ORIGINS AND OCCUPATIONAL MOBILITY
OF LIFETIME MIGRANTS TO SURABAYA,
EAST JAVA

by

Ross McLean Steele

A Thesis Submitted for the Degree
of Doctor of Philosophy of
the Australian National University

December 1980
Except where acknowledged this thesis is based on original research I conducted as a scholar in the Department of Geography, Australian National University.

R. M. Steele
This thesis investigates the origins of lifetime migrants to Surabaya, East Java, and examines the occupational mobility which they experienced as a result of migration. It is mainly concerned with evaluating the occupational mobility and occupational position of immigrants at different stages of migration in terms of the immigrants' origins and pre-migration characteristics.

The first part of the study (Chapters Two, Three and Four) analyses the historical evolution of Surabaya, the geographical origins of migrants and their demographic and socio-economic characteristics prior to migration. The second and major part of the study (Chapters Five, Six, Seven and Eight) compares sequentially the occupations of immigrants before migration, on arrival in Surabaya, and at the time of the survey in 1974. The amount of occupational mobility experienced by migrants is assessed according to changes between these periods of time in the occupational status and sector of employment defined according to the tri-sectoral model of the urban economy. The aim of these two approaches is on the one hand to assess (for the first time) the explanatory value of the tri-sectoral model in explaining intersectoral occupational mobility associated with migration; and on the other to assess whether an approach which incorporates the individual pre-migration attributes of migrants has a greater capacity to predict the occupational and socio-economic status of immigrants.

The major finding is that although most migrants have benefited economically from the move to Surabaya, few have been occupationally mobile at any stage of migration. Migrants from underprivileged backgrounds prior to migration have in most cases seen their underprivileged position relative to other migrants carried with them to Surabaya. Another finding is that as a predictor of occupational mobility or as an analytical tool to examine labour markets, the tri-sectoral model is not a significant advance on the traditional model of urban dualism. Third, because of the lack of occupational mobility among migrants, a multivariate model based on five pre-migration predictors alone is able to 'explain' a significant proportion of the income of male and female migrants in Surabaya.
ACKNOWLEDGEMENTS

Many individuals and organisations in Australia and Indonesia have assisted me with this study. In particular I wish to thank my supervisors Mr E.C. Chapman and Dr L. Sternstein. Mr Chapman visited me regularly when I was on fieldwork in Indonesia and was always willing and able to offer practical assistance and thoughtful advice. Dr Sternstein has kindly given up innumerable hours over the last 18 months to read and edit drafts of this thesis and offer constructive suggestions and criticism.

Thanks are also due to Dr Graeme Hugo, Dr Chris Manning and Dr Richard Curtain who read and commented on the drafts of several chapters. I am also grateful to the Australian National University for the research scholarship which enabled me to carry out this study and for the generous grants which they provided to cover some of the fieldwork expenses. I wish to thank all members of the Department of Geography who have helped me with this study and in particular the staff of the cartography section who were always ready to offer assistance. Mr Kevin Cowan helped me prepare the photographs for this study and his assistance is appreciated. Val Lyon of the cartography section deserves special acknowledgement, however, as it was her skill with the camera and the mapping pen which produced all the maps and diagrams for this thesis.

I am grateful to the Indonesian Institute of Science (LIPI) for generously granting me permission to undertake fieldwork in Indonesia and to the Governor of East Java and his staff for their assistance. I am deeply indebted to the staff of the Population Registration Section (Bagian Pendaftaran Penduduk), Surabaya Municipality for allowing me to conduct a sample survey of their family population registration cards (kartu keluarga). I am particularly grateful to Husein and Soedarmo who were previously employed in the Population Registration Section for their help in explaining the intricacies of the system to a naive orang asing.
Staff in the Demography Section of the Economics Faculty at the University of Airlangga were very helpful during my stay in Surabaya. The former dean of the Economics Faculty Fadjar Notonogoro always made me feel very welcome both academically and personally, and Drs Rangkuti and Drs Suroso helped provide me with a desk in their office.

I am particularly indebted to my fieldwork colleagues from Airlangga University: Hidayat Salim, Harismojo, Didid Supojo, Labib Sjarfuddin, Mikael Kosasih, M. Sururi, Samsul Hilal, A. Halim, Santoso, Linin Sari Pado and Suaeb Asmara Wituitra; and from Gadjah Mada University: Mulyadi, Ng. Chalimie, Kristianto, Zainal Fanani, and R. Pratikno who conducted the interviews on which this study is based. To them, to the residents of Surabaya who graciously gave of their time to be interviewed, and to the administrators in the numerous wilayah, kecamatan, lingkungan, rukun tetangga and rukun kampung visited in the course of this survey, I wish to express heartfelt thanks.

During my stay in Indonesia Dr Dwight King, Dr Peter McDonald and staff at the Central Bureau of Statistics (BPS) in Jakarta assisted me in obtaining unpublished statistics. Throughout the registration and questionnaire surveys my father-in-law Samuel Siwalette provided invaluable assistance in checking the questionnaire forms and the statistics from the registration data.

I would also like to thank Marian May who assisted me with the editing of the final drafts of this thesis and Judy Bradley who painstakingly typed the text and the tables of this study.

A special debt of gratitude is owed to my parents who have helped and encouraged me through the long years of this study. Without their unspoken-of sacrifices, this study would not have been possible.

Finally, and most importantly I wish to thank Anna my Surabaya-born wife for her forbearance and dedication and continual assistance throughout this study.

A friend has claimed 'there is life after a PhD': my parents and wife are waiting to be convinced.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td></td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td></td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>xix</td>
</tr>
<tr>
<td>LIST OF PLATES</td>
<td></td>
<td>xxii</td>
</tr>
<tr>
<td>GLOSSARY AND ABBREVIATIONS</td>
<td></td>
<td>xxv</td>
</tr>
<tr>
<td>CHAPTER I: THE PROBLEM POSED</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1.2 THEORETICAL CONTEXT</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>1.2.1 Conventional Views of Urbanisation and Occupational Mobility in the Third World</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>1.2.2 The Urban Dualism Model</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>1.2.3 Criticism of Urban Dualism and the Concept of the Fragmented Labour Market</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>1.3 MAJOR THEMES</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>CHAPTER II: THE GEOGRAPHICAL SETTING: CHARACTER AND EVOLUTION OF SURABAYA</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>2.1 INTRODUCTION</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>2.2 THE PRE-COLONIAL INDIGENOUS SETTLEMENT: 1000-1675</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>2.3 THE COMING OF THE DUTCH - SURABAYA AS AN INDISCHE COMMUNITY: 1675-1870</td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>2.4 THE FOUNDATION OF A COLONIAL CITY: 1870-1906</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>2.5 THE FLOWERING OF A COLONIAL PORT CITY: 1906-1949</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>2.5.1 Population Trends</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>2.5.2 The Morphology of the City: The Dualism of European Enclave and Indonesian Kampung</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>2.5.2.1 The European City</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>2.5.2.2 The Indigenous City</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>2.5.2.3 Arab, Chinese and Eurasian Quarters of the City</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>2.5.3 Occupational Structure</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>CHAPTER II Contd.</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>2.5.4 The End of the Colonial Era</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>2.6 THE POST-COLONIAL PORT CITY: SURABAYA 1950-1974</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>2.6.1 Population Trends: The Post-Independence Influx and 'Indonesianisation' of Surabaya</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>2.6.2 The Morphology of the City: Indonesianisation and the Survival of Colonial Dualism</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>2.6.3 The Ethnic Composition of Contemporary Surabaya: Relicts of Colonial Policy</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>2.6.3.1 The Javanese</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>2.6.3.2 The Madurese</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>2.6.3.3 The Chinese</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>2.6.3.4 The Arabs</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>2.6.3.5 Other Ethnic Groups</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>2.6.3.6 Conclusion</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>2.6.4 Demographic Character of Old Surabaya in the 1970s</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>2.6.5 Land Use Pattern of Contemporary Surabaya</td>
<td>103</td>
<td></td>
</tr>
<tr>
<td>2.6.6 Occupational Structure of Contemporary Surabaya</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>2.7 CONCLUSION</td>
<td>108</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER III: GEOGRAPHIC ORIGINS OF LIFETIME INMIGRANTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 INTRODUCTION</td>
<td>112</td>
</tr>
<tr>
<td>3.2 MIGRANT BIRTHPLACES</td>
<td>112</td>
</tr>
<tr>
<td>3.2.1 Geographic Distribution</td>
<td>113</td>
</tr>
<tr>
<td>3.2.1.1 Foreign-Born Migrants</td>
<td>115</td>
</tr>
<tr>
<td>3.2.1.2 Indonesian-Born Migrants</td>
<td>116</td>
</tr>
<tr>
<td>3.2.1.3 The Spatial Pattern of Migrant Birthplaces Within Java and Madura</td>
<td>126</td>
</tr>
</tbody>
</table>
### CHAPTER III Contd.

3.2.2 Changes in the Location of Migrant Birthplaces since Colonial times  
 **Page**: 137

3.3 MIGRATION HISTORY  
3.3.1 Direct Migration or Migration by Stages?  
 **Page**: 142

3.3.2 Stepwise Migration and the Migration Histories of Surabaya Inmigrants  
 **Page**: 145

3.4 LAST PLACE OF RESIDENCE BEFORE SURABAYA  
3.4.1 Geographic Distribution  
 **Page**: 154

3.4.2 Rural or Urban Character of Last Place of Residence and Problems Experienced by Migrants  
 **Page**: 156

3.4.3 Accessibility of Last Place of Residence of Recent Inmigrants (1969-1974)  
 **Page**: 161

3.4.4 Recent Inmigrants' Perceptions of Economic Conditions in Their Last Place of Residence Prior to Migration  
 **Page**: 163

3.5 CONCLUSION  
 **Page**: 164

### CHAPTER IV: DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF LIFETIME MIGRANTS TO SURABAYA  
4.1 AGE-SEX DISTRIBUTION OF INMIGRANTS IN 1973-74 AND AT TIME OF MIGRATION  
 **Page**: 167

4.2 PERIOD OF MIGRATION AND CHANGES IN SEX COMPOSITION OF MIGRATION FLOWS  
 **Page**: 181

4.3 ETHNIC AND RELIGIOUS ORIGINS OF INMIGRANTS  
 **Page**: 196

4.4 LEVEL OF EDUCATIONAL ATTAINMENT OF INMIGRANTS AT TIME OF MIGRATION  
4.4.1 Educational Attainment and the Age and Sex of Migrants  
 **Page**: 202

4.4.2 Ethnic Origin, Religion and Educational Attainment  
 **Page**: 208

4.4.3 Educational Attainment and Period of Migration  
 **Page**: 212

4.4.4 Educational Selectivity of Inmigrants from East Java  
 **Page**: 215
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>IV Contd.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>OCCUPATIONAL STATUS, SEX AND MARITAL STATUS OF INMIGRANTS</td>
<td>222</td>
</tr>
<tr>
<td>4.6</td>
<td>SUMMARY AND CONCLUSIONS</td>
<td>231</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>V: OCCUPATIONAL STATUS AND SECTOR OR EMPLOYMENT OF INMIGRANTS BEFORE MIGRATION AND ON FIRST ARRIVAL IN SURABAYA</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>INTRODUCTION</td>
<td>235</td>
</tr>
<tr>
<td>5.2</td>
<td>OCCUPATIONAL STATUS AND SECTOR OF EMPLOYMENT OF INMIGRANTS BEFORE MIGRATION TO SURABAYA</td>
<td>237</td>
</tr>
<tr>
<td>5.2.1</td>
<td>Occupational Status, Employment Conditions and Personal Characteristics of Immigrants Before Departure for Surabaya</td>
<td>238</td>
</tr>
<tr>
<td>5.2.2</td>
<td>Occupational Status of Migrants by Period of Migration</td>
<td>245</td>
</tr>
<tr>
<td>5.2.3</td>
<td>Sector of Employment of Immigrants Prior to Departure for Surabaya</td>
<td>254</td>
</tr>
<tr>
<td>5.3</td>
<td>OCCUPATIONAL STATUS OF IMMIGRANTS ON FIRST ARRIVAL IN SURABAY</td>
<td>264</td>
</tr>
<tr>
<td>5.3.1</td>
<td>Occupational Status, Major Activities and Industry of Employment of Immigrants on First Arrival</td>
<td>265</td>
</tr>
<tr>
<td>5.3.2</td>
<td>Determinants of the Occupational Status of Immigrants On First Arrival</td>
<td>281</td>
</tr>
<tr>
<td>5.3.3</td>
<td>Occupational Status of Migrants on Arrival in Surabaya by Period of Migration</td>
<td>291</td>
</tr>
<tr>
<td>5.4</td>
<td>SUMMARY AND CONCLUSIONS</td>
<td>298</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>VI: OCCUPATIONAL MOBILITY AND THE MOVE TO SURABAYA</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>MIGRATION AND OCCUPATIONAL STATUS CHANGE AMONG IMMIGRANTS</td>
<td>303</td>
</tr>
<tr>
<td>6.1.1</td>
<td>Measurement of Occupational Status Change</td>
<td>303</td>
</tr>
</tbody>
</table>
CHAPTER VI Contd.

6.1.2 Occupational Status Mobility of Inmigrants
Gainfully Employed in Non-farm Occupations
Prior to Migration

6.1.3 Occupational Status on Arrival of Inmigrants
Previously Engaged in Farming or Not Gainfully
Employed

6.1.4 An Overview of Occupational Status Before and
After Migration

6.2 INTERSECTORAL MOBILITY OF RECENT INMIGRANTS (1969-74)

6.2.1 Employment Structure of Recent Immigrants Before
Departure for Surabaya

6.2.2 Intersectoral Mobility of Recent Immigrants
(1969-74)

6.2.2.1 Personal and Occupational Characteristics of
Recent Migrants Employed in the Formal Sector
of Surabaya's Economy on First Arrival

6.2.2.2 Recent Immigrants Within the Family Sector:
Prostitutes and Domestic Servants

6.2.2.3 Recent Immigrants Within the Informal Sector

6.3 SUMMARY AND CONCLUSIONS

CHAPTER VII: POST-ARRIVAL OCCUPATIONAL CHANGE AMONG INMIGRANTS TO SURABAYA

7.1 OCCUPATIONAL STATUS OF INMIGRANTS IN 1974

7.2 CHANGES IN OCCUPATIONAL STATUS AMONG INMIGRANTS SINCE ARRIVAL IN SURABAYA

7.2.1 Cross-sectional Analysis of the Occupational
Mobility of Immigrants Since Arrival in Surabaya

7.2.2 Longitudinal Analysis of Post-Arrival Occupational
Mobility Among Immigrants

7.2.2.1 Occupational Mobility Among Immigrants
Gainfully Employed On Arrival in Surabaya
<table>
<thead>
<tr>
<th>CHAPTER VII Contd.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2.2.2 Occupational Status in 1974 of Immigrants Without Gainful Employment on Arrival in Surabaya</td>
<td>380</td>
</tr>
<tr>
<td>7.2.2.3 An Overview of Post-Arrival Changes in Occupational Status Among Immigrants</td>
<td>383</td>
</tr>
<tr>
<td>7.3 CHANGES IN SECTOR OF EMPLOYMENT OF RECENT IMMIGRANTS (1969-74) SINCE ARRIVAL IN SURABAYA</td>
<td>386</td>
</tr>
<tr>
<td>7.4 SUMMARY AND CONCLUSIONS</td>
<td>386</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER VIII: OVERALL OCCUPATIONAL STATUS CHANGE, EMPLOYMENT STRUCTURE AND INCOME DISTRIBUTION OF IMMIGRANTS TO SURABAYA</th>
<th>393</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 COMPARATIVE OCCUPATIONAL STATUS OF IMMIGRANTS BEFORE MIGRATION AND IN 1974</td>
<td>393</td>
</tr>
<tr>
<td>8.2 EMPLOYMENT STRUCTURE OF LIFETIME IMMIGRANTS IN 1974</td>
<td>400</td>
</tr>
<tr>
<td>8.2.1 Major Employers of Immigrants</td>
<td>400</td>
</tr>
<tr>
<td>8.2.2 Socio-economic Status and Demographic Character of Immigrants by Sector of Employment</td>
<td>406</td>
</tr>
<tr>
<td>8.2.3 Intersectoral Mobility of Immigrants</td>
<td>413</td>
</tr>
<tr>
<td>8.2.4 Origins and Intended Duration of Residence in Surabaya of Immigrants by Sector of Employment in 1974</td>
<td>417</td>
</tr>
<tr>
<td>8.3 DETERMINANTS OF THE MEAN MONTHLY INCOME OF IMMIGRANTS IN SURABAYA, 1974</td>
<td>421</td>
</tr>
<tr>
<td>8.3.1 Introduction to the Predictive Model</td>
<td>421</td>
</tr>
<tr>
<td>8.3.2 Influence of Major Predictors on the Income of Male Migrants</td>
<td>428</td>
</tr>
<tr>
<td>8.3.3 Influence of Major Predictors on the Income of Female Migrants</td>
<td>437</td>
</tr>
<tr>
<td>8.4 SUMMARY AND CONCLUSIONS</td>
<td>449</td>
</tr>
<tr>
<td>CHAPTER IX: CONCLUSIONS</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
</tr>
<tr>
<td>9.1 MAJOR FINDINGS</td>
<td></td>
</tr>
<tr>
<td>9.1.1 Origins and Selectivity of Immigrants</td>
<td>453</td>
</tr>
<tr>
<td>9.1.2 Changes in Occupational Status</td>
<td>454</td>
</tr>
<tr>
<td>9.1.3 Intersectoral Mobility of Immigrants to Surabaya: An Evaluation of the Tri-Sectoral Model</td>
<td>457</td>
</tr>
<tr>
<td>9.1.4 Occupational Mobility, Job Scarcity and the Origins of Immigrants</td>
<td>461</td>
</tr>
<tr>
<td>9.2 SOME POLICY IMPLICATIONS</td>
<td>463</td>
</tr>
</tbody>
</table>

**APPENDICES**

| 1.1 Major Data Sources | 466 |
| 1.2 Population Registration Survey, 1972-3 | 476 |
| 1.3 Household Enumeration Survey and Questionnaire Survey of Recent (1969-74) and Senior (pre-1969) Immigrants | 485 |
| 1.4 Questionnaires Use in the Enumeration Survey and the Questionnaire Surveys of Senior (Pre-1969) and Recent (1969-74) Immigrants with Translated Abstracts | 490 |
| 1.5 Sample Design for the Enumeration Survey | 547 |
| 1.6 An Evaluation of Sample Bias in the Enumeration and Questionnaire Surveys | 555 |
| 2.1 Demographic Data Available for Old Surabaya in the 1970s | 561 |
| 6.1 Distribution of Changes in Occupational Status between Occupation in Previous Place of Residence and Occupation on First Arrival in Surabaya Among All Adult Immigrants, by Sex and Period of Migration | 562-564 |
| 6.2 A Note on the 'Directions' of Occupational Status Change | 565 |

**BIBLIOGRAPHY**

567
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Intercensal population change in all municipalities of Indonesia with a population exceeding 200,000 in 1971.</td>
<td>3</td>
</tr>
<tr>
<td>2.1</td>
<td>Increase of the non-indigenous population in the Netherlands Indies, 1860-1930.</td>
<td>45</td>
</tr>
<tr>
<td>2.2</td>
<td>Population composition of Surabaya in 1905, 1920, 1930 and 1940.</td>
<td>47</td>
</tr>
<tr>
<td>2.3</td>
<td>Occupation in Surabaya Municipality in 1930 according to ethnic group.</td>
<td>70-73</td>
</tr>
<tr>
<td>2.4</td>
<td>Ethnic composition of the population of Old Surabaya, 1930 and 1972.</td>
<td>87</td>
</tr>
<tr>
<td>2.5</td>
<td>Gainfully employed population of New Surabaya in 1971 by industry of employment compared to the generalised occupational structure of Old Surabaya in 1930.</td>
<td>106</td>
</tr>
<tr>
<td>3.1</td>
<td>Birthplace of lifetime inmigrants to Surabaya, 1930, 1972, 1974.</td>
<td>114</td>
</tr>
<tr>
<td>3.2</td>
<td>Results of simple gravity-regression model for lifetime migration to Surabaya from birthplace kabupaten/kotamadya.</td>
<td>119</td>
</tr>
<tr>
<td>3.3</td>
<td>Birthplace migration rates least adequately explained by the simple gravity-regression model.</td>
<td>123</td>
</tr>
<tr>
<td>3.4</td>
<td>Position in settlement hierarchy of Indonesian migrant birthplaces.</td>
<td>135</td>
</tr>
<tr>
<td>3.5</td>
<td>Surviving inmigrants by birthplace and period of migration.</td>
<td>138</td>
</tr>
<tr>
<td>3.6</td>
<td>Number of moves made prior to migration to Surabaya as a percentage of all moves, by last place of residence before Surabaya.</td>
<td>144</td>
</tr>
<tr>
<td>3.7</td>
<td>Percentage of origins and destinations classified by rural, lower order urban, or higher order urban status by category of mover and sequence of move.</td>
<td>146</td>
</tr>
<tr>
<td>3.8</td>
<td>Proportional distribution of moves prior to migration to Surabaya by direction of move within settlement hierarchy.</td>
<td>149</td>
</tr>
</tbody>
</table>
Table

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9</td>
<td>Age structure of migrants at time of first, second, third and fourth moves prior to migrating to Surabaya as a percentage of the total number of migrants making each move.</td>
<td>151</td>
</tr>
<tr>
<td>3.10</td>
<td>Reasons for moves within the settlement hierarchy prior to migration to Surabaya as a percentage of all reasons for moves.</td>
<td>153</td>
</tr>
<tr>
<td>3.11</td>
<td>Percentage of last places of residence with specific numbers of urban features by region.</td>
<td>158</td>
</tr>
<tr>
<td>3.12</td>
<td>Problems experienced by inmigrants in last place of residence prior to migration to Surabaya to Surabaya by position of that place of residence in settlement hierarchy.</td>
<td>159</td>
</tr>
<tr>
<td>3.13</td>
<td>Economic conditions in last place of residence prior to migration to Surabaya according to recent inmigrants.</td>
<td>164</td>
</tr>
<tr>
<td>4.1</td>
<td>Age structure of lifetime immigrants to Surabaya at time of migration compared to age structure of Surabaya-born and source area population.</td>
<td>174</td>
</tr>
<tr>
<td>4.2</td>
<td>Age-specific marital status of migrants (at time of migration) compared with the age-specific marital status of the rural population of East Java, 1971.</td>
<td>180</td>
</tr>
<tr>
<td>4.3</td>
<td>Ethnic composition of major migration streams to Surabaya.</td>
<td>197</td>
</tr>
<tr>
<td>4.4</td>
<td>Ethnic composition and religion of adult inmigrants.</td>
<td>200</td>
</tr>
<tr>
<td>4.5</td>
<td>Educational attainment of adult migrants to Surabaya and total Indonesian population aged 15 years and over, by sex.</td>
<td>203</td>
</tr>
<tr>
<td>4.6</td>
<td>Educational attainment of adult migrants at time of migration, by major ethnic grouping and religion.</td>
<td>209</td>
</tr>
<tr>
<td>4.7</td>
<td>Educational attainment and the period of first entry to Surabaya of male and female adult inmigrants.</td>
<td>213</td>
</tr>
<tr>
<td>4.8</td>
<td>Educational attainment and the period of first entry of adult inmigrants by age of migrants in 1974 and sex.</td>
<td>214</td>
</tr>
<tr>
<td>4.9</td>
<td>Proportion of inmigrants from rural and urban areas of East Java who had no formal education or had completed senior high school at time of migration, compared to proportion of total population with similar educational attainments, by sex and age group.</td>
<td>218</td>
</tr>
<tr>
<td>Number</td>
<td>Table</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>4.10</td>
<td>Occupational status of male and female inmigrants prior to departure for Surabaya.</td>
<td></td>
</tr>
<tr>
<td>4.11</td>
<td>Occupational status of adult inmigrants prior to departure for Surabaya by sex and marital status.</td>
<td></td>
</tr>
<tr>
<td>4.12</td>
<td>Monthly income of recent (1969-74) adult inmigrants prior to departure for Surabaya.</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Occupational status of gainfully employed adult inmigrants prior to departure for Surabaya by major activity, industrial grouping, employer and workforce characteristics.</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Occupational status of all adult inmigrants prior to departure for Surabaya by personal characteristics, period of migration and reasons for moving.</td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td>Occupational status of adult inmigrants prior to departure for Surabaya by sex and period of migration.</td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td>The marital status of short-term and permanent recent (1970-74) female migrants before departure for Surabaya.</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Employer status and workforce composition of enterprises employing inmigrants prior to migration by sector of workforce and rural or urban nature of place of origin (corner percentages).</td>
<td></td>
</tr>
<tr>
<td>5.6</td>
<td>Occupational and personal details of inmigrants before departure for Surabaya, by sector of employment and character of previous place of residence.</td>
<td></td>
</tr>
<tr>
<td>5.7</td>
<td>Occupational status of inmigrants before departure and on first arrival in Surabaya, by sex.</td>
<td></td>
</tr>
<tr>
<td>5.8</td>
<td>A comparison of the usual monthly income of recent migrants (1969-74) prior to migration and on first arrival in Surabaya.</td>
<td></td>
</tr>
<tr>
<td>5.9</td>
<td>Occupational status, major activity and industrial grouping of gainfully employed adult inmigrants soon after arrival in Surabaya.</td>
<td></td>
</tr>
<tr>
<td>5.10</td>
<td>Ethnic composition of inmigrants gainfully employed soon after arrival in Surabaya, by industrial sector.</td>
<td></td>
</tr>
<tr>
<td>5.11</td>
<td>Ethnic composition of inmigrants by industry and occupational status on first arrival in Surabaya.</td>
<td></td>
</tr>
</tbody>
</table>
Table

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.12</td>
<td>Occupational status of adult inmigrants soon after arrival in Surabaya, by personal characteristics, period of migration, previous place of residence, proportion of multiple movers, and proportion with job promised prior to migration.</td>
<td>283</td>
</tr>
<tr>
<td>5.13</td>
<td>Relationship between the occupational status of gainfully employed inmigrants on first arrival and the personal characteristics, source region, and migration history of migrants.</td>
<td>284</td>
</tr>
<tr>
<td>5.14</td>
<td>Occupational status of rural and urban inmigrants by educational attainment at time of migration.</td>
<td>287</td>
</tr>
<tr>
<td>6.1</td>
<td>Occupational status of inmigrants on arrival in Surabaya compared to occupational status before migration, by sex and period of migration.</td>
<td>305</td>
</tr>
<tr>
<td>6.2</td>
<td>Occupational status on arrival of inmigrants farming, not working or studying before migration by sex and intended duration of residence of female inmigrants.</td>
<td>312</td>
</tr>
<tr>
<td>6.3</td>
<td>Personal and occupational characteristics of recent (1969-74) inmigrants in each sector of the labour force in rural and urban source areas prior to migration.</td>
<td>321</td>
</tr>
<tr>
<td>6.4</td>
<td>The sectoral distribution of recent (1969-74) inmigrants on first arrival in Surabaya, by sector of employment before migration, source area, occupation before migration, sex and intended duration of residence.</td>
<td>328</td>
</tr>
<tr>
<td>6.5</td>
<td>Personal characteristics of recent (1969-74) inmigrants at time of migration by sector of employment on first arrival in Surabaya.</td>
<td>331</td>
</tr>
<tr>
<td>6.6</td>
<td>Occupational characteristics of recent (1969-74) inmigrants by sector of employment on first arrival in Surabaya.</td>
<td>332</td>
</tr>
<tr>
<td>6.7</td>
<td>Occupational characteristics of recent (1969-74) inmigrants prior to migration by sector of employment on first arrival in Surabaya.</td>
<td>333</td>
</tr>
<tr>
<td>7.1</td>
<td>Occupational status of income earning inmigrants in 1974 by activity, industrial grouping, employer, workforce and income per month.</td>
<td>346</td>
</tr>
<tr>
<td>7.2</td>
<td>Occupational status of adult inmigrants in 1974 by personal characteristics 1974, personal characteristics at time of migration and migration history.</td>
<td>347</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>7.3</td>
<td>Relationship between occupational status of gainfully employed immigrants in 1974 and sex and rural or urban origins of migrants by level of educational attainment in 1974.</td>
<td>350</td>
</tr>
<tr>
<td>7.4</td>
<td>Proportion of Javanese and non-Javanese immigrants employed in the government sector in 1974, by sex.</td>
<td>353</td>
</tr>
<tr>
<td>7.5</td>
<td>Relationship between occupational status of immigrants in 1974 and duration of residence in Surabaya, by sex and educational attainment.</td>
<td>357</td>
</tr>
<tr>
<td>7.6</td>
<td>Relationship between occupational status of immigrants on first arrival in Surabaya and duration of residence in the city, by sex and educational attainment.</td>
<td>361</td>
</tr>
<tr>
<td>7.7</td>
<td>Post-arrival occupational status mobility and occupational status of immigrants in 1974, by occupational status on arrival, period of migration and sex.</td>
<td>364</td>
</tr>
<tr>
<td>7.8</td>
<td>Occupational status in 1974 and on arrival of male and female immigrants who have changed jobs since arriving in Surabaya.</td>
<td>371</td>
</tr>
<tr>
<td>7.9</td>
<td>Changes in sector of employment of recent immigrants (1969-74) since arrival.</td>
<td>387</td>
</tr>
<tr>
<td>8.1</td>
<td>Occupational status of immigrants before migration and in 1974, by sex.</td>
<td>398</td>
</tr>
<tr>
<td>8.2</td>
<td>Employer and workforce details of immigrants in 1974 by sector of employment (corner percentages).</td>
<td>401</td>
</tr>
<tr>
<td>8.3</td>
<td>Occupational, demographic and socio-economic characteristics of immigrants by sector of employment in 1974.</td>
<td>403</td>
</tr>
<tr>
<td>8.4</td>
<td>Region of origin, migration history and occupational history of immigrants by sector of employment in 1974.</td>
<td>407</td>
</tr>
<tr>
<td>8.5</td>
<td>Intended duration of residence and extent of social and economic ties with place of origin of immigrants, by sector of employment in 1974.</td>
<td>419</td>
</tr>
<tr>
<td>8.6</td>
<td>Proportion of variance ($R^2$) in usual monthly earnings of migrants in Surabaya during 1974 explained by selected additive models.</td>
<td>425</td>
</tr>
<tr>
<td>8.7</td>
<td>Mean monthly income of male migrants to Surabaya in 1974, adjusted for effect of pre-migration characteristics and employment status in 1974.</td>
<td>427</td>
</tr>
</tbody>
</table>
Table

<table>
<thead>
<tr>
<th>Number</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8</td>
<td>429</td>
</tr>
</tbody>
</table>

Mean monthly income of female migrants to Surabaya in 1974, adjusted for effect of pre-migration characteristics and employment status in 1974.

Appendix

1.1 Administrative hierarchy within the province of East Java 477
1.2 Sample Kartu Keluarga with incomplete data 482
1.3 Questionnaire totals per enumeration area 551
1.4 Lingkungan excluded from the systematic areal sample 552
1.5 Proportion of males in the adult inmigrant population of Surabaya according to sample survey results 556
6.1 Distribution of changes in occupational status between occupation in previous place of residence and occupation on first arrival in Surabaya among all adult inmigrants, by sex and period of migration 562-564
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Population of major cities in Indonesia, 1971</td>
<td>2</td>
</tr>
<tr>
<td>1.2</td>
<td>McGee's structural model of rural-urban and urban-rural mobility</td>
<td>21</td>
</tr>
<tr>
<td>2.1</td>
<td>Morphology and landmarks of 'Old Surabaya', 1969</td>
<td>36</td>
</tr>
<tr>
<td>2.2</td>
<td>Valentijn's sketch map of the town of Surabaya, 1719</td>
<td>40</td>
</tr>
<tr>
<td>2.3a</td>
<td>Original map of the morphology of Surabaya, 1787</td>
<td>42</td>
</tr>
<tr>
<td>2.3b</td>
<td>Redrawn map of the morphology of Surabaya in 1787</td>
<td>43</td>
</tr>
<tr>
<td>2.4</td>
<td>Morphology and landmarks of Surabaya, circa 1900</td>
<td>49</td>
</tr>
<tr>
<td>2.5</td>
<td>The growth of the population of 'Old Surabaya', (pre-1969 boundaries) 1905-71</td>
<td>58</td>
</tr>
<tr>
<td>2.6</td>
<td>Morphology and landmarks of Surabaya, 1945</td>
<td>61</td>
</tr>
<tr>
<td>2.7</td>
<td>Workforce by occupation and ethnic group in per cent, Surabaya, 1930</td>
<td>69</td>
</tr>
<tr>
<td>2.8</td>
<td>Kecamatan (sub-districts) within Surabaya municipality, 1974</td>
<td>78</td>
</tr>
<tr>
<td>2.9</td>
<td>Kecamatan (sub-districts) and lingkungan (urban wards) within 'Old Surabaya', 1974</td>
<td>84</td>
</tr>
<tr>
<td>2.10</td>
<td>Family heads born in Java and Madura as a percentage of all family heads, by lingkungan, 'Old Surabaya', 1972</td>
<td>86</td>
</tr>
<tr>
<td>2.11</td>
<td>Ethnic Chinese and Arab as a percentage of the total population, by lingkungan 'Old Surabaya', 1972</td>
<td>90</td>
</tr>
<tr>
<td>2.12a</td>
<td>Age-sex structure of all urban areas in East Java sample census</td>
<td>96</td>
</tr>
<tr>
<td>2.12b</td>
<td>Age-sex structure of 'Old Surabaya' from population registration survey</td>
<td>96</td>
</tr>
<tr>
<td>2.13</td>
<td>Children as percentage of the total population by lingkungan 'Old Surabaya', 1971</td>
<td>98</td>
</tr>
<tr>
<td>2.14</td>
<td>Sex ratio by lingkungan 'Old Surabaya', 1971</td>
<td>100</td>
</tr>
<tr>
<td>2.15</td>
<td>Population density by lingkungan 'Old Surabaya' 1971</td>
<td>101</td>
</tr>
<tr>
<td>2.16</td>
<td>Generalised land use 'Old Surabaya', 1969</td>
<td>104</td>
</tr>
</tbody>
</table>
### Figure

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Number of lifetime migrants in Surabaya standardised by population of birthplace kabupaten and kotamadya by distance from Surabaya</td>
<td>120</td>
</tr>
<tr>
<td>3.2</td>
<td>Intensity of lifetime migration to Surabaya from birthplace kabupaten and kotamadya in Java and Madura</td>
<td>127</td>
</tr>
<tr>
<td>3.3</td>
<td>Birthplace by kecamatan and kotamadya of East Java born lifetime immigrants</td>
<td>133</td>
</tr>
<tr>
<td>3.4</td>
<td>Cumulative per cent of rural and urban born immigrants who arrived in Surabaya during selected periods by distance of birthplace</td>
<td>136</td>
</tr>
<tr>
<td>3.5</td>
<td>Last place of residence before migration to Surabaya of immigrants from East Java by kecamatan and kotamadya</td>
<td>155</td>
</tr>
<tr>
<td>3.6</td>
<td>Distance from kecamatan capital of last place of recent migrants to Surabaya</td>
<td>162</td>
</tr>
<tr>
<td>4.1</td>
<td>Age-sex structure of Surabayan born and lifetime immigrants according to population registration and enumeration surveys of Old Surabaya</td>
<td>168</td>
</tr>
<tr>
<td>4.2</td>
<td>Age-sex structure of migrants at time of departure for Surabaya</td>
<td>172</td>
</tr>
<tr>
<td>4.3</td>
<td>Age structure of male and female migrants at time of migration to Surabaya</td>
<td>176</td>
</tr>
<tr>
<td>4.4</td>
<td>Age-sex structure and marital status of adult migrants at time of migration to Surabaya</td>
<td>178</td>
</tr>
<tr>
<td>4.5</td>
<td>Absolute number of immigrants by year of first entry to Surabaya (3year running means)</td>
<td>182</td>
</tr>
<tr>
<td>4.6</td>
<td>Sex composition of annual flows of surviving immigrants to Surabaya (1940-74)</td>
<td>184</td>
</tr>
<tr>
<td>4.7</td>
<td>Age-sex structure of lifetime immigrants at time of migration by period of first entry</td>
<td>185</td>
</tr>
<tr>
<td>4.8</td>
<td>Demographic character of adult immigrants at time of migration by period of first entry</td>
<td>189</td>
</tr>
<tr>
<td>4.9</td>
<td>Demographic character of adult immigrants at time of migration by region of previous place of residence</td>
<td>190</td>
</tr>
<tr>
<td>Figure Number</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4.10</td>
<td>Demographic character of adult inmigrants at time of migration by position in settlement hierarchy of previous place of residence</td>
<td>191</td>
</tr>
<tr>
<td>4.11</td>
<td>Percentage of male and female inmigrants completed elementary school at time of migration, by age in 1974</td>
<td>205</td>
</tr>
<tr>
<td>4.12</td>
<td>Educational attainment of inmigrants at time of migration by rural or urban character of previous place of residence by sex and age in 1974</td>
<td>206</td>
</tr>
<tr>
<td>4.13</td>
<td>Educational attainments of migrants from rural and urban East Java at time of migration compared to residents of rural and urban East Java, by age and sex</td>
<td>217</td>
</tr>
<tr>
<td>5.1</td>
<td>Sequential changes in occupational status of inmigrants by sex and period of migration</td>
<td>292</td>
</tr>
<tr>
<td>6.1</td>
<td>Occupational status on arrival by occupational status prior to migration, by sex and period of migration</td>
<td>317</td>
</tr>
<tr>
<td>6.2</td>
<td>Intersectoral labour mobility between employment prior to migration and employment on first arrival in Surabaya of recent (1969-74) inmigrants from rural and urban source areas</td>
<td>324</td>
</tr>
<tr>
<td>7.1</td>
<td>Occupational status of inmigrants in 1974 and on first arrival in Surabaya, by period of migration and sex</td>
<td>384</td>
</tr>
<tr>
<td>8.1</td>
<td>Occupational status of inmigrants in 1974 and prior to migration to Surabaya, by period of migration and sex</td>
<td>395</td>
</tr>
<tr>
<td>8.2</td>
<td>Usual monthly earnings of inmigrants gainfully employed by sector of employment and age group, Surabaya 1974</td>
<td>409</td>
</tr>
</tbody>
</table>

Appendix

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Location of sample areas (RW) and enumeration units (RT)</td>
<td>550</td>
</tr>
<tr>
<td></td>
<td>Old Surabaya, 1974</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF PLATES

Number Following Page

1 A street scene in Bongkaran lingkungan in 1973 illustrates the juxtaposition of both modern and traditional forms of transport, and formal and informal sector enterprises within 'Old Surabaya'. This area was the centre of the city's commercial district in the 1880s and 1890s. 36

2 Madurese immigrants who have established small informal sector enterprises (tailor, cigarette seller and a drink seller) in a spacious shop front in Bongkaran, Surabaya. 36

3 Kali Mas circa 1900 when Surabaya was the centre of Java's thriving sugar trade (von Faber, 1931a:51). 51

4 Willemskade in 1909, when the Kali Mas was navigable upstream of Surabaya and the European commercial core had begun to develop southward along Jalan Niaga (Wright and Breakspear, 1909). 51

5 The same scene in 1973 when the Kali Mas was no longer navigable upstream of the Red Bridge, and squatter settlements (rumah liar) were a common sight on vacant land. 51

6 Ampel lingkungan site of the Ampel Mosque (seen in the background) has a higher proportion of Arab residents than any other area of Surabaya. 80

7 Although Pabean Cantian is the centre of 'chinatown' in Surabaya, the lingkungan also contains a large street population of Madurese who provide labour for the Chinese shopowners. 80

8 A small lane within 'chinatown' in which Madurese immigrants have established small dwellings and stalls at the front of large brick houses occupied by totok Chinese. Madurese began to settle in the lane in the mid-1940s. 80

9 With the influx of population since independence 'infilling' and internal subdivision on existing allotments has been common. The process has not been confined to kampung areas, but as shown here it has also been common on the spacious blocks occupied by Dutch built European-style housing in the Darmo district of Surabaya. 80
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Post-independence infilling on vacant land (garden allotments) in the grounds of barracks built at Sidodadi by the colonial government in the early 1900s for railway employees.</td>
<td>80</td>
</tr>
<tr>
<td>11</td>
<td>In the Darmo district a post-independence kampung has developed on land left vacant by the colonial government for the entry of fire vehicles.</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>Even in the older kampungs such as Jati Purwo, which has been a destination of Madurese migrants to Surabaya since the Japanese occupation, vacant land is still being used for the makeshift dwellings of new arrivals.</td>
<td>80</td>
</tr>
<tr>
<td>13</td>
<td>Land beyond the control of the municipal government is a frequent site of squatter settlements, such as this settlement on railway land at Jetis in the south of 'Old Surabaya'.</td>
<td>80</td>
</tr>
<tr>
<td>14</td>
<td>Land on the edges of canals or river floodplains are common sites of squatter settlements, with disastrous results in the wet season.</td>
<td>80</td>
</tr>
<tr>
<td>15</td>
<td>Dutch built European-style housing like this in the Sawahan district is frequently occupied by peranakan Chinese or senior government employees.</td>
<td>81</td>
</tr>
<tr>
<td>16</td>
<td>A typical style of government housing constructed by the Indonesian government in the 1960s for middle or senior ranking government employees.</td>
<td>81</td>
</tr>
<tr>
<td>17</td>
<td>Well planned low-cost housing constructed for low-level government employees in the early 1960s. On retirement, many of the original residents who were born outside the city return to their place of origin, and the dwellings are occupied by wealthier Surabayan residents.</td>
<td>81</td>
</tr>
<tr>
<td>18</td>
<td>Privately developed kampung housing in Ngagel Tirto is typical of the extensive kampung development on the southern outskirts of the city since independence. Javanese inmigrants predominate among the residents of these areas.</td>
<td>81</td>
</tr>
</tbody>
</table>
Congested low quality dwellings in Srengganan an inner city kampung first developed in the early 1900s by Madurese immigrants.

Semi-rural desa-type housing in Simo Gunung a kampung located in the rural-urban fringe of 'Old Surabaya'. As land availability steadily decreases, areas like this are being sought by an increasing number of recent immigrants.
GLOSSARY AND ABBREVIATIONS

adat	customary law in Indonesia
ACS	Allied Geographical Section
alun-alun	traditional Javanese town square
ani-ani	small hand knife traditionally used for cutting individual rice stalks
ANU	Australian National University
bawon	share in kind from the harvest
becak	pedicab
BPS	Central Bureau of Statistics
corvee	an obligation to give labour or taxes to the kampung administration
desa	rural village
gang	small lane within a kampung
germo	manager or owner of brothel
jamu	traditional herbal medicine
kabupaten	regency level administrative unit
kampung	high density indigenous housing in an urban area which retains some of the characteristics of rural housing
kartu keluarga	family population registration card
kecamatan	sub-district
kotamadya	municipality (urban equivalent of the kabupaten)
kuli	coolie
LEKNAS	National Social Economic Research Institute
lingkungan	urban ward (level below kecamatan)
lurah	traditional head of kampung or desa
NEI	Netherlands East Indies
orang asing	foreigner
orang kecil	'little people' implying the poor underprivileged members of society
pasar	market place
Pasisir	Java's north coast
peci	black fez worn by Muslims
perahu	small boat (usually wooden with sail) in Indonesia
peranakan	a local born Chinese or a Chinese acculturated in part to Indonesian society
PKI  Indonesian Communist Party
punggawa  entrepreneur
RSPacS  Research School of Pacific Studies, ANU
RSSS  Research School of Social Sciences, ANU
RT  neighbourhood association
rumah liar  illegal housing, squatter settlements
RW  kampung association (urban areas)
sawah  wet rice cultivation
suku (sukubangsa)  ethnic group
surat jalan  travel authorisation from local government official
SWPA  Southwest Pacific Area
tebasan  system whereby the standing rice crop is sold to a middleman or penebas not long before it is harvested
toko  shop, permanent retail outlet relatively capital intensive
totok  traditional Chinese still adhering to the culture of his homeland, frequently foreign-born
warung  small portable food stall
wilayah  district (urban areas)
CHAPTER I

INTRODUCTION

1.1 THE PROBLEMPOSED

Major urban centres in Indonesia (Table 1.1 and Figure 1.1) and most other less developed countries (LDCs) have experienced population increases in excess of national growth rates for many decades. Immigration to the major cities from their rural hinterland and other urban settlements has been the major cause of the high growth rates, although extension of city boundaries to include surrounding localities has been a contributing factor. This study investigates the geographic, demographic, social and economic origins of lifetime migrants to the city of Surabaya, East Java, and examines the occupational mobility which they have experienced as a result of migration. The major thrust of the study is an attempt to answer several questions: has migration to Surabaya resulted in socio-economic or occupational mobility for the individual migrants, which migrants have experienced socio-economic and occupational mobility, and what factors have been responsible for these changes?

Three main factors influenced the choice of topic and area of study. The first is the existence of a rich body of theoretical literature on migration and employment relevant to Indonesia, and particularly Java. Indeed, the work of Geertz (1963a, 1963b) on 'agricultural involution' and 'bazaar' and 'firm-centred' economic sectors which was the catalyst for the model of urban involution developed by Armstrong and McGee (1968), was developed in part from fieldwork carried out by Geertz in Pare, a small town 108 km west of Surabaya in East Java. Armstrong and McGee's model of urban involution was of critical importance to the concept of urban dualism which gained widespread acceptance in the early 1970s. McGee (1972: 108-24) subsequently applied his structural model to explain the employment obtained by Malays who migrated to the urban centres of West Malaysia; more recently he has suggested its relevance to labour mobility in Indonesia (McGee, 1976). Friedmann and Sullivan (1974) modified the basic urban dualism model into a tri-sectoral model of the urban labour force in LDCs, and this model appears to have
Figure 1.1
Population of major cities in Indonesia, 1971

Population of selected cities, 1971 Census (thousands)

- International boundary
- Provincial boundary

- Star: 2000
- Circle: 1000 - 1999
- Square: 500 - 999
- Triangle: 200 - 299

Source: Indonesia, BPS, 1972
<table>
<thead>
<tr>
<th>Kotamadya (Municipalities)</th>
<th>1930</th>
<th>1961</th>
<th>% Change Per Annum 1930-61</th>
<th>1971</th>
<th>% Change Per Annum 1961-71</th>
<th>% Change Per Annum 1930-71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jakarta</td>
<td>533,015&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>2,973,052</td>
<td>5.7</td>
<td>4,576,009</td>
<td>4.4</td>
<td>5.4</td>
</tr>
<tr>
<td>'Old Surabaya', (Pre-1969)&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>341,675</td>
<td>1,007,945</td>
<td>3.5</td>
<td>1,332,250&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>2.8</td>
<td>3.4</td>
</tr>
<tr>
<td>'New Surabaya' (1969 Boundaries)&lt;sup&gt;(4)&lt;/sup&gt;</td>
<td>-</td>
<td>1,164,829</td>
<td>-</td>
<td>1,556,255</td>
<td>2.9</td>
<td>-</td>
</tr>
<tr>
<td>Bandung</td>
<td>166,815</td>
<td>972,566</td>
<td>5.8</td>
<td>1,201,730</td>
<td>2.1</td>
<td>4.9</td>
</tr>
<tr>
<td>Semarang</td>
<td>217,796</td>
<td>503,153</td>
<td>2.7</td>
<td>646,590</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Medan</td>
<td>76,584</td>
<td>479,098</td>
<td>6.1</td>
<td>635,562</td>
<td>2.9</td>
<td>5.3</td>
</tr>
<tr>
<td>Palembang</td>
<td>108,145</td>
<td>474,971</td>
<td>4.9</td>
<td>582,961</td>
<td>2.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Ujung Pandang</td>
<td>84,855</td>
<td>384,159</td>
<td>5.0</td>
<td>434,766</td>
<td>1.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Malang</td>
<td>86,646</td>
<td>341,452</td>
<td>4.5</td>
<td>422,428</td>
<td>2.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Surakarta</td>
<td>165,484</td>
<td>367,626</td>
<td>2.6</td>
<td>414,285</td>
<td>1.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Yogyakarta</td>
<td>136,649</td>
<td>312,698</td>
<td>2.7</td>
<td>342,267</td>
<td>0.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Banjarmasin</td>
<td>65,698</td>
<td>214,096</td>
<td>3.9</td>
<td>281,673</td>
<td>2.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Pontianak</td>
<td>45,196</td>
<td>150,220</td>
<td>3.9</td>
<td>217,555</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>60,727,233</td>
<td>97,085,348</td>
<td>1.5</td>
<td>119,232,499</td>
<td>2.1</td>
<td>1.6</td>
</tr>
</tbody>
</table>
NOTES:

(1) Djatinegara (Meester Cornelis) has been included in the 1930 Batavia total to enable comparison with present-day Jakarta, although it was not officially incorporated until 1935.

(2) In 1970 Kotamadya Surabaya (Surabaya Municipality) incorporated the five rural kecamatan (sub-districts) of Karangpilang, Wonocolo, Rungkut, Sukolilo, and Tandes, making the 1961 figures not strictly comparable with the 1971 census totals. To enable comparison these five kecamatan are excluded from the 1971 totals shown here, and the sub-area is termed 'Old Surabaya' as it refers to the pre-1970 municipality.

(3) This total includes all persons of no fixed abode and all ships' crews, as it is assumed that the vast majority of the 4,223 persons in this category are found in the 'old city' and the port area.

(4) The 'New Surabaya' (1970 boundaries) totals correspond to the present-day Kotamadya (Municipality) boundaries and include the five newly incorporated kecamatan. The 1961 population totals of these five kecamatan were added to the 1961 Surabaya Kotamadya total to enable intercensal comparison between standard areas.

Sources:

Census of 1930 in the Netherlands Indies [Volkstelling]. Vols. I-VIII. Department van Economische Zaken [Department of Economic Affairs], Batavia, 1933-36.


particular relevance for Indonesia since it makes provision for
government employment which is of particular significance to
inmigrants in the cities of Java.

The early 1970s saw an increase in migration research in
Java\(^{(1)}\) (Temple, 1974; Hugo, 1975a, 1978; Suharso et al., 1976;
McCutcheon, 1977) and also an increased interest in the conditions of
the urban poor and unemployed (Universitas Indonesia, 1972; Papanek,
1975; Sethuraman, 1976a; Dick, 1978; Forbes, 1978a, 1978b; and
Jellinek, 1977, 1978) as informal sector studies became more
important. None of these studies, however, made a systematic attempt
to evaluate empirically the ability of the structural models (as
conceived by their authors) to explain and predict labour absorption
and occupational mobility experienced by migrants to urban areas in
Java. This is an ironic omission since the theoretical contributions
of Geertz, and Armstrong and McGee are deeply rooted in Javanese
experience. These contributions were a major stimulus of this study
and through the systematic application of Friedmann and Sullivan's
(1974) tri-sectoral model to the employment structure of inmigrants in
Surabaya, this study will help evaluate this earlier work.

In addition to the sectoral analysis, this study analyses
sequential changes in the occupational status of migrants in terms of
their pre-migration origins. This approach has advantages over the
structural approach: it recognises that access to employment is
grossly unequal even among migrants previously employed in the same
sector prior to migration; that scarcity of productive employment is
typical of most large cities in LDCs, and that pre-migration
inequalities among inmigrants are likely to persist after migration;
and that determinants of pre-migration occupational status (such as

\(^{(1)}\) Comprehensive reviews and bibliographies of demographic research
in Indonesia by McNicoll (1968, 1970) and Singarimbun (1969,
1974) plus a briefer work by Hugo (1975b) and a bibliography on
urbanism and urbanisation by Warworoentoe (Breese (ed), 1973:
45-54) have adequately summarised migration research in
Indonesia. It is not necessary to repeat these general reviews
in this study, and the next section of this chapter will
concentrate on literature from Indonesia and elsewhere essential
to an understanding of the theoretical framework of this study.
educational attainment, sex and ethnic origin) are major determinants of post-arrival occupational status.

The second factor which influenced the choice of topic and area of study is the importance of Surabaya as a destination of urban immigration in Indonesia since 1900, and particularly since independence in 1949. Recent intercensal growth rates and the large size of Surabaya, imply that the city has been the major destination of urban immigrants in Indonesia outside Jakarta (1961-71, Table 1.1). Surabaya, along with Jakarta, Pontianak, Medan, Banjarmasin and Semarang is one of six cities which have grown more rapidly than the nation's total population in the 1961-71 intercensal period (Table 1.1). In the absence of significant immigration and large rural-urban differentials in rates of natural increase\(^{(1)}\), most of the disparity between national and urban rates of population increase has been due to immigration. It is also likely that there was some underestimation of urban de facto populations in 1971 owing to the return of immigrants to their place of origin during the census, and 'overspill' outside administrative boundaries. The latter was probably responsible for the modest growth rate of Bandung in 1961-71 (Hugo, 1975a: 240-1).

This study confirms the significance of immigration to the growth of Surabaya. Approximately half of the city's 1973-74 population of one-and-a-half million were lifetime immigrants and the proportion of household heads in this category was 76 per cent\(^{(2)}\).

---

\(^{(1)}\) Urban populations in Indonesia have lower mortality levels than rural populations, but any gain in natural increase tends to be offset by higher fertility rates among the rural population (Jones, McDonald and Iskandar, 1975: 4; McNicoll and Mamas, 1973: 13).

\(^{(2)}\) Results from a complete population enumeration of 28 areally stratified randomly sampled rukun tetangga (household associations) within the old city (pre-1970 boundaries) of Surabaya. In this enumeration basic census data were collected for 7997 individuals. This survey is hereafter referred to as the enumeration survey. Data were also obtained from a 0.75% areally stratified random sample of family registration cards (kartu keluarga) from the Bagian Pendaftaran Penduduk, Kotamadya Surabaya (Population Registration Division, Surabaya Municipality). This survey is hereafter referred to as the population registration survey.
Three-quarters of the population of the old city and 70 per cent of the total population of the municipality (all of the city within the present municipal boundaries) are either lifetime immigrants or the offspring of lifetime immigrant parents. Surabaya is an old city, but it is inhabited by a predominantly non-Surabayan born population.

Despite the numerical significance of immigrants in the population of Surabaya and other major cities in Indonesia, research into internal migration has been handicapped by a lack of reliable data. The 1971 Census, the best to date except for the omission of information on ethnicity (sukubangsa), collected no information on intra-provincial migration; birthplace and previous place of residence were collected at the provincial level. Since most urban immigrants are short-distance intra-provincial movers and Jakarta is the only major city defined as a separate province in Indonesia, the majority of urban immigrants resident in cities outside Jakarta were not migrants according to the 1971 Census.

Considering the lack of data about immigration it is not surprising that when fieldwork for this study was begun in late 1972, there was no study of migration to Surabaya Municipality. The one publication which included birthplace information was a study of fertility in the municipality (Pardoko and Suroso, 1971). There was a clear need for such research, however, with data from the 1971 census implying that Surabaya was a major destination of urban migrants in the intercensal decade 1961-71 (Table 1.1).

In 1973 the Population Studies Centre of the National Institute for Economic and Social Research (LEKNAS) conducted a nationwide survey of 32,000 internal migrants in Indonesia. The final report contains invaluable information (Sukarso, Speare, Redmana and Husin, 1976). Approximately 3,000 immigrants to Surabaya were

---

(1) Children with both parents born outside Surabaya, and those with only one parent living, provided that parent was born outside the city, were classified as offspring to lifetime immigrants. Children with two parents living, but with only one of these a lifetime immigrant are classified as half offspring of lifetime immigrants and half as offspring of Surabaya-born parents.
interviewed as part of the LEKNAS study. Although approaches were made to LEKNAS and the National Development Planning Board (BAPPENAS) in an attempt to obtain information about these inmigrants, none was made available to me while I was on fieldwork in Indonesia. Consequently, I had to duplicate questions on migrant selectivity and other topics included in the LEKNAS study. A bias in the LEKNAS study of Surabaya toward large families, the exclusion of two interesting inner city areas because of potential interviewing difficulties, and the grouping of results to avoid disclosure of sensitive information, creates reservations about the representativeness of the results for Surabaya.

Since the LEKNAS survey there has been a rapid growth of migration research in Indonesia. Studies have focused on particular types of population mobility among select ethnic groups (Hugo, 1975a, 1975b, 1977, 1978; Naim, 1974; Maude, 1979a, 1979b; Koentjaraningrat, 1975), migrant selectivity and the motives for moving (Temple, 1974, 1975) while other studies have stressed rural-urban linkages and interdependence, and migrant adjustment to the urban environment (Forbes, 1978a, 1978b; Jellinek, 1977, 1978)\(^{(1)}\). Generally, the consequences of migration for the individual inmigrant have received little attention, and the effect of migration on the occupational status and occupational mobility of migrants has been largely ignored. The one exception is a study of the post-arrival adjustment of inmigrants to Surabaya in 1975 by McCutcheon (1977, 1978).

McCutcheon examined only post-arrival changes in occupational status, and did not attempt to relate the post-arrival occupational status or occupational mobility of immigrants to their occupational status prior to migration. McCutcheon emphasised the contrasts between three groups: recent male inmigrants (1970-75 arrivals), long-term male inmigrants (pre-1970 arrivals), and lifetime residents

\(^{(1)}\) This is not a complete list of major migration studies carried out in Indonesia since 1973, but a selective listing of studies which illustrate some of the trends in recent migration research. Details of other studies may be found in bibliographies by Singarimbun (1974) and Hugo (1975b).
of Surabaya; she did not emphasise the time-specific nature of migration.

Recent trends in migration research in Indonesia indicate that the effect of migration on the socio-economic welfare and occupational status of individual migrants has been seriously neglected, despite pioneering research by McCutcheon in Surabaya. Although as Hugo (1975b: 18-9) has emphasised, much remains to be done in the analysis of geographic patterns of mobility (especially at the intra-provincial level), migrant selectivity, rural-urban linkages, and migrant motivation, we already know more about these aspects of migration than we know about the effects of migration on its individual participants. In this study I intend to correct some of the imbalance. Unlike McCutcheon's survey, I am concerned with the sequence of occupations of male and female migrants at three stages of migration: in their previous place of residence prior to migration, on first arrival in Surabaya, and in Surabaya in 1974. The study concludes with an analysis of the socio-economic status of inmigrants in 1974, and an evaluation of the role of pre-migration variables and period of migration as determinants of post-arrival socio-economic status.

1.2 THEORETICAL CONTEXT

I will now review aspects of urbanisation and economic development research in Third World cities relevant to this study of the origins and occupational mobility of inmigrants to Surabaya(1). This review introduces the theoretical background of the study and identifies 'problem areas' in the research which are taken up and examined in subsequent chapters.

1.2.1 Conventional Views of Urbanisation and Occupational Mobility in the Third World

The conventional view of development studies during the 1950s and early 1960s suggested newly independent developing countries would

---

(1) General migration research has been comprehensively reviewed in bibliographies by Mangalam (1968), Connell (1973), Shaw (1975), Connell, Dasgupta, Laishley and Lipton (1976) and no attempt will be made to duplicate these reviews.
follow the path to economic development previously blazed successfully by developed Western countries (Reissman, 1964: 167-8). This viewpoint implied that increased urbanisation in the LDCs would accompany industrialisation and economic development, since the two processes had occurred contemporaneously in Western economic history. As stated by Hoselitz (1953, reprinted 1969: 239): "we have come to associate industrialisation and urbanisation as part and parcel of one and the same process". Leading economists such as Hirschman (1958), Friedmann (1968) - by 1974 Friedmann had changed his view - and Rostow (1971) all assumed a major role for urbanisation in their economic strategies for the development of the Third World.

Contemporary research in Western cities viewed urbanisation as responsible for modernisation and drastic social change both within the city and in surrounding rural areas (Wirth, 1938, reprinted 1957: 46-63; Reissman, 1964: 154). McGee (1971: 18) has condemned this view with the city as the independent variable. In contrast, McGee sees cities and urbanisation as symptoms of economic change and a wider socio-economic system.

Western cities were viewed also as environments which encouraged occupational and social mobility, both for the urban born and for the migrant, though the extent of occupational mobility may differ between these two groups. Lipset (1955, reprinted 1957: 464) suggests three factors were responsible for occupational and social mobility in Western cities. First, the great specialisation and complex division of labour in large urban centres provides a greater variety of positions than a small settlement, and on the basis of simple probability Lipset argues that there is therefore a greater likelihood that people in large cities will be more occupationally mobile than small community dwellers. Second, since the industrial revolution and the great swell of urbanisation, cities have more than matched the expansion in total population and total economic activities of the countries in which they are located. This growth means that there are more new and higher level positions to be filled in large cities than in smaller more demographically stable communities. Third, the lower birth rate of the cities compared to the countryside has resulted in rural-urban migration filling in the gaps created by the low rate of natural increase. Moreover, within
urban society the lower fertility of the higher status socio-economic strata has permitted upward social mobility. Lipset has summarised the effect of these processes on the occupational mobility of overseas and internal migrants (Lipset, 1955, reprinted 1957: 463):

The cycle in which inmigrants or migrants into large cities take over the lower status positions while native urbanites move up in the occupational structure has been one of the more important processes underlying social mobility ever since cities began to expand rapidly. It is this cycle which gives to cities their character of great mobility and ever present change. Of those persons born and raised in cities, some are socially mobile and some of course, are not. But they all tend to stay in the city (although they frequently move from one urban centre to another). On the other hand, rural and small-town dwellers, if they move out of their parental status, are most likely to do so in a large city - while their more stable neighbours remain in their place of origin.

Historic, economic and demographic conditions are very different in the Third World city of today, however, from those when Western countries underwent rapid urbanisation last century. An ad hoc application of Eurocentric theories to Third World cities is therefore fraught with danger, as it assumes a unilineal path of economic development. McGee (1971: 149-52) argues that conditions favouring occupational mobility observed in Western cities by Lipset (1955, reprinted 1957: 463-4), are not replicated in cities of LDCs. In the cities of LDCs which have inherited a colonial past or a pluralistic population structure, many of the occupational riches are reserved for particular ethnic groups: in Southeast Asian cities, overseas Chinese dominate the large-scale commercial activities (McGee, 1967: 85-102); in Indonesia and Malaysia, indigenous groups dominate the civil service. On a micro-scale Hugo (1975a) found that migrants from particular villages in West Java controlled access into some occupations in Jakarta.

Lipset (1955, reprinted 1957: 464) suggested that city growth in the West was associated with greatly expanding employment opportunities which aided occupational mobility. In the LDCs between 1955 and 1965 industrial employment increased at a rate below the rate of growth in the urban workforce (Friedmann and Sullivan, 1974: 386), and as a consequence the great bulk of the manpower available was absorbed in the tertiary sector of small-scale enterprises, personal
services, disguised underemployment and open unemployment, which although politically stabilising is usually regarded as economically debilitating (Keyfitz, 1965: 265-309). A colonial past (Geertz, 1963a) and exploitation by international capitalism (Frank, 1967) have been held responsible for this process of urbanisation without development, whatever the cause, economic stagnation is unlikely to encourage occupational mobility (McGee, 1971: 152).

The final stimulus to occupational mobility noted by Lipset was the lower fertility rates of the cities compared to the countryside, which allowed migration to the urban areas to fill the gaps so created, particularly in the upper socio-economic strata. This situation does not exist in the cities of the LDCs where natural increase makes up a large component of the cities' numerical growth and so occupational opportunities for immigrants are limited. Qadeer (1974: 283) has remarked on the impact of the natural rate of growth in South Asia where "the natural rate of growth of the middle classes is almost as high as that of the expansion of the economy. The bulk of the population which lives in the lower reaches of the social strata seldom gets a chance to set foot on the escalator."

Research on occupational and social mobility in Kuala Lumpur (McGee, 1971: 149-79), South Asia (Qadeer, 1974: 266-83), and Santiago (Raczynski, 1972: 182-98) supports the general conclusion that the opportunities for social and occupational mobility in most cities in the less developed world are markedly less than those available during urbanisation in the West. Moreover, because of occupational inheritance and the pluralistic population structure, migrants to many of the cities may actually be at a disadvantage compared to the urban-born in obtaining the few opportunities that do exist for upward mobility.

Other empirical studies of the occupational status and mobility of migrants and non-migrants in Third World cities reveal a more complicated picture. In Bombay, Zachariah (1966: 383-4) found migrants were more likely to be employed in industries and occupations which required less skill and less capital, and were in lower status occupations than non-migrants, though migrants appear to have improved
their occupational status with increased duration of residence. Only some of the observed improvements reflected real changes in individual characteristics, the remainder were due to the return migration of the less successful migrants to their source regions (Zachariah, 1966: 388). A direct comparison of first occupations with current occupations among male migrants to Santiago (Elizaga, 1966: 376) revealed that 9 out of 10 manual and 9 out of every 10 non-manual workers had remained in the same occupational category since arrival in the city. Migrants aged over 40 who were in professional occupations or engaged in personal services were usually more occupationally mobile than other migrants.

Recent studies in Seoul (Green, 1978: 70-81) and Bangkok (Tirasawat, 1978: 94-103) suggest migrants have been more successful than is indicated by the Bombay study. In both cities, long-term migrants appear to enjoy occupational status comparable to that of non-migrants, and in Bangkok migrants from urban origins have higher status occupations than non-migrants. Recent inmigrants (defined as those who arrived during the five years prior to the particular survey) in Seoul and Bangkok are more concentrated in low status occupations than long-term migrants and non-migrants, particularly if they are of rural origin, of poor educational attainment and had no urban exposure prior to their move. The Bangkok data also reveal a consistent improvement in the occupational status of inmigrants with increased length of residence in the city (Tirasawat, 1978: 97), after controlling for the influence of education. Both of these surveys, however, infer occupational change from the relationship between duration of residence and occupation at the time of the study. This cross-sectional approach can make little allowance (except for standardisation by educational attainment) for variations between migrant flows over time, and no allowance for varying conditions at the time of migration or for the selective composition of return migration flows.

McCutcheon's (1977, 1978: 82-92) recent study of migrant adjustment in Surabaya revealed no significant differences between employment status or occupational skills of recent migrants (1970-75 arrivals), long-term migrants (pre-1970 arrivals), and lifetime
residents as of February 1975. When the employment status of the three cohorts was re-examined using a simple two-category control for education, and migrants of primary school education or less were considered first, a statistically significant relationship emerged between employment status and migrant type:

The long-term migrants are much more likely to be employees than the recent migrants, and are very similar to the lifetime natives. Duration of residence in the city appears to mean that less educated migrants move away from self-employment into more regular work. (McCutcheon, 1978: 85.)

Among the migrants with at least secondary education there was virtually no difference according to duration of residence, most were employees regardless of whether they were recent or long-term migrants. Contrary results emerged when McCutcheon controlled the occupational skills of migrants by education. Migrants with primary education or less did not exhibit significant differences according to duration of residence, but among the better educated respondents, the long-term migrants were overwhelmingly concentrated in skilled occupations (82 per cent), compared to less than 60 per cent of both recent migrants and lifetime residents. McCutcheon concludes:

with time in the city, educated migrants are able to find occupations more suited to their educational levels. That the lifetime native population does not seem to find employment in skilled occupations to the same extent as the long-term migrants, even given the same education levels, may be a function of positive selection in motivation and skill of migrants (1978: 86).

It is important to point out that McCutcheon did not refer to the exceptional historical circumstances in Indonesia during the late colonial and post-independence years when most of these long-term migrants entered Surabaya. These years saw a large influx of Indonesian civil servants who moved to Surabaya to replace Dutch administrators during both the Japanese occupation and the transfer of sovereignty from the Dutch to the Indonesians in 1949-50. Data from my survey reveal that of the 52 male migrants who arrived in Surabaya before 1950, 19 per cent came to Surabaya because of job transfers. Of the 1950-59 inflow, 18 per cent moved to Surabaya for similar reasons, compared to only 11 per cent and 10 per cent of the male
migrant inflows of the sixties and early seventies, respectively. The majority of the transferees were well-educated civil servants. It is this time-specific specialised intake, which explains McCutcheon's relationship between duration of residence and occupational status, not real occupational mobility.

Subsequent longitudinal analysis by McCutcheon which compared the migrant's present job with his first job in the city, failed to support the hypothesis of occupational mobility. Of the 176 male migrants surveyed, McCutcheon (1978: 87) found that only 23 per cent had changed jobs at least once in Surabaya. Of those who changed jobs, over three-fifths moved to jobs of similar employment status, one-third moved from the status of employee on arrival to being self-employed in 1975, and seven per cent moved from being self-employed on arrival to employee status in 1975. In terms of employment status the general picture is one of stability. In terms of occupational skill over 78\(^{(1)}\) per cent of the immigrants who changed jobs moved into new jobs with the same level of skill, the remainder being split about evenly between upward and downward movers.

These findings imply that the Seoul and Bangkok surveys may also have revealed widespread occupational stability if longitudinal data had been available. A second conclusion is that research findings based solely on inferential data about occupational mobility derived from cross-sectional surveys are of doubtful value in assessing occupational mobility. As McGee (1971: 171) and Pryor (1975: 16) have emphasised, more empirical studies are required into occupational mobility. Ideally these studies should obtain sufficient detail to enable longitudinal and time specific analysis of individual immigrants. Thirdly, with the exception of McGee's (1971) pioneering work, most current research has focused on the post-arrival adjustment of migrants to the city. The change in occupational status of the migrants when they moved to the city from their previous places of

---

(1) McCutcheon (1977: 6.38, 1978: 87) maintains that longitudinal analysis showed that nearly one-half of the migrants who changed jobs at least once after arrival in occupation at the same level of skill. Re-calculation from McCutcheon's tables, however, indicates the real proportion was 78.5 per cent (McCutcheon, 1977: Table 19, 1978: Table 3).
residence, has been largely ignored. A fourth conclusion is that theories suggesting geographic mobility automatically facilitates occupational and social mobility are inadequate to explain the widespread occupational stability experienced by most migrants to the cities of Southeast Asia.

1.2.2 The Urban Dualism Model

The inability of theories derived from European experience to explain the processes of urbanisation and occupational mobility in Third World cities, was increasingly realised in the mid to late sixties. By then, early hopes for rapid economic development in the newly independent nations of the Third World were fading rapidly. In particular, it was obvious that the cities of the new nations could not satisfy the increased demand for productive employment opportunities being forced on them by burgeoning population growth (Lewis, 1967: 13-22). Unlike the earlier experience of the West, rapid population growth was fuelled not only by dramatic urbanisation of essentially rural societies, but by a continued high rate of natural increase, without the 'safety valve' of emigration to the New World, which had been available to millions of Europeans during their Industrial Revolution. At this time, some researchers (Breese, 1966: 133-6) began to use the term 'overurbanisation' to describe the continued influx of people into the cities of the Third World which, in the view of most Western observers already contained too many people for available employment opportunities and urban services.

It was in this context that Geertz (1963b) first applied the ideas of the 'classic dualism' of Boeke (1953) and the 'economic dualism' of Higgins (1955) to identify a dual economic structure within an urban settlement of the Third World. Geertz (1963b: 28-9) identified the two sectors as a 'firm-centred economic sector', "where trade and industry occur through a set of impersonally defined social institutions which organise a variety of specialised occupations with respect to some particular productive, or distributive end," and a 'bazaar economy', "based on the independent activities of a set of highly competitive commodity traders who relate to one another mainly by means of an incredible volume of ad hoc acts of exchange."
Armstrong and McGee (1968: 359-63) developed this model to explain how the 'bazaar economy', of Third World cities could, by a process of 'urban involution', absorb increased inputs of labour, though the end-product of this situation is frequently 'shared poverty'.

McGee (1972; 1973; 1974; 1976; 1978) clearly distinguished the two sectors according to their dominant mode of production. Utilising Franklin's (1965) conceptual scheme, McGee (1973: 138) saw the firm-centred sector as "one derived from capitalist forms of production, the other [Geertz's bazaar economy] from the peasant system of production". The basic distinction between the two modes of production as defined by Franklin (1965: 148) is that:

in the peasant economy the individual entrepreneur is committed to the utilisation of his total labour supply - that of his family, ... in the capitalist and socialist systems of production, labour becomes a commodity to be hired and dismissed by the enterprise according to changes in scale of organisation, degree of mechanisation, the level of market demand for products.

McGee (1973: 140-1) proposed that the self- or family-employed members of the peasant economy in Third World cities should be termed the 'proto-proletariat' since they did not fit into the traditional definition of 'peasants', 'proletariat', or 'urban bourgeoisie'.

Santos (1976) broadened the original Geertz (1963) model by stressing the relationships between the two sectors, which he described as upper and lower circuits of articulation (or linkage), rather than sectors. Santos (1976: 24) suggested that both sectors are capitalistic, at least as far as accumulation is concerned. Hart (1973) apparently quite independently, arrived at a similar model of urban dualism to that of Geertz (1963b) and Armstrong and McGee (1968) when he analysed the low-income section of the labour force in Accra. Hart focused his attention on income opportunities which, as suggested by McGee (1978: 11), may lead to a more precise definition of the low-income sector and an assessment of its income generating potential. Hart (1973: 69) distinguished between 'formal' and 'informal' income opportunities, a distinction which introduced a new terminology and launched the formal/informal sector concept. The terms are misleading, however, since 'informal sector' enterprises may
be formally organised. The Hart (1973: 69) typology also made the distinction between legitimate and illegitimate activities, a difference of little relevance in Third World cities.

Although the dualism of the formal/informal sector concept was approximately analogous to the firm-centred/bazaar dualism proposed by Geertz (1963) and the capitalist/peasant dualism of Armstrong and McGee (1968), the International Labour Office (ILO) quickly adopted and applied the formal/informal sector concept in Kenya (ILO, 1972) and in its World Employment Programme. Bromley (1978: 1036) suggests propitious timing, effective communications and political convenience explain the rapid adoption of the concept during the 1970s, but the hasty adoption also contributed to inconsistencies and anomalies in its early formulations. The Kenya report (ILO, 1972) hoped to avoid some of the problems of definition by focusing on enterprises, not individuals, but when the concept was applied in the field, the definitions were loose and inconsistent (Sethuraman, 1976b: 71-2).

The characteristics of the two sectors recognised by the different versions of the urban dualism model have been comprehensively listed by McGee (1978: 9-12). In brief, the definitions emphasise that an informal sector enterprise involves either self-employment or family control of the enterprise and that it operates on a small scale. In contrast, formal sector enterprises are large scale, and the individual worker is engaged as a wage-earning employee. Franklin's (1965) distinction between a peasant mode of production, in which the entrepreneur is committed to the full use of his total labour supply (his family), and a capitalist system of production, in which labour may be hired or fired, seems the key difference. This distinction and the size of an enterprise are used in this study to distinguish between the formal and informal sectors.

Applying the formal/informal sector concept to empirical data about lifetime migrants to Surabaya revealed a sizable proportion of migrants (26 per cent) engaged in enterprises which could not be classified under a formal/informal dichotomy. For example, some migrants were self- or family-employed in enterprises which also
employed other non-family employees. In these cases the employer status of the respondent suggests the enterprise is informal, whereas the fact that it employs non-family labour suggests it operates within a capitalist mode of production and is a formal sector enterprise. Other small enterprises employed non-family labour like formal sector enterprises, but had a chef d'entreprise who was the head of the household who extended family-type protection to his employees similar to that found in the informal sector (such as domestic servant employed by household head). There were also informally controlled enterprises where migrants were almost in the position of an employee, in that they could be precluded from income earning opportunities, but did not receive a wage and paid a regular rental charge in return for the protection of the head of the enterprise. (1) Prostitutes who were members of formally organised brothels came within this ambiguous category. They paid a commission for the use of the brothel's facilities and the protection and organisational abilities of the germo or brothel manager. Other migrants were employed in small-scale enterprises (less than 10 employees) run by an owner-manager in which union negotiated wages and conditions, usually associated with the large firms of the formal sector (Mazumdar, 1976: 656), did not exist. The existence of these problem groups, which could not be readily identified with either the 'formal' or 'informal' sectors according to the classic dualism model, led me to adopt the Friedmann and Sullivan (1974) tri-sectoral model for my analysis of intersectoral labour mobility.

The Friedmann and Sullivan (1974: 393) model adopts a tri-sectoral division of the urban economy consisting of a corporate, government or large family enterprise sector at the top, equivalent to the formal sector; an intermediate sector of small family-run enterprises which employ both wage and unpaid family workers who are

---

(1) Forbes (1978b: 4) identified a similar situation among the becak (trishaw) riders of Ujung Pandang and remarks: "whilst many see informal sector workers as independent entrepreneurs most are dependent on a punggawa (entrepreneur) who owns and controls the means of production [in this instance the becak], and that the relationship between punggawa and operator, although it varies with different activities, invariably turns out to be most profitable for the partner with access to the scarce resource of capital."
'unprotected' in terms of wages and conditions including those in the 'problem category' above (1); and an informal sector consisting of the self- and family-employed, and the unemployed. One of the great advantages of the Friedmann and Sullivan model is that it clearly defines the position of government employees, a numerically significant section of the workforce in Indonesia. Another advantage is that it combines a labour force and institutional approach which offers additional analytical insights into the structure of urban employment not possible from a strict application of the dualism model. Despite its tri-sectoral features, however, the Friedmann and Sullivan model is in the conceptual tradition of the urban dualism model of Geertz (1963b) and Armstrong and McGee (1968).

The most obvious benefit from the model of urban dualism or the informal sector concept is that it has encouraged a host of recent studies into the conditions of the urban poor. Hart (1973) and Bienefelt (1974) have conducted studies in Africa; McGee and Yeung (1977), Jackson (1978) and Rimmer (1978) have conducted research in Southeast Asia. In Indonesia, the informal sector has recently been researched by Papanek (1975), Sethuraman (1976a), Dick (1978), Forbes (1978a, 1978b) and Jellinek (1977, 1978). From the viewpoint of this study, one of its more significant by-products was the development of a structural model of rural-urban migration by McGee (1972, 1976) which he applied to the migration of Malays in West Malaysia. The major elements of McGee's structural model are presented in Figure 1.2 (after McGee, 1972: 110, 1976: 17). The model is essentially one of labour mobility, though retirement migration is included (McGee, 1976: 15). The model suggests that horizontal movements between similar sectors (for example A-B or C-D, Figure 1.2) pose few problems

---

(1) Friedmann and Sullivan (1974: 392) place all forms of prostitution in the informal sector because of their illegal status. This criterion appears to be of little relevance in Surabaya, however, since prostitutes organised into brothels are formally recognised by city authorities. Moreover, the relatively large scale of these brothels (up to 10 girls in each), plus the organised and almost 'formal' nature of their obligations to the germo (brothel manager) suggest that although not wage earners, they are not individual entrepreneurs and as such should be located within the intermediate or family sector. Prostitutes who conduct their activities individually would of course qualify as members of the informal sector.
Figure 1.2
McGee's structural model of rural-urban and urban-rural mobility

A ——— B  Few problems in rural-urban mobility. Circulatory and seasonal mobility most common.

C ——— D  Few problems in rural-urban mobility. Transfer mobility most common (often government sponsored)

E ——— F  Possible difficulties of economic adjustment. Two major types of migrants: i) migrants educated out of rural areas ii) unskilled marginalised population forced off the land.

F ——— E  Migration is often retirement migration

G ——— H  Uncommon except in condition of fluctuating incomes for primary produce.

of adjustment for migrants, whereas geographic mobility which involves a vertical change from a rural-peasant mode of production to an urban-capitalist mode of production (E-F, Figure 1.2), creates potential difficulties of economic adjustment, such as the problem of obtaining work. Inherent in this suggestion is the assumption that the urban-informal (peasant) sector is easy to enter, whereas the formal sector with its emphasis on formal educational qualifications is difficult to enter.

Current opinion on this vital point is divided. The ILO report on Kenya (1972: 6) cites 'ease of entry' as the first major characteristic of the informal sector. Hugo (1977: 62-3) states that entrance to informal sector occupations is relatively easy for circular migrants to Jakarta, not only because it allows flexibility of working days and hours unlike the formal sector, but because it has a capacity to involute, whereby goods, risks, returns and employment are fractionalised among many individuals. However, Bienefeld (1974: 17) notes that in Tanzania migrants are under-represented in the non-wage sector, which "suggests that becoming established in this sector is rather difficult for those having few roots and/or little experience in the urban community and economy". As noted by Hugo (1975a: 514-20), entry into either the formal or informal sectors is not easy in the absence of family connections in Indonesia. McGee (1976: 16) is careful not to overstate the ease or difficulty of entering either sector: "there are potential problems of work adjustment in this type of mobility [that is E-F mobility, Figure 1.2], but in general in this Asian region they do not appear to have been severe".

In the latest restatement of the structural model McGee (1976: 18-21) has proposed a dynamic model suggesting three possible scenarios according to the rates of growth in the workforce in the capitalist and peasant sectors over the next 50 years. Indonesia is unlikely to have much more than 40 per cent of its population resident in urban areas by 2025 at current rates of urbanisation. If there is a slow rate of capitalist penetration of the economy and a continuation of the present de facto emphasis on capital intensive projects over the next 45 years, Indonesia will conform to McGee's
second scenario by 2025. This scenario predicts a reduction in the volume of migration from peasant-rural to urban-capitalist (Figure 1.2), but an increase in peasant-rural to peasant-urban mobility and circular migration. This prediction implies that continuous population growth and the capital intensive nature of economic development in a country such as Indonesia will force most rural-urban migrants into the urban informal sector.

It appears that inadequate employment opportunities in the formal sector will leave rural-urban migrants no alternative but to create self-employment in the informal or family sectors of the urban economy. McGee (1976: 23-4) has argued also that the volume of circular migration between the rural-peasant and urban-informal sectors will increase because, as indicated by Hugo (1977: 62) and Jellinek (1977: 69-70), circular migrants are able to maximise economic returns and minimise their living costs and overheads. They achieve this by leaving their family in the village where living costs are low, and by sharing travel costs and accommodation in the city with other migrants from their home village.

The urban dualism model and the structural model of migration derived therefrom, raise critical questions about the labour absorption, occupational mobility and post-arrival behaviour of immigrants. These questions are summarised in the following hypotheses which will be tested empirically later in this study:

1. Rural immigrants with low formal educational qualifications and low socio-economic status tend to concentrate in the informal sector of the urban economy because it is easier to gain entry to this sector than to the formal sector.

2. Immigrants in the formal or corporate sector of the urban economy in Third World cities are of high socio-economic status and possess better formal educational qualifications than those employed in the informal sector.

3. The informal sector contains more recent immigrants than the family or corporate sectors; and many immigrants are
temporarily employed within the informal sector until they obtain better jobs in the family or the formal sectors of the urban economy.

4. Whereas entrance into formal sector employment is usually restricted to inmigrants previously employed within this sector, upward occupational mobility to the family enterprise sector is not particularly selective of previous occupation.

5. Members of the informal sector are less likely to be committed solely to an urban existence than formal sector employees. The nature of their occupations encourages target and circular migration between their place of origin and the city. Inmigrants occupied in the informal sector of a city's economy regard themselves as less permanent residents of the city than formal sector employees, and maintain closer economic and social ties with family members resident in their place of origin.

1.2.3 Criticism of Urban Dualism and the Concept of the Fragmented Labour Market

Since the mid-seventies the urban dualism model and the concept of the urban informal sector have come under increased criticism (Brookfield, 1975; Breman, 1976; Armstrong and McGee, 1976; Bromley, 1978; Moser, 1978; Harriss, 1978; Miller, 1978; McGee, 1978). Since the structural models of migration are based on the dualism concept these criticisms apply also to migration theory. Some criticism originates from empirical research and emphasises either the problems encountered in the application of the concept, or the lack of homogeneity among those occupied within the informal sector. Doubts have been raised about the empirical relevance of the structural model. The other criticism is theoretical and strikes at the heart of the model. This criticism suggests that the bi-polar nature of the dualism model has focused attention on differences between sectors and, as a result, the model has been responsible for the current neglect of research into the processes which have created dualism. According to proponents of this view, research should focus on the interrelationships between the sectors (see Tokman, 1978).
Some of the problems encountered in the application of the urban dualism model have arisen because there has been no universally acceptable, precise, and logically consistent definition of the informal sector; for details see Breman (1976: 1871) Bromley (1978: 1034) and Moser (1978: 1051). For example, at different times it has been regarded as synonymous with a system of production (McGee, 1973: 137-8), a lower economic circuit (Santos, 1976), a type of labour relations (Mazumdar, 1976: 65) or with people living in slums or squatter settlements (Sethuraman, 1976b: 72).

Other empirical research has revealed that even where a consistent definition has been applied, the informal sector includes a heterogeneous mixture of individuals who relate to their means of livelihood in different ways. For example, a persistent assumption about those occupied in the informal sector of the Third World cities, is that they are the poorest members of the urban labour force (Sethuraman, 1976: 75). Mazumdar (1976: 663-6) concluded from a review of the comparative earnings of the self-employed and wage earners in Peru, Tanzania and Malaysia that there was "a wide diversity of earnings among the self-employed", and a substantial proportion received a larger income than the wage earners (1976: 666). Bienefeld's (1975: 56-9) work in Tanzania indicated that the smallest incomes were not a monopoly of the self-employed, but were shared by wage earners clustered in certain parts of the service sector and casual wage earners. Although almost half of the self-employed in urban Tanzania earned less than the state minimum wage, one-quarter received incomes at least twice the minimum wage, one-quarter received incomes at least twice the minimum wage, and 10 per cent earned incomes in excess of six times the state minimum. The adoption of a definition based on the system of production (which would exclude family enterprises employing non-family workers) would not eliminate this problem, since the immigrant shopkeeper with his packaged western-style goods would be grouped incongruously in the informal sector alongside the indigenous street-trader provided the shopkeeper employed family labour only. The inadequacy of the informal sector concept in this type of situation has been remarked on by Breman (1976: 1873), and noted elsewhere in this discussion (refer section 1.2.2).
Mazumdar (1976: 660) reviewed the demographic characteristics of informal sector members in Belo Horizonte (Brazil) and Peru and noted a disproportionate concentration of females and workers who had not completed primary school. The informal sector also comprised a disproportionate number of workers outside the major working age groups and a large number who were not heads of households. Mazumdar concluded that many of the workers in the informal sector in both Brazil and Peru were secondary workers from families where the head of the family had a job in the formal sector. In Surabaya, many wives whose husbands were previously employed in the formal sector established a small stall when their husband or family breadwinner retired or died. A similar practice has been recorded in Tanzania (Bienefeld, 1974: 18).

Proponents of the urban dualism model often imply that the informal sector contains a large proportion of rural inmigrants who constitute a pool of 'marginal labour'. Breman (1976: 1872) and Bienefeld (1974: 15), however, emphasise that the informal sector often contains proportionately fewer inmigrants than the wage earning sector, and many of the self-employed originate from other urban centres. Other researchers (e.g. Mazumdar, 1976: 656) suggest that labour relations and the degree of protection of wage-levels and working conditions distinguish formal or protected sector employees from informal or 'unprotected' sector workers. Breman's (1976: 1905) research in South Gujarat (India) raises doubts about this distinction. Breman admits that it is easy to find two extreme categories which oppose each other if we attempt to delineate two levels of employment, but "as the distance between the extremes lessens, similarities in recruitment, working conditions, and bargaining procedures gradually outdo the differences between various categories of labour". Harriss (1978: 1078-84) reached a similar conclusion in South India where she found considerable evidence of informal relationships and activities within the 'organised' or formal sector, and widespread evidence of order, rule and structure in the 'unorganised' informal sector. It appears the urban labour market of most Third World cities consists of a continuum of working conditions within one labour market. Dualism is found only when extreme conditions at each end of the range are compared and the intervening
majority is ignored. These findings cast serious doubt on the empirical validity and analytical value of the formal/informal dichotomy. These doubts about dualism must be borne in mind when this study evaluates the structural models of migration developed from the dualism paradigm.

A second strand of criticism of the urban dualism model attacks its theoretical foundations, and is more serious than the empirical criticisms which highlight its inability to approximate reality. The most important theoretical criticism of dualism is derived from dependency theory which claims that there is no duality of economic systems within Third World cities and proposes instead that there is one distinct mode of production, peripheral capitalism, whereby the international capitalist system has integrated the economies of the Third World nations into an international capitalist system (for details see: Breman, 1976: 1874; McGee, 1978: 13-5; 1979; Miller, 1978; Moser, 1978: 1055-62). Peripheral capitalism consists of a capitalist or modern (formal) sector closely integrated into the international capitalist economy, and a variety of 'petty capitalist' or traditional forms of production "under the hegemony of the first form" (McGee, 1978: 14). In a system of peripheral capitalism the relationship between the two sectors is determined by the capitalist sector which dominates and exploits petty capitalist or traditional forms of production.

Several proponents (for example Moser, 1978: 1056-62) of peripheral capitalism believe the small-scale enterprises of the informal sector should be classified as a form of production termed 'petty commodity production', since these enterprises are too dependent on the capitalist sector to warrant classification as a separate and self-sufficient mode of production. From this viewpoint, non-capitalist modes of production have been eliminated by peripheral capitalism. Breman (1976: 1875) and Bienefeld (1975: 54) do not agree that there has been a complete elimination of non-capitalist modes of production; but, like McGee (1978: 13-5), they emphasise that although two sectors may be recognised, the essential point is the way each has been transformed through its relationship with the other (Bienefeld, 1975: 54).
Because of the dominance of the capitalist mode of production, the petty capitalist enterprises find it very difficult to accumulate capital and carry out domestic expansion. Bienefeld (1975: 55-6) has summarised the processes which have operated to block their development:

many small scale operators are engaged in a process of production and of technological development but their ability to develop cumulatively over extended periods is limited; by their being exploited through the terms of trade; by their dependence on large scale industry for inputs (often illegally obtained); and by the fact that when the markets they serve grow beyond a certain size this will not be a gradual but accelerating stimulus to further development of the forces of production. Instead it will trigger a discontinuous shift to 'international' technology which will incorporate this market by virtue of its efficiency and/or its market power, the latter based on effectively unlimited access to capital and on the establishment of brand name products through heavy advertising.

In addition to the blocking capacity of the large capitalist enterprises, McGee (1978: 15, 1979: 7-10) has suggested that in poorer Third World countries, such as Indonesia, it is not in the interests of the dominant capitalist mode of production to destroy some of the non-capitalist modes; instead these are restructured and subordinated to the capitalist mode. One reason advanced (McGee, 1979: 9) for the conservation of the non-capitalist modes of production is that it is more profitable for the large capital intensive firms to concentrate on export oriented products or consumption goods for the upper classes, than to produce cheap goods for mass consumption in the domestic market with its limited purchasing power. Non-capitalist modes of production also guarantee supplies of cheap goods and casual labour for capitalist enterprises, and the survival of small-scale petty commodity production offers at least some employment to the urban poor and restricts the growth of open unemployment.

Although conservation dominates the conservation-dissolution mechanism in most Third World countries (McGee, 1979: 8), Tokman (1978: 1071-3) has pointed out that the situation varies greatly among activities and through time. Some informal sector (petty commodity production) activities such as manufacturing, are under threat of almost immediate destruction by large-scale capital
intensive competitors in the formal sector; other informal sector activities, such as personal services, face no immediate threat from capital intensive enterprises in the formal sector.

The critics of urban dualism, which include two proponents of the original model (Armstrong and McGee, 1976; McGee, 1978, 1979), focus attention on the interrelationship between sectors or, more accurately, on the interrelationships between enterprises, with the aim of explaining persistent inequalities within the urban economy of Third World nations. They claim the dualism model 'begged the question of causation' by focusing on the 'symptoms' rather than the 'disease'. McGee (1978: 13, 1979: 5) suggests that when the dualism model was utilised for explanatory rather than descriptive purposes, dualism was frequently seen as a consequence of internal processes, rather than a result of the relative position occupied by Third World countries in the international capitalist system.

What alternative approaches have been proposed which are relevant to migration and occupational mobility research? Breman's (1976) concept of a 'fragmented labour market' appears the most suitable alternative. Breman (1976: 1870-5) dismisses the dualism model as over-rigid and simplistic and notes that the tri-sectoral model also is insufficient if it is intended to indicate the existence of a differentiated horizontal structure, since such a structure only recognises the difficulty of vertical movements and ignores internal lateral movement within a sector which may be equally difficult. Breman (1976: 1905-7) suggests that the labour market of Third World cities is extremely fragmented, and that scarcity of work encourages social groups to attempt to monopolise certain occupational roles or activities in order to guarantee income and employment for themselves. While attempting to fence-off some activities against outsiders, these same groups try to enter into new activities in order to establish a bridgehead which eventually will provide increased employment opportunities for other members of their group. However, Breman (1976: 1905) suggests the degree of compartmentalisation should not be exaggerated so that the labour market is seen as pluralist, with separate sub-markets. An example of compartmentalisation in Surabaya, is the Chinese domination of the
retail trade within the formal sector. Examples of how particular ethnic groups or immigrants originating from a particular region have monopolised certain activities in Jakarta are given by Papanek (1975: 15) and Hugo (1975a: 515-7).

The concept of the fragmented labour market has obvious consequences for some of the assumptions involving migration to urban areas which arose from the urban dualism model. As Breman (1976: 1907) emphasises, migration models based on the formal/informal dichotomy (see Todaro, 1969) assume that unskilled workers who migrate to the towns from the rural areas first drift into the informal sector of the urban economy and subsequently move on to jobs in the formal sector. The informal sector, then is a 'holding sector' or 'buffer zone'. If the urban labour market is a more fragmented structure in which social groups fence-off particular activities in the face of an acute shortage of employment opportunities, then structuralist models will not explain the occupational success or failure of immigrants in the cities of LDCs. Structuralist models have made the error of portraying the rural immigrant as a uniform type, "whose mobility is laid down in a completely mechanistic pattern" (Breman, 1976: 1907). In a fragmented labour market access to employment occurs at different levels and is dependent on the socio-economic background, education, presence or absence of urban contacts, and ethnicity of the individual immigrant. Immigrants who enjoy a high socio-economic ranking in the rural system will, in all probability, utilise the advantages derived from such a ranking (such as education) to obtain a superior position in the city in comparison to other rural immigrants. Poorer rural immigrants "see their former backward position within the village continued in the urban environment" (Breman, 1976: 1907).

The assumption that the city is a place where immigrants may enjoy upward occupational mobility, must also be reassessed if the labour market is viewed as a fragmented structure. Studies of Surabaya (McCutcheon, 1978: 87) and Jakarta (Papanek, 1975: 14) which utilise longitudinal data do not support the assumption of upward mobility; instead they indicate general occupational stability. In Breman's view this stability is explained by the scarcity of employment and the limited opportunities for those with work to
accumulate capital or to invest in formal education. Breman (1976: 1907) suggests that the labour market in the city is characterised by 'defensiveness', where those in income earning occupations do their utmost to protect their position and attempt to restrict entry to outsiders, because although opportunities for upward mobility are limited, "the road downwards is all too easy to traverse".

Migration theories derived from the urban dualism model assume that small-scale activities of the informal sector are characterised by ease of entry and are capable of almost unlimited expansion. Work by Bienefeld (1974: 3-5) in Tanzania raises doubts about this view; doubts which are reinforced by the peripheral capitalism paradigm which suggests that any expansion of petty commodity production is dependent on policies pursued by the dominant capitalist sector. So real expansion of employment opportunities within the informal or petty commodity sector will be confined to activities of little interest to the capitalist sector (such as personal services), though continued expansion of the labour supply will force involutionary growth within most other informal sector activities. The concept of a fragmented labour market, in which those with income earning occupations focus their attention on defending their position against outsiders, also suggests that entry into the small-scale activities of the informal sector will not be easy for newly arrived inmigrants without contacts in the city.

1.3 MAJOR THEMES

The major themes of this thesis are closely linked both to the needs of migration research in Indonesia and to questions raised in my discussion of research into migration and occupational mobility in LDCs. The major aims are:

i) To investigate the geographic, demographic, and socio-economic origins and migration history of lifetime migrants to Surabaya.

ii) To determine the amount of occupational mobility experienced by these migrants as a result of their move to Surabaya.
Occupational mobility is examined in two stages: the occupational mobility which occurs as the immigrant changes from his last job prior to migration to his first job on arrival in Surabaya; and the post-arrival occupational change between first arrival in Surabaya and 1974, when my survey was undertaken. Occupational mobility is related to the period of migration in order to isolate changes in employment opportunities and migrant selectivity over time.

iii) To evaluate Friedmann and Sullivan's (1974) tri-sectoral model as an aid to an understanding of the occupational mobility experienced by immigrants.

iv) To analyse detailed changes in occupational status and the 1974 socio-economic status of immigrants in relation to their pre-migration origins. The object of this analysis is to test Breman's (1976) hypotheses:

a) In surplus labour markets typical of urban centres in LDCs, job scarcity has resulted in fragmented labour markets and occupational immobility among entrants to the workforce.

b) As a result of occupational immobility, the post-arrival occupational and socio-economic status of immigrants is dependent to a significant degree on the individual immigrant's pre-migration origins, particularly on his or her geographic, demographic and socio-economic background.

When this study was begun in late 1972, detailed time-specific information about the origins and occupational mobility of lifetime migrants to Surabaya was not available from any source (refer Appendix 1.1 for an evaluation of available data sources). Data about the majority of immigrants who came to Surabaya from other parts of East Java were unobtainable, and as a result my thesis relies on data personally collected in the field. I made two major surveys: a population registration survey (hereafter referred to as
the 'population registration survey'), and a questionnaire and enumeration survey (generally referred to as the 'questionnaire survey'). The latter survey comprised an 'enumeration survey' and detailed questionnaire surveys of recent (1969-74 arrivals) and senior inmigrants (pre-1969 arrivals), hereafter referred to as the 'questionnaire survey of recent inmigrants' and the 'questionnaire survey of senior inmigrants', respectively. The population registration survey is described in Appendix 1.2; Appendix 1.3 describes the enumeration and questionnaire surveys; Appendix 1.4 presents copies of the original questionnaires; and Appendix 1.5 outlines the sample design of the enumeration and questionnaire surveys. The extent of sample bias in the enumeration and questionnaire surveys is evaluated in Appendix 1.6.

The thesis is organised into two major parts. The first part (Chapters Two, Three and Four) focuses on the historical context of migration to Surabaya and the origins of inmigrants. In Chapter Two the historical development of Surabaya, the city's population growth, and migration into the city since early colonial times is described. In Chapter Three the geographic origins of inmigrants and their migration history prior to the move to Surabaya is examined. In Chapter Four the demographic and socio-economic selectivity of the inmigrants is studied.

In the second major part of the thesis (Chapters Five, Six, Seven and Eight) I analyse the occupational mobility experienced by migrants during and after migration to Surabaya. The extent and distribution of occupational mobility among inmigrants, and the occupational and socio-economic position of inmigrants in 1974 is explained in terms of the migrant's pre-migration origins and the tri-sectoral model (Friedmann and Sullivan, 1974) of urban employment in LDCs. Benchmarks for the subsequent analysis of occupational mobility are established in Chapter Five which investigates the occupational status and employment structure of inmigrants, both before migration and on first arrival in Surabaya. In Chapter Six data from Chapter Five are used to assess the occupational status change and intersectoral mobility of inmigrants as they move from the last job prior to migration to their first job on arrival in
Surabaya. The sequential analysis of occupational change is continued in Chapter Seven in which the occupational status of immigrants in Surabaya in 1974 and post-arrival occupational mobility is studied. The empirical evaluation of occupational mobility is completed in Chapter Eight with an analysis of the employment structure of immigrants in 1974, an analysis of the overall intersectoral mobility of immigrants between previous place of residence and Surabaya in 1974, a review of overall occupational status mobility, and an attempt to construct a multivariate model to explain the socio-economic status of immigrants in 1974.
CHAPTER II

THE GEOGRAPHICAL SETTING: CHARACTER AND EVOLUTION
OF SURABAYA

"Dutch colonial policy can be read from the countenance of the Indies town" ('Town Planning Ordinance for Municipalities on Java', Batavia, 1938, in Wertheim, et.al., 1958: 66).

2.1 INTRODUCTION

The outstanding characteristic of Surabaya, for the observer conversant with Western cities, is an extreme almost incongruous diversity in the ethnic, demographic, social, economic, and geographic character of the city. Along any street in the northern section of the city one meets tall aquiline-featured residents of Arab descent, short wiry Madurese wearing the peci (black fez worn by Muslims), pale-skinned descendants of Chinese immigrants, and stockily built indigenous Javanese. In a Javanese kampung (village in an urban area which retains some of the characteristics of the rural village or desa) on the outskirts of Surabaya (such as Ngagel, refer Figure 2.1) or in a Madurese kampung in the northeast of the city (such as Jatipurwo, Fig. 2.1) one is surrounded by young children. In the old Chinatown of Pabean Cantian (Figure 2.1), households are dominated by aging totok Chinese ('pure' or traditional Chinese, often China born). To the south in the well-to-do European style suburban housing of the Darmo district are the younger generation of peranakan Chinese (those who speak an Indonesian language, have often adopted an Indonesian name and are usually local-born).

The contrast between rich and poor is dramatic. Air-conditioned, chauffeur-driven cars compete for inadequate roadspace with becak (pedicab) drivers and oxcarts. Footpaths outside modern air-conditioned offices are crowded with the orang kecil (little people) selling cigarettes, drinks or soup from their tiny portable stands (Plates 1 and 2). In the Darmo district, members of the internationally-travelled military, administrative, and commercial
Figure 2.1  Morphology and landmarks of 'Old Surabaya', 1969

1. The Red Bridge
2. Mosque of Sunan Ampel
3. Docks and warehouses (indigenous craft)
4. Jl. Jembatan Merah
5. Jl. Naga
6. Jl. Tunjungan
7. Military barracks
8. Governor's official residence
9. Office of the Governor
10. Surabaya Kota railway station
11. Pasar Turi railway station
12. Gubeng railway station
13. Wonokromo railway station
14. Wonokromo bus station

Clustered permanent stone or brick buildings
Drainage ponds
Railways 3'6" gauge

Village type indigenous housing (kampung and desa)
Wet rice fields (sawah)
Light steam railways

Fishponds
Vacant land or arable upland
Railway station

Marsh and swamp
Graveyards; Muslim, Christian, Chinese
Boundary of 'Old Surabaya'

Source: Photomap of Surabaya, 1959; Air photographs of Surabaya, 1969; Planimetric city maps, 1971; fieldwork
PLATE 1. A street scene in Bongkaran lingkungan in 1973 illustrates the juxtaposition of both modern and traditional forms of transport, and formal and informal sector enterprises within 'Old Surabaya'. This area was the centre of the city's commercial district in the 1880s and 1890s.

PLATE 2. Madurese immigrants who have established small informal sector enterprises (tailor, cigarette seller and a drink seller) in a spacious shop front in Bongkaran, Surabaya.
elite share, and frequently achieve, many of the aspirations and values of the urban elites of the West. In nearby kampung the aspirations and values of the residents are akin to those of traditional rural society in the rural village (desa). In the kampung friends, perspectives and responsibilities are limited to the gang (small lane within a kampung), the kampung, and perhaps to the desa, if the resident is a recent immigrant with strong ties to his desa of origin. For the elite, business associates and responsibilities extend to Jakarta and beyond to Singapore, Hong Kong and Tokyo; and 'neighbours' are as distant socially as are 'neighbours' in a Western metropolis.

Although such diversity is not unique to Surabaya, the micro-geographic scale at which it occurs makes it dramatic, even incongruous. In no Western city do the shanties of urban squatters share the same fence line as the gardens of the urban elite. In few Western cities are there row on row of shop-houses, as in the Chinatown of Surabaya. Few footpaths in Western cities have the multitude of uses, from the display counter of a handicraft pedlar to the entrance of a large international corporation.

In the majority of Western cities the existence and active enforcement of planning regulations, the universal dominance of the capitalist mode of production, and advanced transportation systems have led to the specialisation of land use and the development of relatively homogeneous zones of economic usage. No clear zonation of land use occurs in Surabaya, or in other Southeast Asian cities. Planning regulations which do exist are rarely implemented; and a dual economic system, comprising bazaar and firm sectors, encourages variety in the scale and type of economic organisation. A wide range of land uses, economic organisation, ethnic communities and demographic and social characteristics are apt to co-exist within one micro-geographic region in Surabaya. Even the relatively few areas of homogeneous use, such as the high-class housing of the Darmo district, have tended to be creations of the colonial period which have become more mixed since independence.
A main cause of the considerable diversity within contemporary Surabaya is the city's colonial past. During the 200 years from 1746 until 1949, the city developed from a minor Dutch military outpost to the major colonial port city of the Netherlands Indies, outside Batavia. In colonial times most of the contrasts in land use and ethnic composition were between sectors of the city, as the city comprised internally homogeneous sectors of European offices, European residential areas, Chinese shop-houses, and Javanese or Madurese kampung. Since independence, Surabaya has been 'Indonesianized' both by immigration and the repatriation of the Dutch, and in contemporary Surabaya there is a marked heterogeneity at the micro-scale within individual sectors. At the same time, the differences between sectors so characteristic of the colonial era remain, and no study of Surabaya can hope to understand its character and internal diversity without an analysis of its colonial past. The first task, then, is to outline the historical development and population growth of Surabaya from its pre-colonial days until the early 1970s.

2.2 THE PRE-COLONIAL INDIGENOUS SETTLEMENT: 1000-1675

A small indigenous port settlement may have existed on the present site of Surabaya as early as the eleventh century (van der Kroef, 1954: 136) when the East Javanese state was reunited under King Airlangga, and the region became more intensely cultivated and settled (Van Niel, 1963: 274). There are some doubts about the existence of Surabaya at this time, however, as a history of the Yuan dynasty which describes the Chinese-Mongol attack on the Kingdom of Singhasari in 1292 does not mention Surabaya, though part of the invading army proceeded up the Brantas Valley and would have passed any small settlement on the site of the present city (Cobban, 1970: 17).

There is no doubt that at the time of the Majapahit dynasty (13th - 16th century) Surabaya was a sizeable port town. It was mentioned in the Negara-Kertagama (von Faber, 1937a: 1). The Chinese muslim Ma-Huan also described the town in his account of two voyages to Java during 1413-15 and 1421-22 (Cobban, 1970: 24): "Going
southwards from these two villages [Tuban and Gresik] a distance of about seven miles one comes to Surabaya, where many rich people are also found. Here are about a thousand families, with Chinese amongst them".\(^{(1)}\) This translation has been disputed (Cobban, 1970: 24-5), but all translations agree that Surabaya had a population of at least 1,000, with Chinese amongst them, during the first quarter of the 15th century. However, the settlement seems to have been little more than a loose agglomeration of kampung (Cobban, 1970: 25). It does not appear to have been a city-state similar to northern harbour towns like Demak and Bantam, which controlled much of the trade of Java in the sixteenth century following the decline of Majapahit.

2.3 THE COMING OF THE DUTCH - SURABAYA AS AN INDISCHE COMMUNITY: 1675-1870

The fort and new town established by the Dutch at Batavia in 1619 had no immediate effect on Surabaya. Between 1675 and 1677, however, the East India Company sent a number of expeditions of Dutch and native troops to Surabaya to fight the Makassarese and Madurese on behalf of the Susuhunan of Mataram. A sketch map of the settlement (Figure 2.2) in 1719 by Valentijn shows the only European legacy of these campaigns: a small Dutch fortress located on the western bank of the Mas River near the present Red Bridge (Figure 2.1).

Active political interference by the Dutch in East Java began with assistance to the Susuhunan in 1742 during the Chinese-Javanese War. The price for this aid was a treaty between the East India Company and the Susuhunan of Mataram signed in 1743. Under that treaty the Susuhunan took an oath of allegiance to the Dutch military commander at Semarang, and the regents and village headmen acknowledged the right of the Company to approve the appointment of new headmen. Madura, the East Hook (approximately all of East Java east of Pasuruan) and Surabaya together with its dependent regencies were given to the Company, along with Japara and Rembang in Central Java. In 1746 the remaining districts on the north coast were ceded to the Company (Cobban, 1970: 64-5).

\(^{(1)}\) Cobban (1970: 24) quotes from Groeneveldt's translation of Ma-Huan's narrative.
Een schetskaart „van het Fort, Retranchement, en omleggende Ciuatie van Sourabaya”, vervaardigd op een schaal van 100 Rijnlandsche roeden in 1719. Het fort, hetzelfde, waarvan Valentijn in zijn werk een schets opnam, lag nabij de Kali Mas, ongeveer ter hoogte van den lateren grooten Boom (thans ingeruimd voor de provinciale kantoren). Ten Zuiden daarvan, omgeven door schansen en een deel der Kali Mas (Sourabaya Rivier), lag „t Dorp”. Ten Noord-Oosten van het fort, aan de overzijde der rivier, bevond zich te midden van rijstvelden en bosschen het „geruineerde ampel”, de bakermat van den Islam in den Oosthoek.

A sketch map of “the fortress, fortifications and surrounding situation of Surabaya”, made in 1719 on a scale of 100 Rhineland decametres. Valentijn included a sketch of the fortress in his work. It was situated near Kali Mas.....

To the south, partly surrounded by fortifications and partly by the river Kali Mas (Surabaya river), was the “village”. To the northeast of the fortress, on the other side of the river and in the midst of ricefields and forests, was the “ruined ampel”, the birthplace of Islam in the Eastcoast.  

*Translated by A. der Kroons*

*Source: Von Faber, 1931a: 18*
The result of the subjugation of the native princes was the establishment in 1746 of a rather formidable military garrison in Surabaya, consisting of approximately 100 Dutch and 100 native soldiers (von Faber, 1931a: 18). This marked the beginning of a major European impact on the morphology of the settlement. The changes were shown on a map of Surabaya dated 1787 (Figure 2.3a), which has been re-drawn as Figure 2.3b. A fortified Dutch town for members of the garrison was erected just south of Fort Belvedere. Across the Mas River was the beginning of a Chinese kampung of permanent stone buildings, in which the Chinese were obliged to reside by law. Further south, in the vicinity of 'the Village' noted on the 1719 map (Figure 2.2), were the homes of the regent and other Javanese aristocrats who were the 'de facto' administrators of the town. Near present day Simpang (Figure 2.1) was the summer house of the Dutch military commander, in whom ultimate authority resided. Scattered around the two major rivers were the kampung, or the spacious desa of the indigenous Javanese. Near the grave of Sunan Ampel (Figures 2.2 and 2.3) kampung of Malay residents had developed, housing perhaps the more devout members of the Islamic community.

As early as 1787, then, Surabaya was divided into quarters housing the major racial groups. The distribution of these quarters formed the basis of the spatial character of the colonial city. Some of the so called 'characteristics of colonial cities', such as the diverse ethnic composition of the population, and the segregation of these groups into particular quarters of the town, however, had been a characteristic of the northern coastal cities at least since Majapahit. As noted by Cobban (1970: 225), 'the earliest Portuguese records portray towns divided into sections in each of which the different nationalities were concentrated. In Bantam, the first Dutch traders were assigned to the Portuguese quarter located outside the city walls next to the Chinese'.

Under the Dutch on Java, urban centres were, at least in theory, foreign creations. The change did not occur immediately. There were so few East India Company officials and troops in the major cities, including Surabaya, that they adopted a modified indigenous culture (referred to as an Indische culture) rather than a distinctly
Figure 2.3a  Original map of the morphology of Surabaya in 1787

Kaart van Soerabaia en omgeving, vervaardigd in 1787 op een schaal van 300 Rijnlandse roeden. Het origineel bevindt zich in het Algemeen Rijksarchief te 's Gravenhage. 

Bij bestudering van deze kaart in vergelijking met de plattegronden van Soerabaia van meer recenten datum, welke achter in dit boek zijn opgenomen, kan men zich een juist beeld vormen van de geleidelijke ontwikkeling van onze stad.

Ik wijze er op, dat waar men op bovenstaande kaart het Noorden zou zoeken, in werkelijkheid het Zuiden ligt.

Map of Surabaya and surroundings, made in 1787 on a scale of 300 Rhineland decametres. The original is in the Rijksarchief in the Hague. Translated by A. der Kraans

Source: Von Faber, 1931a: 25
Figure 2.3b Redrawn map of the morphology of Surabaya in 1787

SURABAYA AND SURROUNDING DISTRICT - 1787

Significant Landmarks

A — Mouth of the great river (Surabaya River or Kali Mas)
B — Earthen walls constructed during the last war
C — Bamboo fences constructed during the last war
D — Two sets of walls constructed during the last war
E — Old course of Surabaya River
F — Kali Anak
G — Kali Kerambangan
H — Salt River
I — Fort Belvedere
J — The Town
L — Malay kampung
M — Chinese kampung
N — Javanese kampung
O — Marketplace
P — House of the first regent
Q — House of the second regent
R — Temple

Legend:
- Clusters, more permanent, regularly spaced buildings
- Wet rice fields
- Marsh and swamp
- Village type indigenous housing (kampung and desa)
- Vacant land or arable upland

Source: Von Faber, 1931a: 25
European way of life. Raffles' census of Java in 1812-13 provides an indication of the small number of Europeans. The total population of the City of Batavia was 47,083 persons, of whom 1,928 or 4.1% were Europeans, the descendants of Europeans, or Eurasians (Raffles, I, 1817, reprinted 1965: Table I, 63). Von Faber (1931a: 61) claims that in 1813 Surabaya had 307 European residents; compared with the estimated population of 25,000 in 1815 (Raffles, I, 1817, reprinted 1965: Table II, 63), which was 1.2% of the total population. The number of European residents in Surabaya subsequently increased to approximately 2,000 in 1830, 3,000 in 1850, and to 4,500 in 1870 (von Faber, 1931a: 61). Compared with the total population of the settlement, however, these numbers were very small.

2.4 THE FOUNDATION OF A COLONIAL CITY: 1870-1906

European private capital was allowed into Java after 1870, and Europeans could establish privately-owned plantations and business enterprises. As minor industry and manufacturing developed, the number of Europeans (and other non-indigenes) in the towns increased and, significantly, much more of this increase than previously was accounted for by wives accompanying their husbands from Europe (Table 2.1). This development disturbed the mestizo culture of the cities at the end of the 19th century and prevented the growth of an Indische society.

The rate of increase of the indigenous population of Java and Madura before the census of 1930 is a matter for conjecture, since most of the available figures were estimates made by local officials. Population estimates were made for taxation purposes, as was Raffles' original census of 1815, and numbers appear to have been under-reported (Widjojo, 1970: 21-71; NEI, 1936, VIII: 39). McDonald(1) has suggested that a 1 per cent per annum growth rate for the first half of the 19th century for the population of Java and Madura and a 1.5 per cent per annum growth rate for the second half,

(1) Estimates proposed at a seminar presented by Dr P.F. McDonald of the Department of Demography, RSSS, ANU, 14 September 1976.
TABLE 2.1 Increase of the non-indigenous population in the Netherlands Indies, 1860-1930

<table>
<thead>
<tr>
<th>Year</th>
<th>European</th>
<th>Chinese</th>
<th>Arab</th>
<th>Other Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Males per 100 Females</td>
<td>No. Males per 100 Females</td>
<td>No. Males per 100 Females</td>
<td>No. Males per 100 Females</td>
</tr>
<tr>
<td>1860</td>
<td>43876</td>
<td>221438</td>
<td>8909</td>
<td>124</td>
</tr>
<tr>
<td>1880</td>
<td>59903</td>
<td>343793</td>
<td>16025</td>
<td>120</td>
</tr>
<tr>
<td>1900</td>
<td>91142</td>
<td>537316</td>
<td>27399</td>
<td>117</td>
</tr>
<tr>
<td>1905</td>
<td>94518</td>
<td>563449</td>
<td>29588</td>
<td>112</td>
</tr>
<tr>
<td>1920</td>
<td>168114</td>
<td>809039</td>
<td>44902</td>
<td>116</td>
</tr>
<tr>
<td>1930</td>
<td>240417</td>
<td>1233214</td>
<td>71335</td>
<td>119</td>
</tr>
</tbody>
</table>

Population Totals

<table>
<thead>
<tr>
<th>Year</th>
<th>European</th>
<th>Chinese</th>
<th>Arab</th>
<th>Other Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>43876</td>
<td>221438</td>
<td>8909</td>
<td>124</td>
</tr>
<tr>
<td>1880</td>
<td>59903</td>
<td>343793</td>
<td>16025</td>
<td>120</td>
</tr>
<tr>
<td>1900</td>
<td>91142</td>
<td>537316</td>
<td>27399</td>
<td>117</td>
</tr>
<tr>
<td>1905</td>
<td>94518</td>
<td>563449</td>
<td>29588</td>
<td>112</td>
</tr>
<tr>
<td>1920</td>
<td>168114</td>
<td>809039</td>
<td>44902</td>
<td>116</td>
</tr>
<tr>
<td>1930</td>
<td>240417</td>
<td>1233214</td>
<td>71335</td>
<td>119</td>
</tr>
</tbody>
</table>

Average Annual Increase in Percent

<table>
<thead>
<tr>
<th>Period</th>
<th>European</th>
<th>Chinese</th>
<th>Arab</th>
<th>Other Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860-1880</td>
<td>1.6</td>
<td>2.2</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>1880-1900</td>
<td>2.1</td>
<td>2.3</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>1900-1920</td>
<td>3.1</td>
<td>2.1</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>1920-1930</td>
<td>3.6</td>
<td>4.3</td>
<td>4.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

appear more probable than the 2.2 per cent\(^{(1)}\) implied by Raffles' 1815 estimate of a total population of 4.6 million for Java and Madura.

The 1930 census (NEI, 1936, VIII: 39) suggested that the non-indigenous population estimates were more reliable. These estimates were available only for all of the Netherland East Indies (NEI), but they indicate a greater relative increase of the European population than for the indigenous population, particularly after 1880 (Table 2.1), and similar relatively rapid increases of the other non-indigenous population groups during the last decades of the 19th century. However, the small absolute size of these populations in 1860 cautions against overemphasising of the rates of change (Table 2.1).

Except for the European population no estimates of the size of the several non-indigenous groups exist for Surabaya prior to 1905-06. Von Faber (1931a: 61) estimated the number of Europeans in 1870 at 4,500, in 1890 at 7,500, and at the turn of the century at approximately 10,000. Compared with 1905 or 1906 figures (Table 2.2) these later totals are too large and may have included surrounding areas. Nevertheless, the area of the 'European type' clustered permanent buildings circa 1900\(^{(2)}\) (Figure 2.4) had increased greatly as compared with 1787 (Figure 2.3), and a similar increase in the relative importance of the European population vis-a-vis the indigenous population appears also to have occurred in Surabaya. The composition of the population of Surabaya in 1905 bears this out (Table 2.2). European residents increased their share of the total population four and a half times from 1815 to 1905.

To meet the demands of the expanding 'modern' sector of the economy and the increased European population, the administration had to be formalised. The highest indigenous official, the Regent, was an essential and respected link in the chain between the European and

---

\(^{(1)}\) Estimate for the total growth rate from 1815 until 1900 as calculated by Peper (1970: 71-84) using Raffles' 1815 population estimates.

\(^{(2)}\) Undated map, but compiled in the period 1897-1904.
TABLE 2.2 Population composition of Surabaya in 1905, 1920, 1930 and 1940

<table>
<thead>
<tr>
<th>Year</th>
<th>Indigenes</th>
<th>Europeans</th>
<th>Chinese</th>
<th>Other Orientals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>1905(1)</td>
<td>124,473</td>
<td>83</td>
<td>8,063</td>
<td>5</td>
<td>14,843</td>
</tr>
<tr>
<td>1920</td>
<td>148,411</td>
<td>77</td>
<td>17,497</td>
<td>9</td>
<td>22,118</td>
</tr>
<tr>
<td>1930(2)</td>
<td>271,275</td>
<td>79</td>
<td>25,900</td>
<td>8</td>
<td>38,871</td>
</tr>
<tr>
<td>1940(3)</td>
<td>314,000</td>
<td>78</td>
<td>35,076</td>
<td>9</td>
<td>47,884</td>
</tr>
</tbody>
</table>

Average Annual Increase in Percent

<table>
<thead>
<tr>
<th>Period</th>
<th>Indigenes</th>
<th>Europeans</th>
<th>Chinese</th>
<th>Other Orientals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1905-20</td>
<td>1.2</td>
<td>5.3</td>
<td>2.7</td>
<td>2.6</td>
<td>1.6</td>
</tr>
<tr>
<td>1920-30</td>
<td>6.2</td>
<td>4.0</td>
<td>5.8</td>
<td>3.1</td>
<td>5.9</td>
</tr>
<tr>
<td>1930-40</td>
<td>1.5</td>
<td>3.1</td>
<td>2.1</td>
<td>1.1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Notes:

(1) Date given by von Faber was 1906, but figures correspond to 1905 enumeration details in Scheltema (1926: 871).

(2) 1930 census.

(3) Estimated from registration data published in Municipality Report (Netherlands East Indies Stadsgemeente Soerabaja, 1940 Verslag, Deel I: 13) assuming that armed forces numbers were the same as 1939 with an assumed composition of 500 Europeans and 6,000 indigenous members.

Sources: Von Faber, 1931b: 1
Netherlands East Indies, 1934, III: 124
Netherlands East Indies, 1940: 13.

Indigenous populations in the 18th and early 19th centuries. The Regent exercised direct authority over the native population in his respective regency, was in charge of the police, and during the operation of the 'Culture System' from 1830 to 1870, it was he who directed the 'culture' work and was 'responsible for the carrying out of all obligations the natives may have towards the Government or among themselves' (Wright and Breakspear, 1909: 115). When Java was opened to private enterprise, the Regent lost some of this power, and by the early 20th century he had become a civil servant of the Dutch administration (Van Niel, 1963: 289). Also, the growing European
administrative corps became increasingly concerned with the problems of its countrymen at the expense of the indigenes. By the end of the nineteenth century the coastal cities of the NEI had become more a series of foreign enclaves and less an integral part of indigenous Indonesia.

The degree to which Surabaya had become a Europeanised colonial port city by 1900 is revealed by its morphology (Figure 2.4) and its functions. The small fortified town of 1787 (Figure 2.3) surrounded by extensive indigenous kampung, had become a city in 1900 (Figure 2.4). During the nineteenth century western-type clustered permanent urban housing spread over large areas, reflecting the increased numbers and economic significance of the European, Chinese and Arab populations in comparison with the indigenous Javanese. In 1787 the areal extent of the fortified European town and Chinese quarter was a minute fraction of the sprawling bamboo kampung and desa of the Javanese population (Figure 2.3), but by 1900 the two types of dwelling occupied approximately equal areas. The Europeanisation of the indigenous settlement was reflected symbolically in the invasion of Alun-Alun Contong and Pasar Besar. In 1787 the area was the preserve of the Regent and the Javanese elite who presided over the surrounding Javanese kampung. By 1900 much of the traditional Javanese town square (alun-alun) had been built over and turned to European uses.

During the nineteenth century the original European town spread southward, away from the crowded, flood-prone old town which became known as the 'lower city', toward the higher, better drained and healthier level banks and flood plain of the 'upper city'. Although this move began before the 19th century with the construction of the Resident's summer house in the Simpang area (Figure 2.3), it became significant in the mid-nineteenth century. The demolition of the fortifications around the old town in 1871 (von Faber, 1931a: 43) improved accessibility to the lower city and encouraged the physical separation of the commercial and residential quarters of the city. This trend was not followed, however, in the Chinese and Arab quarters of the city located between Kali Mas and Kali Pegirian (see location of the Chinese temples and the mosque of Sunan Ampel, Figure 2.4).
Figure 2.4
Morphology and landmarks of Surabaya, circa 1900

1 Naval base
2 Mosque of Sunan Ampel
3 Military arsenal
4 Military encampments
5 Citadel Prins Hendrik
6 Pasar Turi railway station
7 Surabaya Kota railway station
8 Resident's official mansion
9 Chinese temple
10 Jalan Pasar Besar
11 The traditional town square (Alun Alun)

Source: NEI, Topographisch Bureau, 1907
Here shop-houses remained and are the distinctive land use at present. The Arabs preferred to remain in the area because of its proximity to the mosque of Sunan Ampel, one of the more sacred mosques in Java. Dutch policy may have encouraged this localisation, though there is no direct evidence of this. As early as the 18th century, kampung of Arabs and Malays (probably including Acehnese and Buginese) had developed in Ampel (Figure 2.3). The Chinese, on the other hand, were obliged to live in Pabean Cantian and Kapasan (in the vicinity of the Chinese temples, Figure 2.4) by the Dutch authorities. The Chinese needed special permits to settle elsewhere in the town. This policy of forced localisation of the Chinese population continued until the second decade of this century when it was abandoned (von Faber, 1931b: 61).

Abandonment of the lower city by Europeans in Surabaya and Batavia (Milone, 1966a: 303) was followed by an increase in the Asian population of the area, particularly Chinese, following removal of the regulations limiting them to certain quarters of the city. Cobban (1970: 227) notes, however, that most Indonesians remained in their kampung on the fringes of the European city. So, though the 'trek' inland signalled a recognition (long overdue) of the climatic and health problems of the lower city, it also resulted in a clear separation, socially and spatially, between the Europeans and the less influential Eurasian, Chinese, Arab and indigenous communities. By the end of the 19th century, Surabaya and Batavia were cities within which the economic and politically dominant minority population had developed an enclave colonial structure.

The functions of Surabaya at the turn of the century reflected its status as a major colonial settlement. For the Dutch, the original function of the settlement was as a military base, and the city of 1900 (Figure 2.4) reflected the continued military power behind the Dutch presence in the Netherlands Indies. In the middle of the 19th century, one of the largest dockyards in the East was established in Surabaya, which became the primary naval base of the colony (Figure 2.4). To the south of the naval base were the remains of the major fortifications of citadel Prins Hendrik (Figure 2.4) which had been built in 1837 and manned until 1895 (von Faber, 1931a:
and further south near the site of the former Fort Belvedere (Figure 2.3) there was a military arsenal. Three major military encampments were located within the core of the city in 1900 (Figure 2.4).

In addition to its military functions, Surabaya was a port and acted as a middleman linking the export-producing areas of inland Java to the importing metropolitan centres of Western Europe (Plate 3). According to a contemporary description (Wright and Breakspear, 1909) Surabaya was 'the prosperous and thriving commercial capital of Netherlands India, and the centre of the great Java sugar trade'.

Commercial port facilities were not constructed in Surabaya until 1916, so all large ships anchored in the roadstead near the mouth of Kali Mas (Figure 2.4) and were unloaded by lighters. Surabaya possessed the geographical features necessary for the development of a port and harbour. It was sited at the narrowest part of Madura Strait with safe approaches from east and west. The island of Madura provided protection for the roadstead and ships could be loaded and unloaded by lighters all the year round prior to the completion of the port in 1916. The importance of Surabaya as a commercial port at the turn of the century was noted by Wright and Breakspear (1909):

From May to November, during the height of the sugar season, the harbour presents a scene of bustle and life, which vies with the feverish activity of the largest entrepot of trade in the Orient. The ships continually coming and going are representative of nearly every nation, ranging from the great tramps of European commercial lines to the small steamers of the local trade, while the harbour is alive with a great fleet of lighters and native craft busily conveying cargoes to and fro. In 1907, 1,077 steamers and twenty-three sailing vessels entered the harbour, with a net carrying capacity of 5,265,493 cubic metres, and 46,640 cubic metres respectively. In addition, native seagoing craft to the number of 21,000 visited the town from neighbouring islands, and the Moluccan Archipelago, whilst probably double that number, engaged in the Java coast trade alone, came and left without any notice being taken of their arrival or departure.

The position of Surabaya as the major commercial port was strengthened during the last half of the 19th century when the city was linked to the major export-producing regions of the interior by a comprehensive system of railway lines (Figure 2.4).
PLATE 3. Kali Mas circa 1900 when Surabaya was the centre of Java's thriving sugar trade (von Faber, 1931a:51).

PLATE 4. Willemskade in 1909, when the Kali Mas was navigable upstream of Surabaya and the European commercial core had begun to develop southward along Jalan Niaga (Wright and Breakspear, 1909).

PLATE 5. The same scene in 1973 when the Kali Mas was no longer navigable upstream of the Red Bridge, and squatter settlements (rumah liar) were a common sight on vacant land.
In order to service the earlier culture system and, later, the private plantations of the late 19th century, Surabaya became the centre for many large trading companies and financial institutions. The Nederlandsche Handel Maatschappij, the major trading house during the heyday of the culture system, was established in the city in the early 19th century along with the Javasche Bank. The Rotterdamsche Bank and the Chartered Bank of India, Australia and China, and the Handelsvereeniging Amsterdam (HVA) were established in Surabaya later in the 19th century (von Faber, 1931a: 150-2). By the late 1920s, the HVA had become the largest plantation owner and agricultural company in the NEI.

As a collecting, financing and transhipping point for the products of the interior during the period of the culture system, Surabaya had an exceptionally large proportion of its workforce employed in the tertiary or service sector of the economy. There were few large-scale European manufacturing industries located within the city. Although the situation began to change toward the turn of the century, with the opening of the Netherlands Indies to private capital from Europe, the tertiary sector of the economy remained disproportionately large compared with European centres. The reason for this was that most of the requirements of the European population were imported. The development of indigenous industry was inhibited also by the low purchasing power of the indigenous population. The growing non-indigenous population was a potential market for indigenous industry, but the foreign enclaves which developed within Surabaya increasingly assumed European values, and European products were preferred to local goods. Indeed, in 1875 'imported linens caused the virtual disappearance of the local industry' (von Faber, 1931a: 186-7).

If the colonial nature of Surabaya inhibited the development of local industry, the expansion of the city in the late 19th century provided work to about 500 bricklayers, a few thousand coolies and several hundreds of carpenters, chalkburners, brickbakers, sanddiggers, smiths and painters ... in the Southern suburbs ... fields with tubers provided work for hundreds of hands in the retail business and on the markets. The river transit-trade
from the surrounding districts to the city, and from the city to the interior as well as that from the harbour to the neighbouring ports, provided work opportunities to hundreds of prahu and boatcarriers. Several hundreds of boats were necessary for the transit trade with the interior. These boats were loaded with the products of the country, i.e. with rice, coffee, sugar, rattan, hides, bricks, etc. However, the volume of the import export trade was much larger (von Faber, 1931a: 186).

So, the last half of the 19th century and the first years of the 20th witnessed a profound change in the character of Surabaya. The foundations of a great colonial port city were established. The development of an 'Indische' or mestizo urban culture in the NEI was aborted. Surabaya was to become an exemplar of the colonial port city.

2.5 THE FLOWERING OF A COLONIAL PORT CITY: 1906-49

From the creation of the Surabaya Municipal Council in 1906 until the close of the colonial era in 1949, Surabaya experienced its florescence as a colonial port city. A prerequisite of this development was a continuation in the 20th century of 19th century changes in the population composition of the city, especially a continuation in the growth of the European population.

2.5.1 Population Trends

In 1905 the number of Europeans, and those accepted officially as of 'European status', totalled 8,063 persons. In 1920 there were 17,000 Europeans, and by 1930 some 26,000 (Table 2.2). The rate of increase of 'Europeans' appears to have been lower than the rate of increase in the number of indigenes resident in the city between 1920 and 1930. Census reports of 1930, however, suggest the indigenous population was under enumerated in 1920, which resulted in exaggeration of their 1920-30 growth rate (NEI, 1936, VIII: 39). Between 1930 and 1940 the number of Europeans increased at a higher rate than the indigenes. By 1940 Europeans accounted for 8.7 per cent of Surabaya's population.
The Chinese population also grew rapidly: from less than 15,000 in 1905 to 22,000 in 1920, 39,000 in 1930 and almost 48,000 in 1940. In Surabaya, as in all Java, the period which witnessed the greatest increase of Chinese was the decade of the 1920s, when there was an upsurge in the immigration of Chinese-born. At this time, significant numbers of Chinese traders penetrated the rural interior of the island. Here, they became money lenders 'and participated in or monopolized the gathering, marketing, and exporting of major crops, a process which in many cases led to chronic indebtedness of the peasants' (Heidhues, 1974: 11-2).

In Surabaya, as in all major cities of Southeast Asia, the Chinese dominated small business as shopkeepers and middlemen, traders or wholesalers, 'passing on imported goods and some locally-manufactured articles to the smaller shopkeepers and village or itinerant retailers' (Heidhues, 1974: 14). Prior to World War II, the economic influence of overseas Chinese was second only to that of European capital. Nevertheless, 'only a few Chinese acquired status as proprietors of large firms (in nearly all cases import-export) on a scale comparable to that of the big European operations' (Heidhues, 1974: 14). Chinese firms which achieved the scale of European companies in Surabaya included the firms of Kwik Hoo Tong (De Vries, 1927: 194), Ban Hong Hin and Chop Hoo Bee, which exported sugar, tobacco, coffee and tea, and imported rice, dried fish and general Chinese produce (Wright and Breakspear, 1909: 48). The decline in trade and economic prosperity which accompanied the depression of the 1930s, plus the outbreak of the Second World War, combined to discourage and finally to halt Chinese emigration to Southeast Asia. Subsequently, the Chinese population of Surabaya increased at a rate similar to that of the indigenous population (Table 2.2).

From the 16th to early 20th century, Chinese society in Java was dominated by peranakan Chinese, Chinese partly assimilated to indigenous culture who could speak Javanese or Indonesian and who were usually local-born (Skinner, 1973: 103-10). Since immigration was at a moderate rate and assimilation rapid, non-assimilated new arrivals were a small group. Assimilation in early centuries was encouraged by the fact that 'Chinese women almost never emigrated overseas prior to this [20th] century' (Skinner, 1963: 104).
Four developments occurred to change this situation (Skinner, 1963: 105). First, the number of immigrants increased dramatically. Second, the proportion of non-Hokkien Chinese among the immigrants rose rapidly until the Cantonese and Hakkas displaced the Hokkiens as the major Chinese group. Third, the number of female immigrants increased rapidly. Fourth, the rise of Chinese nationalism at home encouraged the immigrants to preserve their Chinese character. This desire was reflected in the development of Chinese-language schools and newspapers. The upshot of all of this was the development of a new Chinese society during the 20th century. Members of this society were called totok Chinese, 'pure' or traditional Chinese. Totok Chinese were often, but not necessarily, China-born. The term also included descendants of Chinese immigrants who were strongly oriented toward China. Totok Chinese usually spoke the language of their own speech group and did not interact with the indigenous culture.

The dichotomisation of Chinese society during the 20th century was reflected in the segregation of Chinese within Surabaya. In 1911 the policy of forced localisation of the Chinese population, which the Dutch had began as a result of the Chinese revolt in Batavia in 1740, was relaxed (Karsten, 1938, translated in Wertheim et al. 1958: vii). In 1919 it was abandoned (von Faber, 1931b: 61). The peranakan Chinese rapidly scattered throughout the city, though they showed a preference for western-style housing on the margins of Dutch areas. The totok Chinese moved into the shop-house dwellings of the old Chinese areas of Bongkaran and Pabean Cantian vacated by the peranakan Chinese.

While the Chinese population became increasingly significant numerically and economically, and increasingly diversified culturally, the Arab population remained small, maintaining a one or two per cent share of the total population (Table 2.2). Unlike the totok Chinese, the Arab community of Surabaya did not deliberately orient itself toward its place of origin (usually Hadhramaut, now Southern Yemen) to the extent that it divorced itself from the indigenous community. The male composition of the Arab migration flows encouraged intermarriage with Malay or Javanese women (von Faber, 1931b: 77), and children
usually did not speak Arabic as their 'mother-tongue'. The one aspect of life which was strongly oriented toward their place of origin was their religion, but, as Arabs share the Islamic faith with the majority of the indigenous population, this served as a strong bond between the two communities. The Arabs, like the Chinese, enjoyed an economic influence which was out of proportion with their numbers in pre-independence Surabaya. They held in pre-independence days, and still hold, large tracts of land within the city, and controlled huge amounts of capital. As well, the Arabs enjoyed a monopoly over the small pony carriage industry in the 1930s (von Faber, 1931b: 81). Nevertheless, their economic strength never approached that of the Chinese.

The growth of the indigenous population between 1906 and 1949 is not well documented. The 1930 census totals may be reliable, though census reports sound a note of caution about ethnic data (NEI, 1934, III: 98). The data we do have suggest an uneven rate of growth of the indigenous population. If, as the 1930 census reports suggest (NEI, 1936, VIII: 39), the 1920 enumeration was an underestimate(1), then an annual growth rate of approximately 2.8-3.0 per cent(2) per annum between 1905 and 1930 may better approximate reality than the growth rates shown in Table 2.2. A growth rate of 2.8-3.0 per cent suggests substantial inmigration to Surabaya from surrounding districts, even under the present rate of natural increase of 2.7-2.2 per cent per annum. Contemporary accounts support the contention that immigration was significant between 1905 and 1930: 'the economic development of the city as a result of which people streamed to Surabaya from the countryside in search of the means of livelihood', and 'the numbers of Javanese from Lamongan,

---

(1) The earlier census counted only the de jure resident population, 'so that the floating coolie population was included among the inhabitants of the towns in 1930, but not in 1920' (NEI, Town-Planning Commission, 1938, translated in Wertheim et.al. 1958: 5).

(2) This estimate is based on the average annual growth rate between 1905 and 1930 of 3.2% per annum, deflated by between 0.2 and 0.4% as the 1930 census report (Netherlands East Indies, 1936, VIII: 39) implied that the 1905 enumeration also may have underestimated the population.
Babat and Tuban, that have found the means of livelihood, in the stables, the port or an industry, are not insignificant' (von Faber, 1931b: 43).

The only data available on the growth rates of the indigenous population of Surabaya during the decade of the 1930s are annual registration totals from the Municipality (Figure 2.5). These data suggest there was a drastic decline in the rate of growth during the decade. The rate of growth appears so low (1.5% per annum) that net outmigration from Surabaya may have occurred as a result of the economic depression of the 1930s which led to the collapse of the sugar industry in East Java, and reduced employment opportunities in Surabaya.

After 1940, data are unavailable from which to determine population trends for individual ethnic groups. Estimates of the population of the city are available (refer Figure 2.5), however, and these provide an indication of the changes which occurred between 1940 and the end of the colonial period in 1949. Until the Japanese conquest of Java, which was completed on 8 March 1942 (registration totals apply to the end of December of the year shown), the trend of the 1930s appears to have continued. But from March 1942 until the end of 1945 there appears to have been a massive influx of population into the city. A rate of growth of 11.5 per cent per annum from 1941-45 (Figure 2.5) is far too high to be explained in any other way.

The major proportion of the population appears to have been made up of indigenous labourers brought in to meet the demands of the Japanese war effort, though some of the inmigration was due to the presence of the occupation forces, always considerable in Surabaya as it was the naval headquarters of the NEI. Madurese, interviewed in the Srengganan area (refer Appendix Figure 1.1) by the writer, reported a huge influx of fellow Madurese during the Japanese

(1) The annual totals shown on this graph are estimates derived from registration data and as such are not completely in agreement with the totals shown in Table 2.2 which utilised census data wherever possible.
Figure 2.5
The growth of the population of 'Old Surabaya', (pre-1969 boundaries) 1905-71

Source: (i) NEI, 1940 : 13
(ii) Unpublished registration data, Bagian Pendaftaran Penduduk, Kotamadya Surabaya
(iii) Indonesia, BPS, 1962
(iv) Indonesia, BPS, 1972
(v) Scheltema, 1926 : 871
occupation to provide labour in both the naval and civilian dockyards. An Allied intelligence report (AGS, SWPA, 1945: 113-4) revealed that the Japanese constructed a ship-building yard with four slipways and repair shops on the small waterway to the southeast of the naval dockyard. This establishment must have employed a large workforce. The construction of a new railway bridge across Kali Mas and extensive petrol and ammunition dumps in the Gubeng area (AGS, SWPA, 1945: 100; Surabaya mosaic southern sheet) also serve to explain the increased population growth of Surabaya during the Japanese occupation. During the early years of the occupation, the indigenous population welcomed the Japanese who were more sympathetic to their nationalist aspirations than the colonial Dutch. The Japanese offered administrative positions which, under the Dutch, were filled by Europeans (Reid, 1974: 11-3). Also, aggressive Japanese recruitment in the rural areas for romusha (forced labour, often overseas) may have encouraged males to migrate to the cities such as Surabaya where they were relatively anonymous (Milone, 1966b: 78). (1)

The final year of the Japanese occupation was one of hardship for Indonesians in the cities. Although this may have caused a decline in the rate of net inmigration, conditions were hardly better in the villages (Reid, 1974: 22). The real change in Surabaya came in late 1945 when British troops, whose commanders seriously underestimated the progress of the Indonesian National Revolution, fought a bloody battle with Indonesian nationalists for control of the city. Air strikes and naval bombardments devastated large parts of the city (Reid, 1974: 51-2). Most of the indigenous inhabitants fled. Their plight and fears have been vividly portrayed by Idrus (1968: 1-28). By the end of 1946 (Figure 2.5). Surabaya's population had fallen from 618,000 to 209,000, and a large proportion of the remainder was European, Chinese and Arab. After 1946 the indigenous population began to return. At the time of the transfer of

---

(1) Contrary to my findings in Surabaya, both Milone (1966b: 78) and Heeren (1955: 704, 723) suggest that rates of immigration to Jakarta were lower during the Japanese occupation than in pre-war years. The data are crude, however, and findings for Jakarta cannot be applied to Surabaya.
sovereignty by the Dutch in December 1949, the city's population had returned to its pre-evacuation level. It was now the turn of the small Dutch minority to begin its departure.

2.5.2 The Morphology of the City: The Dualism of European Enclave and Indonesian Kampung

The great growth of the population of Surabaya between 1906 and 1949 was reflected in a profound change in the morphology of the city, though the bases of this change were established prior to 1906. At the end of the Japanese occupation in 1945, the areal extent of the European-style urban area of clustered stone or brick buildings approximated two and a half or three times that of 1900 (compare Figure 2.4 with 2.6)\(^1\) The map of 1945 (Figure 2.6) does not show a comparable increase in the area of kampung housing, despite the fact that by 1945 the indigenous population had grown to more than double its number in 1905 (Table 2.2). Indeed, many of the kampung areas of 1900 appear to have been taken over for European-style housing, and others had been enclosed by Western-style ribbon development so that they appeared as enclaves within an essentially European city (such as Kedungdoro, Figure 2.6). The 1945 map may have exaggerated the extent of European-style housing since some areas under clustered stone or brick housing could have been improved kampung, and housed indigenes. Contemporary descriptions suggest, however, that the improvement of the earlier kampung areas led to their occupation by 'lesser Europeans' (probably Eurasians) and Chinese (Karsten, 1938, translated in Wertheim et al., 1958: vii–viii). Nevertheless, during the period 1906–49 there took place an unprecedented expansion of the European section of the city, largely at the expense of indigenous residents. At the end of the colonial era the development and organisation of Surabaya had been turned to the interests of the European and commercial elite.

One of the preconditions to the extension of European authority during the last period of colonial rule was the creation of a municipal council in Surabaya in 1906. The council was given

\(^1\) A detailed comparison is not possible as the map of 1900 does not extend to the south, presumably because only minor urban development had occurred there by 1900.
Figure 2.6 Morphology and landmarks of Surabaya, 1945

1. East Basin of naval base
2. Mosque of Sunan Ampel
3. Japanese wooden-ship building yard
4. Docks and warehouses (indigenous craft)
5. The Red Bridge
6. Military barracks
7. Jl. H.H. Mas Mansjur
8. Resident's official mansion
9. Chinese temples
10. Surabaya Kota railway station
11. Pasar Turi railway station
12. Gubeng railway station
13. Wonokromo railway station

Source: Topographic map sheet of Surabaya, 1945, 1:50,000; AGS, 1945
responsibility for the construction and maintenance of streets, roadways and bridges. It also supervised sewage disposal, water supply, markets, slaughterhouses, sanitation, housing, town expansion, burial grounds, fire service, and street lighting, and public health and public transportation generally (Wertheim et al. 1958: viii). Although the notion of a municipal council carrying out these responsibilities on behalf of the population of Surabaya was admirable, the municipal council did not cater to the population, but to the increasing number of prominent Europeans. At its establishment, the Surabaya Municipal Council had 23 council members, comprising fifteen Europeans, five Indonesians and three 'Other Asians' (Cobban, 1970: 117). The number of council members and their method of election were modified subsequently, but the colonial government never allowed control of the city to pass into the hands of the majority of its residents, the Indonesians (Cobban, 1970: 231-2). In common with other city councils in the NEI, Surabaya Municipal Council gave first priority to the improvement of living conditions in the European parts of the city, thereby accentuating the Western enclave nature of these sectors in comparison with the overcrowding and backwardness of the indigenous housing quarters in the kampung. A decade passed before civic-minded members of the council began to feel a responsibility for the distress of the rapidly growing indigenous population. Not until the late 1920s, in the twilight of the colonial era, was significant progress made in improving conditions in the kampung.

The creation of the Surabaya Municipal Council formalised the European domination of the city. Its interference in the indigenous quarters of the city heightened the conflict inherent in the colonial society of the Netherlands Indies. The Council was one of the instruments by which the Dutch sought to preserve the city as an island of predominantly alien Western culture within a sea of traditional rural Javanese peasantry. The colonial structure which had created the city of Surabaya neutralised the possibility that it could play a modernisation and development role in pre-independent Indonesian society, similar to that of the Western City during the Industrial Revolution.
2.5.2.1 The European City

A most significant development in the European sector of Surabaya during the 1906-49 period was the construction of a modern deepwater harbour along the western bank of the Kali Mas in 1916 (Figure 2.6). This development permitted a huge expansion in the volume of overseas trade. Customs duties rose from 4.5 million guilders in 1905 to over 34 million in 1929, when the worldwide economic slump began to depress trade (von Faber, 1931b: 221). The chief exports of Surabaya during the boom of the 1920s were sugar, coffee, tobacco and rubber. Sixty-two of the 180 sugar factories in Java at this time sent their produce via Surabaya (von Faber, 1931b: 199). In marked contrast to the extensive area of well developed port facilities in Tanjung Perak provided for the large, steel-hulled, and predominantly European owned shipping industry, the wooden sailing vessels (perahu) of the indigenous inter-island and coastal trade had to make do with overcrowded, antiquated facilities along the banks of the Kali Mas downstream from the Red Bridge (Figure 2.6). Military installations in Surabaya were expanded also. The naval base was enlarged during the early 1930s. By the 1940s the new East Basin could berth cruisers and destroyers (Figure 2.6); when Java fell to the Japanese forces in 1942 Surabaya was regarded as one of the major naval repairing stations in Southeast Asia.

In 1915-16 the city council followed the trend in Europe and began to localise industry. The private estate of Ngagel to the southeast of the city was purchased and some 45 ha were designated an industrial area. By the early 1930s the land was almost entirely occupied with metal fabricating works, a brewery, a cigarette factory, soap factories and an electrical components factory, some of which had relocated from older sites in the lower city (Figure 2.6).

The north-south spread of the city which began in the 1870s, or even earlier, continued to 1949. The private estate of Gubeng between the Surabaya River (the name of the Kali Mas on the south side of the city) and the railway was developed as an elite housing area for Europeans in the decade after the municipal council was created,
followed by the districts of Tegalsari, Sawahan, Ketabang and Kupang. The Darmo district was the last area developed exclusively for elite European housing. Development began in 1924; by 1945 the area had been almost entirely built over (Figure 2.6).

During the flowering of the colonial era from 1906-49, the European residents of Surabaya, particularly its well-to-do members, enjoyed most of the trappings and services of a metropolitan city. Telephones had been introduced in 1884; the state railways dated from 1877; a piped water supply had been installed in European quarters in 1903; electricity was available in 1908; in 1924 the city had an electric tram system. The municipal council provided street lighting and a fire fighting service, and kept the peace with the aid of a city police force. Recreation could be found at rowing, rugby, cricket, swimming and tennis clubs. In the evening, symphony concerts and chamber music recitals at the exclusive 'Europeans only' Simpang or Concordia clubs provided cultural diversions.

2.5.2.2 The Indigenous City

In contrast to the Europeans and other non-indigenes who were described as 'powerful, rich, alive, and pushing, but small in numerical size', the indigenous population was 'subservient, poor, and slow to develop, but with a strength in its massive size and its roots in tradition' (NEI, Town-Planning Commission, 1938, translated in Wertheim et.al. 1958: 66). This socio-economic dualism was reflected most dramatically in the residential morphology of colonial Surabaya. The indigenous population was concentrated in the kampung areas of the city. In the kampung conditions were very different from those in the European quarters. Street lighting and electricity was non-existant. Local canals served for the disposal of both sewage and garbage, and also for bathing and washing. In the wet season, the kampung were flooded. This brought with it increased disease, which threatened the whole city. Access to kampung were usually possible only on foot. Ribbon development along the major roads further decreased accessibility. Housing in kampung incredibly varied but everywhere congested, has been vividly described by von Faber (1931b: 155, translated by J. Lawrey):
Habitations made of all kinds of materials are built on almost every available patch of land. Good stone dwellings exist along with hovels made of decaying wood or bamboo, scraps of kerosene tins and corrugated iron, for lack of materials more suitable for walls and roofs. Between these two extremes is to be found every possible intermediate form. The great majority of these dwellings are occupied by numbers of people far exceeding what can be considered reasonable. This is especially true of the kampungs in the lower town, where innumerable Madurese coolies find shelter in dwellings mostly unworthy of the name.

Three interrelated factors were responsible for the deplorable condition of the kampung in Surabaya during the colonial period. First, the period 1906-49 witnessed a substantial net inmigration of indigenes which was not accommodated by orderly expansion of kampung housing, since the European-dominated city council had little desire to divert funds for this purpose. Before the war, the authorities acknowledged that they were unable to keep up with the rapid growth of the urban population, and 'rather than to speak of kampung improvement, it was more urgent to take steps to prevent kampung deterioration' (NEI, Kampung Improvement Commission, 1939, translated in Wertheim et.al. 1958: xv):

... in the large towns we are lagging further and further behind in the number of dwellings for the poorest levels of the population - which means that in various kampungs the number of persons per dwelling is constantly increasing, with people sub-letting rooms and building lean-to's ...

So, the pre-war period of colonial rule saw the beginning of the process of 'intensification'\(^{(1)}\) or 'infilling', whereby the housing needs of an increased population, due largely to inmigration, were met, not by the development of new kampung, but by existing kampung. The result was increased congestion and overcrowding.

A second factor which contributed to the problems of kampung in Surabaya, was that in the case of some kampung the city council had no authority to interfere with their indigenous administration.

---

\(^{(1)}\) Term used for this process by the NEI Town Planning Commission in 1938, translated in Wertheim, et.al., (1958, 19).
Within these kampung the responsibility for roads and public amenities belonged to the traditional kampung administration led by the lurah, who was elected by the landowners and houseowners in the kampung. Each resident of these kampung owed the village administration labour or corvee. This obligation could be discharged by a payment to the kampung fund, to be used to hire coolies to maintain public works. The system appears to have worked satisfactorily during the 19th century. With the growth of kampung populations during the present century, however, the indigenous administrations could no longer meet the demands placed on them without outside technical and financial assistance. Because recent arrivals and government employees, though kampung residents, were exempt from corvee obligations and payment of money taxes according to customary law (adat), neglect of public works and kampung maintenance frequently followed (Cobban, 1970: 229-30; von Faber, 1931b: 44,155). In addition, new kampung dwellers felt little responsibility for kampung welfare, and the old bonds of the kampung community gradually weakened. A 1918 study of Semarang, quoted by Cobban (1970: 230), found that 47 per cent of the Indonesian residents within the city boundary originated outside the city. The relevant proportion in Surabaya is not known, but it may have been similar to the proportion in Semarang.

A third factor which exacerbated conditions in the kampung was that much of the kampung acreage of earlier years was cleared and taken over for European use (compare Figures 2.4 and 2.6). The indigenous population driven from these areas reconcentrated on remaining kampung lands, and overcrowding resulted.

Despite the deplorable conditions of the kampung, which 'stood out in their general air of backwardness from the air of light and propriety which prevailed in the European section of the cities' (Cobban, 1970: 228), and except for the provision of water hydrants, the city council turned a blind eye to the problem until the 1920s. During the 1920s, partly for humanitarian reasons and partly because of the threat to health which kampung conditions posed to the Europeans, the city council began to take an active role in kampung improvement. In 1927 central government funds were made available for
improvements, but not until the late 1930s was the importance of town planning recognised. Without a public housing scheme designed to benefit the poor by increasing the supply of housing, however, kampung improvements often had unforeseen and undesirable results. For example, 'improved kampung' became desirable places of residence for the more wealthy Indonesians and Chinese, who bought out residents. The 'displaced' locals then sought out cheaper housing in kampung further away from the roadways. Another unforeseen result was that kampung improvements led to 'intensification' or 'infilling', which eventually resulted in a deterioration to pre-improvement conditions.

2.5.2.3 Arab, Chinese and Eurasian Quarters of the City

The residential quarters of the Arab, Chinese and Eurasian population were intermediate in character between the wide and ordered streets (jalan besar) of the European quarter and the congested kampung of the indigenous population. The Arab quarter of the city remained in the vicinity of the mosque of Sunan Ampel. The wealthier Arab families had, by the 1930s, moved into high quality housing along the wide Kampementstraat (now Jalan K.H. Mas Mansjur), originally constructed for officers of the Dutch military (Figure 2.6). Most Arabs resided in relatively poor kampung-type housing back from the main streets in the kampung of Ampel and Nyamplungan, kampung which were not included in the improvement programme until 1932 (von Faber, 1931b: 75, 161).

The Chinese community was dichotomised between the peranakan Chinese and the totok Chinese. The former scattered throughout the city following the relaxation of the Dutch localisation policy in 1911 and its abolition in 1919, though they were never far from their business enterprises along the major thoroughfares. Chinese shopkeepers normally lived above or immediately behind their shops. At the back of these shops were the kampung of the indigenous population. Wealthy peranakan Chinese merchants usually purchased luxurious housing in some of the older European quarters of the city. The totok Chinese concentrated in the shophouses of the old Chinese camp of Pabean Cantian and Bongkaran. By 1945 (Figure 2.6) they had
extended this area of shop-houses and built up kampung into the areas of Kapasan, Kapasari and Sidodadi. The totok Chinese also crossed the river into the old European quarter of Alun-Alun Contong, an area which had been subdivided for small lower city European housing in the late 1870s and early 1880s (von Faber, 1931b: 45).

Eurasians and the less affluent Europeans appear to have concentrated in the old lower city residential areas abandoned by wealthier Europeans for the upper city in the 1890s and early twentieth century (Karsten 1938, translated in Wertheim et.al. 1958: vi). A wealthy minority resided in the new European quarters of the city.

The Chinese, Arab and Eurasian communities did not weaken the dualism of the urban geography of Surabaya. These communities which were of intermediate socio-economic status between the Europeans and the Indonesians played a rather passive role. They occupied abandoned lower city European quarters of the city, or invaded some of the more accessible street frontage sites of central kampung areas in the city. Despite the existence of the Chinese, Arab and Eurasian communities, and despite a few attempts at kampung improvement, the Dutch bequeathed to the newly independent nation of Indonesia in 1949, a city whose morphology was essentially a mirror image of the fundamental dualism of colonial society in the NEI.

2.5.3 Occupational Structure

Surabaya's occupational structure, like its morphology, reflected the European domination and ethnic inequality inherent in its colonial status from 1906-49. Data from the 1930 census (Figure 2.7 and Table 2.3) show that the occupational structure of the city was dominated by employment in the tertiary sector of the economy, as were other colonial cities in Southeast Asia (McGee, 1967: 57-9). Of 138,094 residents classified as gainfully employed in the 1930 census (Table 2.3), 20 per cent were employed in manufacturing industry, and another 3.1 per cent were employed in primary industry; proportions comparable to the situation in Rangoon at the time (McGee, 1967:}
Figure 2.7
Workforce by occupation and ethnic group in per cent, Surabaya 1930

Source: NEI, 1933-35, vols. III, VI and VII
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Primary Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous (small-scale) agriculture and horticulture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2172</td>
</tr>
<tr>
<td>All non-indigenous (large-scale) agriculture except for sugarcane</td>
<td>173</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
<td>173</td>
</tr>
<tr>
<td>Petroleum production</td>
<td>345</td>
<td>3.9</td>
<td>-</td>
<td>-</td>
<td>345</td>
</tr>
<tr>
<td>Unspecified forms of primary production</td>
<td>126</td>
<td>1.4</td>
<td>150</td>
<td>1.0</td>
<td>1657</td>
</tr>
<tr>
<td>TOTAL PRIMARY PRODUCTION</td>
<td>644</td>
<td>7.2</td>
<td>150</td>
<td>1.0</td>
<td>4347</td>
</tr>
<tr>
<td>II - Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturers of food, drink, tobacco, etc.</td>
<td>135</td>
<td>1.5</td>
<td>956</td>
<td>6.6</td>
<td>5972</td>
</tr>
<tr>
<td>Workers in metal</td>
<td>107</td>
<td>1.2</td>
<td>282</td>
<td>1.9</td>
<td>3442</td>
</tr>
<tr>
<td>Workers in wood and bamboo</td>
<td>-</td>
<td>-</td>
<td>1771</td>
<td>12.2</td>
<td>1754</td>
</tr>
<tr>
<td>Manufacturers of articles of dress</td>
<td>-</td>
<td>-</td>
<td>708</td>
<td>4.9</td>
<td>3970</td>
</tr>
<tr>
<td>Unspecified industries</td>
<td>530</td>
<td>6.0</td>
<td>562</td>
<td>3.9</td>
<td>8431</td>
</tr>
<tr>
<td>TOTAL MANUFACTURING</td>
<td>772</td>
<td>8.7</td>
<td>4279</td>
<td>29.6</td>
<td>27618</td>
</tr>
</tbody>
</table>
### OCCUPATION

<table>
<thead>
<tr>
<th></th>
<th>Europeans</th>
<th>Chinese</th>
<th>Other</th>
<th>Indigenes</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.  %</td>
<td>No.  %</td>
<td>No.  %</td>
<td>No.  %</td>
<td>No.  %</td>
</tr>
<tr>
<td>III - Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail and tramway workers</td>
<td>478 5.4</td>
<td>- -</td>
<td>- -</td>
<td>3864 3.4</td>
<td>4342 3.1</td>
</tr>
<tr>
<td>Post-office, telegraph and telephone service</td>
<td>349 3.9</td>
<td>- -</td>
<td>- -</td>
<td>-</td>
<td>349 0.2</td>
</tr>
<tr>
<td>Road transport</td>
<td>150 1.7</td>
<td>282 1.9</td>
<td>27 1.7</td>
<td>4512 4.0</td>
<td>4971 3.6</td>
</tr>
<tr>
<td>Transport by water, aviation, etc.</td>
<td>332 3.7</td>
<td>- -</td>
<td>22 1.4</td>
<td>2458 2.2</td>
<td>2812 2.0</td>
</tr>
<tr>
<td>Unspecified transport</td>
<td>- -</td>
<td>157 1.1</td>
<td>6 0.4</td>
<td>996 0.9</td>
<td>1159 0.8</td>
</tr>
<tr>
<td>TOTAL TRANSPORT</td>
<td>1309 14.7</td>
<td>439 3.0</td>
<td>55 3.4</td>
<td>11830 10.5</td>
<td>13633 9.9</td>
</tr>
<tr>
<td>IV - Trade and Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade in victuals, tobacco etc.</td>
<td>- -</td>
<td>1930 13.3</td>
<td>32 2.0</td>
<td>5186 4.6</td>
<td>7148 5.2</td>
</tr>
<tr>
<td>Trade in textile goods</td>
<td>- -</td>
<td>1350 9.3</td>
<td>441 27.7</td>
<td>- -</td>
<td>1791 1.3</td>
</tr>
<tr>
<td>Trade in vehicles and other forms of conveyance</td>
<td>106 1.2</td>
<td>279 1.9</td>
<td>- -</td>
<td>- -</td>
<td>385 0.3</td>
</tr>
<tr>
<td>Shopkeepers and hawkers</td>
<td>242 2.7</td>
<td>3142 21.7</td>
<td>427 26.8</td>
<td>3591 3.2</td>
<td>7401 5.3</td>
</tr>
<tr>
<td>Wholesale and commission merchants</td>
<td>1346 15.1</td>
<td>598 4.1</td>
<td>- -</td>
<td>1575 1.4</td>
<td>3519 2.5</td>
</tr>
<tr>
<td>Credit institutions</td>
<td>321 3.6</td>
<td>174 1.2</td>
<td>215 13.5</td>
<td>- -</td>
<td>710 0.5</td>
</tr>
<tr>
<td>Unspecified trade and finance</td>
<td>344 3.9</td>
<td>718 5.0</td>
<td>99 6.2</td>
<td>2871 2.5</td>
<td>4032 2.9</td>
</tr>
<tr>
<td>TOTAL TRADE AND FINANCE</td>
<td>2359 26.5</td>
<td>8190 56.6</td>
<td>1214 76.3</td>
<td>13223 11.7</td>
<td>24986 18.1</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td>Europeans No.</td>
<td>Europeans %</td>
<td>Chinese No.</td>
<td>Chinese %</td>
<td>Other Asians No.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>V - Professions and Arts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>89</td>
<td>1.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Medicine</td>
<td>203</td>
<td>2.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Law</td>
<td>225</td>
<td>2.5</td>
<td>-</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Artists, journalists</td>
<td>215</td>
<td>2.4</td>
<td>161</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>Teaching, education</td>
<td>479</td>
<td>5.4</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Unspecified professions and arts</td>
<td>-</td>
<td>-</td>
<td>298</td>
<td>2.1</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL PROFESSIONS AND ARTS</strong></td>
<td>1211</td>
<td>13.6</td>
<td>459</td>
<td>3.2</td>
<td>68</td>
</tr>
<tr>
<td><strong>VI - Public Administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local government</td>
<td>300</td>
<td>3.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Central government</td>
<td>769</td>
<td>8.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Police</td>
<td>190</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Navy</td>
<td>674</td>
<td>7.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unspecified public administration</td>
<td>87</td>
<td>1.0</td>
<td>115</td>
<td>0.8</td>
<td>12</td>
</tr>
<tr>
<td><strong>TOTAL PUBLIC ADMINISTRATION</strong></td>
<td>2020</td>
<td>22.7</td>
<td>115</td>
<td>0.8</td>
<td>12</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td>Europeans No.</td>
<td>Europeans %</td>
<td>Chinese No.</td>
<td>Chinese %</td>
<td>Other Asians No.</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td>VII - Other Occupations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons living on their income</td>
<td>283</td>
<td>3.2</td>
<td>-</td>
<td>-</td>
<td>59</td>
</tr>
<tr>
<td>Domestic service</td>
<td>-</td>
<td>-</td>
<td>170</td>
<td>1.2</td>
<td>31</td>
</tr>
<tr>
<td>Insufficiently described occupations</td>
<td>-</td>
<td>-</td>
<td>564</td>
<td>3.9</td>
<td>-</td>
</tr>
<tr>
<td>All other occupations</td>
<td>287</td>
<td>3.2</td>
<td>100</td>
<td>0.7</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL GAINFULLY OCCUPIED</td>
<td>8885</td>
<td>99.8</td>
<td>14466</td>
<td>100.0</td>
<td>1591</td>
</tr>
</tbody>
</table>

Notes: Some of the percentage totals do not equal 100 or the sum of their components due to rounding.

* Estimates only.

The importance of industry may have been underestimated, since the census report (NEI, 1934, III: 104) noted that the vast majority of those whose occupation was 'insufficiently described' in the census returns (Table 2.3) were 'casual coolies', some of whom must have worked in manufacturing. Nevertheless, even if it is assumed that half the number in this category (Table 2.3) were so employed, the total proportion of the gainfully employed workforce in the primary and secondary sectors of the city's economy was 30 per cent. In comparison, 19.8 per cent were employed in domestic service, 18.1 per cent in trade and finance including retailing and wholesaling, 10.4 per cent in public administration, 9.9 per cent in transport, and 2.7 per cent in the professions and arts (Table 2.3). Surabaya was a city of domestic servants, retail and wholesale merchants, administrators, clerks, hawkers, and transport workers. Seven out of every ten persons gainfully employed were engaged in the tertiary sector of the economy. Such a large tertiary sector was exceptional by contemporary European standards, but normal for colonial cities of Southeast Asia. In these cities as noted by McGee (1967: 57-8), 'the smoking chimney stacks of the Western industrial cities were replaced by the long, corrugated-iron godowns (warehouses) of the port city. The colonial city was essentially an economic intermediary - a middleman - between the metropolitan power and colony'.

Another feature of the occupational structure of Surabaya, also apparent in Rangoon in 1931 (McGee, 1967: 59) was occupational specialisation within the various ethnic groups (Figure 2.7). Over 75 per cent of the Other Asians in the city (predominantly the Arab community) and 56 per cent of the Chinese were engaged in trading and financial occupations (Table 2.3). Although the indigenous community did not specialise to this extent (Figure 2.7), a significant 19.8 per cent of the total indigenous workforce and a remarkable 61.5 per cent (NEI, 1934, III: 97) of the employed indigenous women in 1930 were engaged in some form of domestic service, usually as house servants to wealthy Europeans and Chinese. The Europeans were rather evenly represented throughout the spectrum of major occupational groups (Figure 2.7), where they formed the owning or managerial class which employed the indigenes and Chinese. The large number of Europeans in trade and finance, public administration, transport, the professions
75

and the arts reflects the middleman role which Surabaya played for the Netherlands.

Because of their small numbers, no foreign group was numerically dominant within any occupation (Table 2.3). This contrasts with McGee's claim that:

A second characteristic of the tertiary occupations of the colonial city of immense significance was the fact that they came to be overwhelmingly occupied by alien Asian communities (McGee, 1967: 58-9).

There is no doubt, however, that through managerial positions and ownership the Europeans, Chinese and Arabs dominated and effectively controlled the modern, more capital intensive sectors.

2.5.4 The End of the Colonial Era

During the last half-century of colonial rule from 1900-49 Surabaya possessed all the characteristics of a colonial port city. The Europeans formed the elite and the masses of the indigenous population the lumpenproletariat. The Chinese, Arab and Eurasian communities modified this dualism only slightly. The morphology of the city reflected this condition. The modern, westernised villas of the Europeans contrasted with the overcrowded sub-standard housing in the kampung of the indigenous population. The city functioned as a middleman between the export producing rural areas of Java and the metropolitan market of the Netherlands.

During the last years of the colonial era the city was a place of conflict and intense competition between Europeans and Indonesians. In these circumstances the 'Indonesian bottom layer could see itself as a whole' (Reid, 1974: 2), and the result was an increasingly nationalistic reaction against the Europeans. After their humiliating surrender to the Japanese in 1942 and despite Allied support in 1945, the Dutch colonialists were unable to assume their pre-war position of unchallenged political supremacy during the struggle for independence from 1945 to 1949. In December 1949 the Dutch surrendered control to an independent Indonesia.
2.6 THE POST-COLONIAL PORT CITY: SURABAYA 1950-74

2.6.1 Population Trends: The Post-Independence Influx and 'Indonesianisation' of Surabaya

Registration data (Figure 2.5) suggest that at the transfer of sovereignty from the Dutch to Indonesia in December 1949 the population of Surabaya had recovered to the level prior to the 1945-46 evacuation. Subsequent changes of staff and administration raise doubts about the reliability of the immediate post-independence registration data, doubts emphasised by discrepancies between the 1961 and 1971 census totals and the registration data (Figure 2.5). Household enumeration data\(^{(1)}\) and other sources (such as Milone, 1966b: 45), however, agree with the registration data and suggest that the immediate post-independence years of the early 1950s saw continued large-scale immigration of Indonesians into Surabaya and other cities in Java, an immigration which began in the late 1940s when negotiations were underway to end Dutch rule (Figure 2.5).

During the Japanese occupation much of the European personality of the cities in Java was eliminated, but the most profound changes occurred in the last year of Dutch rule and in the first years of independence. In these four or five years many Indonesians whose village-bound horizons had been shattered by participation in the struggle for independence, flocked to the city in the hope of obtaining some of the fruits of independence. During the period 1948-52, the cities of Java were claimed as their own by the indigenous population: they were 'Indonesianised'.

Indonesians now lived in the better residential neighbourhoods as well as elsewhere in the city, and held the highest municipal offices. There were now monuments for Indonesian revolutionary heroes and events, Indonesian street names, and new buildings built in a more modern style than in pre-World War II times (Milone, 1966b: 45).

\(^{(1)}\) Results of the household enumeration survey will be discussed in detail in Chapter Four.
From the early 1950s, growth rates of the population of Surabaya Municipality are a matter for conjecture. From 1955 until 1966, numbers estimated from registration data appear to be inaccurate (Figure 2.5). For example, if the total of 921,035 persons in 1952 is compared with the 1961 census population of 1,007,945 the average annual growth rate was 1.0 per cent (Figure 2.5). Such a low growth rate suggests that the 1952 total was an overestimate. Most of the remaining Dutch citizens left Indonesia in December 1957 when Dutch companies were nationalised (Feith, 1963: 321), and many Chinese were repatriated during 1960. Although the losses among the Chinese were partly compensated for by the relocation of Chinese from rural areas to the cities after November 1959 (Skinner, 1963: 114-5), the outmigration of Europeans and Chinese provides some explanation of the low growth rate.

In the intercensal period 1961-71, the population growth rate appears to have increased. In 1971, the population of 'Old Surabaya' (pre-1969 boundaries, refer Figures 2.5 and 2.8) was 1.3 million; this indicated an average annual growth rate of 2.8 per cent (Table 1.1). In 1969, five new rural kecamatan on the outskirts of the municipality were incorporated within the municipal boundaries. If the populations of the enlarged area are considered in 1961 and 1971, a slightly higher average annual growth rate of 2.9 per cent is obtained (Table 1.1). This implies that a somewhat greater proportion of urbanisation took place outside the old city. Most of this development, however, was confined to Wonocolo kecamatan to the south of Surabaya along the road to Malang (Figure 2.1). The four other kecamatan of Rungkut, Karangpilang, Tandes and Sukolilo, however, were still predominantly rural in 1974.

To sum up, during the post-colonial period from 1949 to 1971, the population of Old Surabaya rose from approximately 588,000 to 1,332,000, an average annual increase of 3.8 per cent. During the 1950s, the average annual rate of natural increase of the population of Java and Madura has been estimated at 2.0 per cent (Widjojo, 1970: 125-6). During the 1961-71 intercensal period the average rate of
growth declined to approximately 1.9 per cent per annum (McNicoll and Mamas, 1973: 8). If the rate of natural increase of the population of Surabaya was the same as the rest of Java and Madura, then natural increase accounted for approximately 53 per cent of the average annual growth of 3.8 per cent, and net immigration accounted for the remainder. Clearly, immigration has accounted for a significant amount of the growth of the population of Old Surabaya since independence.

2.6.2 The Morphology of the City: Indonesianisation and the Survival of Colonial Dualism

The rapid growth of the population of Surabaya since independence has not had the effect on the morphology of the city which might be expected by a Western observer. Surabaya has had to accommodate a rapid increase in its population without a commensurate expansion of its urban infrastructure. A comparison of the morphology of the city in 1945 and 1969 (Figures 2.6 and 2.1) reveals that the urban core of permanent buildings has changed little since the colonial period. Except for some minor infilling, the core of modern Surabaya has remained a colonial enclave inhabited by a post-colonial population. The standstill has been due largely to the political instability of the late 1950s and the collapse of the Indonesian economy during the early 1960s. Since the coming to power of Indonesia's 'New Order' in 1965 the situation has improved, though extensive street widening and redevelopment in the old business core of the city have been underway only since 1971-72. Today, the central business district of Jalan Niaga, Jalan Jembatan Merah, Jalan Tunjungan and the area of Pabean Cantian is dominated by Dutch-built offices and banks. The scene in 1909 at Jembatan Merah (the Red Bridge) was not very different. The general picture is that of a deteriorating colonial city (Plates 4 and 5). Some offices have had face-lifts and most have changed names, but the prosperous, well-kept look of 1909 was gone by 1972.

(1) This is the actual intercensal growth rate in Java and Madura, but since transmigration moved only an average of 36,481 persons per year between 1970 and 1974 (Jones, 1975b: 2) and with significant return migration to Java, the total rate of growth is close to the rate of natural increase.
A significant development within the urban core since independence has been the continuation of the march southward which began toward the end of the 19th century. Today, this movement comprises commercial uses invading what was prime quality European-style housing along the major southern thoroughfares. Such sites are much more accessible than the overcrowded lower city to the north. The large allotments in the Darmo district offer ample space for commercial uses, and these will continue to invade the area unless zoning regulations are enforced. The intense competition for the prime sites of European-style housing has forced land prices to levels comparable with upper class areas in Sydney or Melbourne.

A comparison of the extent of the built-up area of permanent buildings in 1945 and 1969 (Figures 2.6 and 2.1) reveals how limited development has been since independence, though vacant land has been filled in. For example, the areas of Ketabang and Darmo were completely built over by 1969 (Figure 2.1). Some infilling has occurred through squatting. Land not controlled by the Surabaya Municipality, such as the narrow strips of land along the railway lines, has been particularly vulnerable to squatting, but the banks of canals, wide gang in the old Chinatown of Pabean Cantian, spacious yards of Dutch-built housing for government employees, elite Dutch-built residential areas like Sawahan, and rights-of-way for the fire brigade in the Darmo district have also experienced infilling since independence (Plates 5, 8, 9, 10, 11, 12, 13, 14). Under the Dutch, the land had been kept vacant by a 'hard' colonial administration. The newly installed, relatively 'soft' Indonesian administration was unable and unwilling to enforce colonial laws forbidding such buildings in the face of the massive influx of population in the 1950s. During the early 1960s when the Indonesian Communist Party (PKI) dominated the municipal council, some squatters were granted rights of tenure.

Development in the zone of permanent dwellings was not confined to the infilling of vacant land. Some extension of permanent housing occurred. Naval facilities and accommodation at the naval bases of Morokrembangan and Ujung were expanded during the early 1960s, and the campus of the University of Airlangga, with associated
PLATE 6. Ampel lingkungan site of the Ampel Mosque (seen in the background) has a higher proportion of Arab residents than any other area of Surabaya.

PLATE 7. Although Pabean Cantian is the centre of 'chinatown' in Surabaya, the lingkungan also contains a large street population of Madurese who provide labour for the Chinese shopowners.

PLATE 8. A small lane within 'chinatown' in which Madurese immigrants have established small dwellings and stalls at the front of large brick houses occupied by totok Chinese. Madurese began to settle in the lane in the mid-1940s.
PLATE 9. With the influx of population since independence 'infilling' and internal subdivision on existing allotments has been common. The process has not been confined to kampung areas, but as shown here it has also been common on the spacious blocks occupied by Dutch built European-style housing in the Darmo district of Surabaya.

PLATE 10. Post-independence infilling on vacant land (garden allotments) in the grounds of barracks built at Sidodadi by the colonial government in the early 1900s for railway employees.

PLATE 11. In the Darmo district a post-independence kampung has developed on land left vacant by the colonial government for the entry of fire vehicles.
PLATE 12. Even in the older kampungs such as Jati Purwo, which has been a destination of Madurese migrants to Surabaya since the Japanese occupation, vacant land is still being used for the makeshift dwellings of new arrivals.

PLATE 13. Land beyond the control of the municipal government is a frequent site of squatter settlements, such as this settlement on railway land at Jetis in the south of 'Old Surabaya'.

PLATE 14. Land on the edges of canals or river floodplains are common sites of squatter settlements, with disastrous results in the wet season.
staff accommodation, was built in ricefields to the south of the Dutch-built hospital at Karang Menjangan (Figure 2.1). In the late 1950s and early 1960s some attempts were made to provide cheap well-planned permanent housing for government employees (Plate 17), but there was no general government-assisted plan to provide housing for the urban poor.

In contrast to the limited areal growth of the inner, Western style core of Surabaya since independence, the area of kampung housing on the outskirts of the city has expanded greatly since 1945 (Figures 2.6 and 2.1). In 1945 the 'true' urban kampung (those functionally part of the city with most of their residents engaged in urban occupations) were adjacent to the European urban core or enclosed by the Europeanised city (Figure 2.6). The more remote kampung were essentially desa in which residents owned and worked surrounding wet rice and dry land fields. The picture had changed completely by 1969 (Figure 2.1). Surabaya in 1969 was surrounded by a vast unbroken belt of kampung, all of which were functionally part of the 'Indonesianised' city. Only a small number of isolated desa, separated from the city by wet rice and dry land fields, preserved their rural character (Plate 20). Indeed, much of the farmland of the rural desa of 1945 had been built over by chaotic kampung development, and the former farming population had become members of the urban workforce. One such desa is now the kampung of Dupak (Figures 2.6 and 2.1). Between 1945 and 1969 the area of kampung had doubled, and in 1969 it approximated the area of the Europeanised core of the city (Figure 2.1).

Surabaya still exhibits, in its morphology and dramatic socio-economic contrasts, the features of a colonial port city, despite the huge influx of Indonesians since independence and the resulting 'Indonesianisation' of the city. The extreme dualism of the colonial city is being modified but not eliminated by a new post-independence population of inmigrants. Today, as in colonial times, social and economic status are associated with ethnic origin and political power, and the contrast between the housing of the poor and the rich is as great as in colonial times (Plates 15, 16 and 19).
PLATE 15. Dutch built European-style housing like this in the Sawahan district is frequently occupied by peranakan Chinese or senior government employees.

PLATE 16. A typical style of government housing constructed by the Indonesian government in the 1960s for middle or senior ranking government employees.

PLATE 17. Well planned low-cost housing constructed for low-level government employees in the early 1960s. On retirement, many of the original residents who were born outside the city return to their place of origin, and the dwellings are occupied by wealthier Surabayan residents.
PLATE 18. Privately developed kampung housing in Ngagel Tirto is typical of the extensive kampung development on the southern outskirts of the city since independence. Javanese inmigrants predominate among the residents of these areas.

PLATE 19. Congested low quality dwellings in Srengganan an inner city kampung first developed in the early 1900s by Madurese inmigrants.

PLATE 20. Semi-rural desa-type housing in Simo Gunung a kampung located in the rural-urban fringe of 'Old Surabaya'. As land availability steadily decreases, areas like this are being sought by an increasing number of recent inmigrants.
In contemporary Surabaya the elite residential areas of Gubeng, Ketabang and Darmo are occupied by the wealthy or the politically powerful (Figure 2.1). These include Javanese military leaders, wealthy Chinese or Outer Island businessmen, retired or senior Javanese civil servants, and the few Chinese and Javanese who have attained a lucrative professional status (Plates 9 and 15). Alongside these areas of high-status European housing and in the sprawling kampung on the fringes of the city, are the masses of the urban poor, the lumpenproletariat. The Javanese and Madurese who reside in kampung rarely benefit from such essential urban services as piped water, electricity, sewage disposal, or drainage (Plates 12, 13 and 19). The kampung of present day Surabaya are overcrowded and unsanitary and though conditions may not be worse than in the last years of colonial rule, the scale of the problem is much greater. Since 1967 attempts have been made to widen streets and provide proper drainage within some of the most depressed kampung, and many of the overcrowded squatter settlements or rumah liar along the railways and canals have been cleared. But all too often this has been achieved at the expense of many residents who have lost their access to workplaces.

Perhaps the major reason for the similarity of socio-economic structure between contemporary Surabaya and the colonial city is that the national revolution of 1945-49 did not develop into a true social revolution. The structural framework of colonial hierarchical society, which used traditional feudal elements in the host society, was not destroyed or even restructured. Independence replaced the European elite with an Indonesian elite. The new elite was interested in political power; and except by the use of political power could not compete in commerce and trade with the financial and managerial resources of the Chinese and Arab communities who took over most of the abandoned European commercial enterprises. The depressed condition of the urban masses remained essentially unchanged, though those with influential connections could attain a position in the burgeoning civil service and armed forces, the two main avenues through which the Indonesian elite have exercised patronage in the post-independence period.
The Ethnic Composition of Contemporary Surabaya: Relicts of Colonial Policy

The present distribution of ethnic groups in Surabaya is a carry-over from the colonial past, as is the dualism in the economy, the morphology, and the society of the city. The number of ethnic Chinese, Arabs, Indians/Pakistanis, Europeans and Indonesians is recorded annually for each lingkungan (urban ward) at the central office of the Department of Population Registration (Bagian Pendaftaran Penduduk). Although there are problems with these data, these are more likely to have resulted in consistent underenumeration than spatial bias. In the absence of a more reliable data source, population registration data has been used to provide an idea of the distribution of foreign ethnic groups within Old Surabaya at the level of lingkungan (Figure 2.9).

Official data are unavailable concerning the ethnic composition of the indigenous population. In Surabaya, as in most of East Java, the indigenous population is composed predominantly of Javanese and Madurese. To understand the population geography and character of Surabaya, the distribution of these two groups must be considered. The 1930 census revealed that the Javanese accounted for 83.9 per cent of the total indigenous population of the city and the Madurese accounted for 12.7 per cent. No other ethnic group accounted for even 1 per cent of the total (NEI, 1934, III: 154). The lack of information concerning the ethnic composition of the indigenous population was partly overcome by the population registration survey I conducted; though ethnicity was not noted on the family registration

(1) The major problem with the population registration data is one of definition. The major criteria for deciding the ethnic origin appear to be facial features and name. Chinese who had adopted Indonesian names, and persons belonging to ethnic groups with facial similarities to the Indonesian, are, like as not, noted as Indonesian. Moreover, there appears to be no uniform policy with regard to the classification of children from mixed marriages, though in most cases the offspring are included in the ethnic group of the father.
Figure 2.9 Kecamatan (sub-districts) and lingkungan (urban wards) within 'Old Surabaya', 1974

Source: Bagian Pendaftaran Penduduk, Kotamadya Surabaya
cards, place of birth was, and was used as a surrogate for ethnicity.(1)

2.6.3.1 The Javanese

Java-born family heads form a clear majority in all but six of the 37 lingkungan in Old Surabaya (Figure 2.10). In two of the six exceptional areas, Java-born family heads account for half the total number of family heads. Taking the whole of Old Surabaya, Java-born family heads account for 78 per cent of the total number of family heads. In ethnic terms, contemporary Surabaya clearly is a Javanese city, much more so than in colonial times, when the Javanese accounted for 67 per cent(2) of the population (Table 2.4).

Within the overall dominance of Javanese-born family heads, particular concentrations (over 85 per cent) are found in two areas of the city: the military bases (for example, the Ujung Naval Base (Ujung lingkungan - area 7, Figures 2.9 and 2.10) has 86 per cent of its family heads born in Java); and the rapidly growing post-World War II lingkungan on the outer fringes of the Dutch-built residential zones of the city (Figure 2.10). The latter area of concentration includes the lingkungan of Simokerto (8)(3), Rangkah (29), Pacarkembang (31), Tambaksari (27), Cubeng (30), Ngagel (36), Wonokromo (37), Darmo III (35), and Simo (22). Each of these

---

(1) In each lingkungan, the proportion of family heads born in Java and Madura appeared to provide an unbiased indicator of the relative concentration of Madurese and Javanese. Had the proportion of the total population been used instead of the proportion of family heads, the Madurese would have been underestimated because children of Madurese parents born in Surabaya would be classified as Javanese. Also, a second generation Madurese resident of Surabaya who was born in Surabaya of Madurese parents and who had attained the status of a family head would be classified as an ethnic Javanese, though this would be offset, in part, because many expectant mothers return to their village of origin to give birth. In any event, a second generation Madurese resident of Surabaya probably would have less affinity for Madura than his parents and might better be considered as Javanese, or Surabayan.

(2) At the time of the 1930 census.

(3) The numbers enclosed in brackets after the name of a lingkungan refer to the code number of that lingkungan in Figure 2.9.
Figure 2.10  Family heads born in Java and Madura as a percentage of all family heads, by lingkungan, ‘Old Surabaya’, 1972

Family Heads Born in Java and Madura as a Percentage of all Family Heads, by Lingkungan ‘Old Surabaya’ 1972

Source: Population registration survey
### TABLE 2.4 - Ethnic composition of the population of Old Surabaya, 1930 and 1972

<table>
<thead>
<tr>
<th>ETHNIC GROUP</th>
<th>1930</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Population</td>
<td>Total Population</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Javanese</td>
<td>227,524</td>
<td>66.6</td>
</tr>
<tr>
<td>Madurese</td>
<td>34,433</td>
<td>10.1</td>
</tr>
<tr>
<td>Other Indigenes</td>
<td>5,729</td>
<td>1.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>ALL INDIGENES</strong></td>
<td>267,686</td>
<td>78.4</td>
</tr>
<tr>
<td>Chinese</td>
<td>38,871</td>
<td>11.4</td>
</tr>
<tr>
<td>European</td>
<td>25,900</td>
<td>7.6</td>
</tr>
<tr>
<td>Other Asians</td>
<td>5,629</td>
<td>1.6</td>
</tr>
<tr>
<td>Other</td>
<td>105</td>
<td>0.0</td>
</tr>
<tr>
<td>Unknown</td>
<td>3,484</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>345,675</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Notes:**
- * Percentage of total family heads born in Java, Madura and other places in Indonesia.
- @ Includes persons of Indonesian and foreign citizenship.
- n.a. Not available or in the case of family heads, not applicable.
- ** Foreign citizens only.

**Sources:**
- iii) Population registration survey.
The old inner city Chinatown lingkungan of Pabean Cantian (12) and Bongkaran (14) were areas in which Java-born family heads constituted a relatively low proportion of all family heads (Figures 2.9 and 2.10). The northeast sector of the city, populated largely by Madurese, was another area in which Java-born family heads were of relatively less importance (the four lingkungan of Semampir (4), Nyamplungan (6), Kampung Baru (5) and Srengganan (15)). Except where other ethnic groups had claimed parts of the crowded inner commercial zones of Surabaya, the Javanese ethnic group was predominant, particularly so in the post-colonial kampung areas and in the elite residential suburbs (Figure 2.10).

2.6.3.2 The Madurese

The areas of greatest of Madura-born family heads formed a relatively small sector of four lingkungan in the northeast of the city (Figure 2.10). Even in these four lingkungan, however, the proportion of Madura-born family heads was not a majority. Within Old Surabaya, Madura-born family heads accounted for only 13 per cent of all family heads (Table 2.4).

Why has the Madurese community concentrated in the northeast sector of the city? First, the northeast sector of Surabaya is closest to the island of Madura, and is most accessible to the Madurese. Until the late 1940s Kali Semampir (Figure 2.6), whose
mouth was just south of the easternmost dock at Ujung, offered native perahu of shallow draught a convenient avenue to the northeastern sector of the city. Also, from colonial times until recently, the light railway from Krian via Wonokromo and Pabean Cantian connected with the Madura ferry at Ujung. This service enhanced the accessibility of the lingkungan of Kampung Baru (5), Semampir (4), Nyamplungan (6), Srengganan (15), and Bongkaran (14) for Madurese inmigrants (Plates 12 and 19). The lingkungan of Ujung (7) also appears to be accessible to the Madurese, yet in 1972 only 7 per cent of the family heads in Ujung were Madura-born. The reason for this apparent anomaly is that Ujung lingkungan is contained within the boundaries of the Surabaya Naval Base in which the vast majority of residents are in the Indonesian Navy. Madurese have not been able to join the Indonesian Navy because of their inferior educational qualifications, and the navy's preference for Javanese recruits.

A second reason for the concentration of Madurese in the northeast of the 'old city' is the availability of employment in this area. The island of Madura is the poorest 'minus area' near Surabaya. Madura lacks employment opportunities, suffers from a critical shortage of land, and has poor educational facilities. Madurese coming to Surabaya have willingly accepted unskilled labouring occupations (kuli). A ready market for such labour has been traditionally available amongst the Chinese businessmen and traders of the old Dutch business district and Chinatown. Here Madurese kuli, petty pedlars, and traders form a highly visible street community in front of and alongside Chinese and Arab-owned shops (toko), trading houses, and financial institutions (Plates 7 and 8). Areas in which there is a concentration of Madura-born family heads are often those same areas in which there is a concentration of ethnic Chinese (compare Figures 2.10 and 2.11).

There is also a significant concentration of Madura-born in the lingkungan of Sempampir (4), Kampung Baru (5), and Krembangan Utara (1). Demand for Madurese kuli and dockyard workers at the perahu docks of the Kali Mas and the nearby Naval Base at Ujung (which employs Madurese civilian labourers who reside outside the base) has been a major factor responsible for the large Madurese community in
Figure 2.11 Ethnic Chinese and Arab as a percentage of the total population, by lingkungan 'Old Surabaya' 1972

Ethnic Chinese and Arab as a Percentage of the Total Population, by Lingkungan 'Old Surabaya' 1972

Source: Unpublished data, Bagian Pendaftaran Penduduk, Kotamadya Surabaya
this area. Madurese residents of the lingkungan of Srengganan and Semampir remarked that the increased demand for dockyard labour by the Japanese during the war was a major factor responsible for the influx of Madurese into the two areas.

To sum up, the location of the major commercial core of the city and Chinatown in combination with geographical accessibility and the demand for labour in the dockyards, have been the major factors influencing the location of the Madurese community in contemporary Surabaya.

2.6.3.3 The Chinese

The present spatial concentrations of ethnic Chinese in Surabaya also reflect, in large part, the manifestations of colonial policy. In 1787, a Chinese kampung existed on the east bank of the Kali Mas, near the present lingkungan of Pabean Cantian and Bongkaran (Figure 2.3b). This kampung may have existed before the Dutch influenced the morphology of the settlement, since a 1719 sketch map shows a kampung in that area (Figure 2.2), though (unlike the 1787 map) it does not identify areas of ethnic concentration. It is possible, then, that the localisation of the Chinese may date from pre-colonial times in Surabaya. A similar localisation existed in pre-colonial Bantam (Cobban, 1970: 225). Following the revolt by the Chinese against the Dutch authorities in Batavia in 1740, Dutch policy restricted the Chinese to certain quarters of the city designated as the 'Chinese camp' (Milone, 1966a). Similar regulations were enforced in Surabaya until they were relaxed in 1911 and abandoned in 1919. Although the exact boundaries of the Chinese camp in Surabaya have not been located, contemporary accounts indicate that it included all of the present lingkungan of Pabean Cantian (12), and at least part of the present lingkungan of Bongkaran (14), Kampung Baru (5), and Kapasan (9) (Wright and Breakspear, 1909). Three of the four lingkungan in which ethnic Chinese were concentrated in 1972 (Figure 2.11), are within the area of the 'Chinese camp'. The inertia of the Chinese community is attested to by the fact that six of the eight lingkungan with a quarter or more of their populations comprised of
ethnic Chinese, are located east of the Kali Mas, the area to which they were restricted by the Dutch (Plate 7).

The origins of the present concentration of ethnic Chinese in the lingkungan of Alun-Alun Contong (17) and Genteng (23) are uncertain (Figure 2.11). In 1787 the Alun-Alun Contong area was the site of the original town square, and the residence of the Javanese regent and aristocracy (Figure 2.3b). During the period of the localisation of the Chinese community by the Dutch, the area did not appear to be an official 'Chinese camp'. A map of the city in 1900 indicated Chinese graves at nearby Embong Malang (Figure 2.4), but this was the high land nearest to the 'Chinese camp' east of Kali Mas, and the Chinese usually buried their dead at elevated sites some distance from their residential areas. The Chinese may not have moved into the lingkungan of Alun-Alun Contong until after 1911, when they moved into minor streets. It appears that large numbers of Chinese resided outside the original 'Chinese camp' east of Kali Mas after the substantial influx of Chinese into Java during the 1920s. At this time some of the older residential areas in Alun-Alun Contong were being deserted by Europeans, who were moving south to the new residential areas of Tegalsari and Darmo.

The importance of the Chinese in the retailing occupations of Surabaya in 1930, when they outnumbered Europeans three to one (Table 2.3), suggests that they were located predominantly in the major retail areas of the city. Although large-scale retail outlets and most of the banks along the main streets of Jalan Niaga and Jalan Tunjungan were still in European hands, the withdrawal of the Europeans on independence and the subsequent nationalisation of European firms, permitted the Chinese to take over 'firm-type' retailing and trading. The Chinese now control all but a few of the major retail firms along the main streets in Surabaya.(1)

The affluence of the ethnic Chinese has permitted them to occupy elite European-style residential areas such as the lingkungan

---

(1) In 1972, ethnic Chinese accounted for 60 per cent of the population in the lingkungan of Alun-Alun Contong (17), and 25 per cent of the population in Genteng (23) (Figure 2.11).
of Sawahan (20), Darmo (32) and Ketabang (25) which now have a relatively high proportion of peranakan Chinese residents. On the other hand, many of the older totok Chinese continue to reside in the old overcrowded shophouses of Chinatown, in Pabean Cantian and Bongkaran lingkungan (Plates 2 and 7).

Both totok and peranakan Chinese have avoided the major outer kampung areas of Surabaya (Figure 2.11), though the construction of better quality kampung housing has been followed, in certain instances, by an 'invasion' of Chinese (Plate 17). Occasionally, a Javanese or Madurese can afford to retain a high quality kampung house, but on retirement or retrenchment the local resident usually realises the capital gain of his property and either moves to cheaper kampung housing on the fringes of the city or returns to his desa.

2.6.3.4 The Arabs

The ethnic Arab community of Surabaya is numerically insignificant. It numbered 7,405(1) in 1972, 0.5 per cent of the total population of Old Surabaya. Because of their small numbers Arabs nowhere constitute a majority of the total population of a lingkungan, unlike the Chinese, who form a majority of the total population in the lingkungan of Pabean Cantian and Alun-Alun Contong. Like the Chinese, however, the Arabs have a significant effect on the economic life of the city as landowners, traders and financiers. Also, as the first Muslims in Indonesia the Arabs play a leading role in the religious life of the country. They are not regarded with suspicion, as is the Chinese minority, by the indigenous population.

The Arab community is highly localised (Figure 2.11). In 1972, 89 per cent of the ethnic Arabs resided in three lingkungan: Ampel (13), Kampung Baru (5) and Nyamplung (6), where they accounted for 27 per cent, 18 per cent and 14 per cent respectively, of the total population (Figure 2.11).

(1) Population registration data from Bagian Pendaftaran Penduduk, Kotamadya Surabaya.
The reason for the strict localisation of the Arab community in the vicinity of Ampel lingkungan is largely historical. Ampel is the site of the grave of Sunan Ampel - one of the nine Islamic saints of Java - who died in 1409 (AGS, SWPA, 1945: 4). An important mosque, the Ampel Mosque was erected on the site, and it is considered one of the most sacred shrines for Muslims in all of Indonesia. Because of his devout Islamic faith, an Arab values a place of residence near this sacred shrine (Plate 6). The map of 1787 shows Malay kampung in the Ampel area (Figures 2.3a, 2.3b); this suggests it had become a desirable residential area for Malays (and Arabs)\(^{(1)}\) who were generally more fervent Muslims than Javanese. The proximity of the area to the grave of Sunan Ampel was its major attraction, but its nearness to the Kali Mas and the Kali Pegirian were also of importance to the seafaring Malays and Buginese.

2.6.3.5 Other Ethnic Groups

The Europeans, Indians and Pakistanis, and a few unclassified foreigners, make up the remainder of the ethnic groups in Surabaya. Each accounted for insignificant percentages of the old city's total population in 1972 and none formed a significant part of the population of any particular sector of the city. The Indians and Pakistanis did form a minor concentration in the commercial and trading areas of Ampel and Alun-Alun Contong, where they accounted for less than 2 per cent of the population. The small European population, which probably included many Eurasians (orang Indo), was distributed throughout the city.

2.6.3.6 Conclusion

Despite differences in numbers and degree of localisation, the present geographic location of the Madurese, Chinese and Arab communities have each been determined in great part, by colonial policies which have not operated for three decades. The present

\(^{(1)}\) In the context of the 1787 map 'Malays' probably includes non-Javanese from the outer islands of the NEI; Buginese and Makassarese from South Sulawesi, for example.
significance of these past policies is evidence of the extent to which the post-independence economic collapse of Indonesia has hindered the development of post-colonial Indonesian cities.

2.6.4 Demographic Character of Old Surabaya in the 1970s

Information about the demographic structure of Old Surabaya (pre-1969 boundaries) in the early 1970s was limited (refer Appendix 2.1). In these circumstances age-sex data for Old Surabaya have been derived from the population registration survey I carried out in 1972-73. In order to evaluate the accuracy of the registration data and highlight some of the major characteristics of the population composition of Old Surabaya, the 1972-73 registration data were compared with the East Java 1971 sample census results (Indonesia, BPS, Series E, No. 13, 1973) for all urban areas in East Java (Figures 2.12a and 2.12b). Surabaya Municipality accounted for 42 per cent of the urban population of East Java; the old city alone accounted for 36 per cent.

The result was that the population registration data (Figure 2.12b) seemed to provide a reasonable picture of the age-sex structure of Old Surabaya, a more accurate picture than critics of population registration data have suggested. Differences between the two age-sex pyramids (Figure 2.12) are readily explained by the somewhat different populations considered and by certain limitations of the data. For example, the number of children in the 0-4 age group appears to be grossly under-reported in the registration data (Figure 2.12). Slow administrative procedures and the reluctance of parents in a situation of high infant mortality to report the birth of a child until he or she has achieved a 'significant' age may account for the under-reporting. Also, the proportion of males and females in the young working ages of 20-24, 25-29 and 30-34 is larger among the Old Surabaya population than among the sample survey population of urban East Java (27 per cent compared to 23 per cent, refer Figure 2.12). The reason for the difference appears to be related to immigration. Surabaya, in common with other large cities in Java, has tended to experience more immigration than smaller centres (Table 1.1). Since immigrants are predominantly concentrated in the young working age
Figure 2.12a  Age - Sex Structure of All Urban Areas in East Java Sample Census  

1971  
(N=3,694,311)  
Overall sex ratio=94 males per 100 females  

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Males per 100 females</th>
<th>Females per cent of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>75+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 - 74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 - 69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 - 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 - 59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 - 49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 - 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 - 39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 - 34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 - 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (i) Indonesia, BPS, Series E, No. 13, 1973 : 5  
(ii) Population registration survey

Figure 2.12b  Age - Sex Structure of 'Old Surabaya' from Population Registration Survey  

1972  
(N=9,704)  
Overall sex ratio=98 males per 100 females  

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Males per 100 females</th>
<th>Females per cent of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>75+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 - 74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 - 69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 - 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 - 59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 - 49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 - 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 - 39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 - 34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 - 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (i) Indonesia, BPS, Series E, No. 13, 1973 : 5  
(ii) Population registration survey
groups, Old Surabaya has a larger proportion of its population in the 20-34 age group than is usual among urban areas in East Java (Figure 2.12).

The overall sex composition of the population of Old Surabaya was not significantly different from that of all urban areas in East Java (98 males per 100 females compared to 94 males per 100 females). The age specific sex ratios were also similar, the only significant contrast (1) was that males equal or outnumber females in Old Surabaya in the 30-34, 35-39 and 40-44 age groups, whereas for all urban areas in East Java these age cohorts are female-dominated with sex ratios of 89, 86 and 98, respectively (Figure 2.12). Inmigration is the most likely explanation for this difference, since the inmigrant flow to Surabaya in the immediate post-independence period was dominated by males, many of whom were young demobilised guerilla fighters who had battled against the Dutch.

Examination of the intra-city distribution of children aged 0-14 reveals a pattern similar to that found in most Western cities, the number of children increasing uniformly in nearly all directions with distance from the city centre (Figure 2.13). In the Western city, the main reasons for young families predominating in the outer areas are cheaper land, the location of new housing stock, and the belief that the 'broad acres' of suburbia are a better environment in which to raise a family. Although the first two of these factors are equally applicable in Surabaya, the third factor seems irrelevant. Most residents living in lingkungan on the outskirts of the city would prefer to live near the city centre. Many have lived in or near the city centre in the past, but have been forced out, either by the clearance of squatter settlements or by economic pressure from wealthier residents.

The main reason for the concentration of children in the outer areas and the dearth of children in the inner city, however, is the historical development of Surabaya and the plural society created

---

(1) Sex ratios in the older age groups of the registration data are suspect because of the small number of observations involved (Figure 2.12b).
Figure 2.13
Children as percentage of the total population by lingkungan 'Old Surabaya' 1971

Children as a Percentage of the Total Population, by Lingkungan 'Old Surabaya' 1971

Source: Population registration survey
by this development. After independence in 1949 young immigrants who arrived in Surabaya found that most of the choice inner-city locations were already occupied by earlier arrivals. Areas available to most of the post-1949 arrivals were on the fringes of the established city, or in existing indigenous kampung within the city. Because the migrants who settled in these areas after independence were concentrated in the younger working age groups, it was the indigenous kampung within the city and the areas on the outskirts of Old Surabaya which contained the highest concentration of children in 1971. In comparison, lingkungan located in the commercial core of the city and in the areas of European-style housing to the south contained relatively few children, reflecting the earlier arrival in Surabaya and the older age structure of populations resident in these areas (Figure 2.13).

A majority of the lingkungan populations had a female-dominated sex structure reflecting the overall numerical predominance of females in the city's total population (Figures 2.12 and 2.14). The range of sex ratios between lingkungan was small, and the most significant feature of the spatial pattern was an above average concentration of females in areas of European-style housing and the commercial core of the city. This concentration was caused by the employment of female domestics in households of the wealthy families resident in these areas (Figure 2.14). Even lingkungan with the highest proportions of males had sex ratios of approximately 100 in 1971, despite the siting of industries and land uses oriented to male employment in these areas (such as the naval base in Ujung and metal fabricating industries in Ngagel, Figures 2.14 and 2.16).

Unlike Bangkok or Singapore (McGee, 1967: 114), the highest population densities in Surabaya are not in the areas of shop-houses in old Chinatown (compare Figures 2.15 and 2.11). Within Old Surabaya there are two cores of high density. The major core includes the lingkungan of Srengganan (14), Sidokapasan (11), and Nyamplungan (6), which were all indigenous kampung on the edge of the 'Chinese camp' at the turn of the century (Figures 2.15, 2.4 and 2.9). Much of the huge influx of Madurese which occurred when Surabaya was developed as a major colonial port city was absorbed in these kampung which had easy access to employment opportunities in the adjacent Chinatown, Naval
Figure 2.14 Sex ratio by lingkungan ‘Old Surabaya’ 1971

Sex Ratio by Lingkungan
‘Old Surabaya’ 1971

Males per 100 females

1: 97.54 – 105.60
2: 96.43 – 97.52
3: 95.05 – 95.98
4: 93.74 – 94.98
5: 90.96 – 92.80
6: 89.80 – 90.95
7: 84.75 – 89.45

Source: Unpublished census data, Bagian Pendaftaran Penduduk, Kotamadya Surabaya
Figure 2.15
Population density by lingkungan 'Old Surabaya' 1971

Population Density by Lingkungan
'Old Surabaya' 1971

Source: Unpublished census data, Bagian Pendaftaran Penduduk, Kotamadya Surabaya
Base and Kali Mas docks (Figures 2.10 and 2.15). The European-oriented city council did little to alleviate the overcrowded and unhealthy conditions in these kampung, and a contemporary account described them as an area 'where Madurese coolies find shelter in dwellings mostly unworthy of the name' (von Faber, 1931b: 155). Overcrowded conditions have persisted in these kampung (Plate 19). Like many other features of contemporary Surabaya this nucleus of high-density housing is a relict of the colonial past.

A second nucleus of high population density was located south of the original 'Chinese camp', and included the lingkungan of Jagalan (18) and Kapasari (28) (Figures 2.9 and 2.15). Approximately one-third of the populations of these two lingkungan, as well as Sidodadi (10) on the northern side of the old Chinatown, consisted of ethnic Chinese (Figures 2.15 and 2.11). Each of the lingkungan contained a mixed land use pattern of Chinese shop-houses and Chinese and indigenous kampung (Figure 2.16). However, there is more of a kampung component in the land use mix, than there is in the core of Chinatown. Consequently, the lingkungan which fringe Chinatown had a higher population density in 1971 than did the core Chinatown lingkungan of Kapasan (9), Pabean Cantian (12) and Bongkaran (15). Since the location of Chinatown was determined in great part, by the Dutch, this second nucleus of high population densities, as the first, reflects colonial policies.

Other indigenous kampung which existed in the colonial period and which had good access to the city, also had relatively high population densities in 1971. Areas in this category include the lingkungan of Kedungdoro (21), Tambaksari (27), Tegalsari (34) and part of Krembangan Utara (1) (Figures 2.15, 2.4 and 2.6). Most kampung areas on the fringes of the present city have low population densities (Plates 18 and 20), except for those settled soon after independence, such as Tembok Dukuh (19). Some of the more central lingkungan have lower population densities than lingkungan further from the city centre; each was part of the European-created sector of the colonial city. Examples include Krembangan Selatan (2), Bubutan (16) and Genteng (23) which formed the heart of the Dutch commercial and administrative core of the city and were dominated by
non-residential land uses. Other lingkungan with relatively low population densities such as Embong Kaliasin (24), Darmo I (32), Ketabang (25), Sawahan (20) and Darmo III (35) were developed by the Dutch for European-style, low-density dwellings (Figures 2.15, 2.16, 2.6 and Plates 9 and 15).

2.6.5 Land Use Pattern of Contemporary Surabaya

An obvious feature of Surabaya's land use pattern is its diversity and apparently ad hoc mixture of uses. The concentric pattern of land use zones around the commercial core observed in the Western city is not present in Surabaya (Figure 2.16). Something of a sectoral pattern akin to McGee's generalised model of major land use areas in the Southeast Asian city (McGee, 1967: 128) can be recognised, but most Western cities also exhibit a sectoral land use pattern. A feature of the city is its north-south elongation, which has been determined more by the constraints of low-lying swampy land east and west of the higher levees of the Kali Mas, than by other factors.

A more significant feature of contemporary Surabaya is that its land use zones, except for new kampung housing on the city's outskirts, were developed to serve a European-dominated colonial port, and prime sites were allocated to capital intensive sectors of the economy. Contemporary Surabaya has huge areas set aside for port facilities and military bases, and sites along the banks of the Kali Mas are occupied by either Western-style financial or retailing enterprises of the firm economy or 'alien' Chinese-owned enterprises. In contrast, indigenous markets frequently occupy congested, often illegal sites situated in the transitional zone of commercial and high density residential use or in the fringe kampung. Large-scale, capital intensive industrial concerns have been provided with spacious and well-serviced industrial estates while the small-scale indigenous industries languish on inadequate congested sites without any government provided services. Clearly, the city's contemporary land-use pattern and planning priorities are influenced more by the needs of its former colonial rulers and its current trading links with
Figure 2.16 Generalised land use 'Old Surabaya' 1969

Generalised Land Use 'Old Surabaya' 1969

Source: Photomap of Surabaya, 1959; Air photographs of Surabaya, 1969; Planimetric city maps, 1971; fieldwork
the international economy, than by the basic needs of its indigenous population.

2.6.6 Occupational Structure of Contemporary Surabaya

The distribution of the gainfully employed workforce (aged ten years or over) by industry of employment in 1971 reveals that the occupational structure of post-independence Surabaya (like the colonial city of 1930) is dominated by the tertiary sector (Table 2.5). In 1971, 61 per cent of Surabaya's gainfully employed population were working in the tertiary sector. Community, social and personal services employed 33 per cent of the gainfully employed, 24 per cent were employed in wholesale and retail trade, restaurants and hotels, and transport storage and communications employed an additional 10 per cent. In contrast, manufacturing activities employed just 12 per cent of the gainfully employed and primary industry (agriculture and mining) an additional 7 per cent (Table 2.5).

Comparison with the occupational structure of the city in 1930 is complicated by use of different classifications, different city boundaries, and the exclusion of those gainfully employed who were aged under 10 in the 1971 sample census and their inclusion in the 1930 census. Nevertheless, comparison is possible between the major groupings in the two censuses (Table 2.5). The number engaged in primary industry appears to have increased markedly since 1930, but this apparent increase simply reflects the incorporation of the five semi-rural kecamatan into the municipality in 1969. Of far greater significance is the decrease in the proportion employed in manufacturing activities, from 20 per cent in 1930 to 12 per cent in 1971. The difference cannot be explained by the increased share of the workforce employed in agriculture in 1971, since this is more than compensated for by a decrease in the proportion 'inadequately defined' in comparison with 1930. Conversely, the percentage employed in tertiary activities has increased from just over 60 per cent in 1930 to 74 per cent in 1971 (Table 2.5). The post-independence influx of immigrants to Surabaya, unlike the movement to the cities in Western Europe during the industrial revolution, has been absorbed not by the
### TABLE 2.5 - Gainfully employed population of New Surabaya in 1971 by industry of employment compared to the generalised occupational structure of Old Surabaya in 1930

<table>
<thead>
<tr>
<th>Industry of employment</th>
<th>1971*</th>
<th></th>
<th>1930**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Primary industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, hunting, forestry &amp; fishing</td>
<td>31,528</td>
<td>6.8</td>
<td>-</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>862</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>32,390</td>
<td>7.0</td>
<td>4,347</td>
</tr>
<tr>
<td><strong>Secondary industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>56,878</td>
<td>12.2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>56,878</td>
<td>12.2</td>
<td>27,618</td>
</tr>
<tr>
<td><strong>Tertiary industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, gas &amp; water</td>
<td>3,358</td>
<td>0.7</td>
<td>-</td>
</tr>
<tr>
<td>Construction</td>
<td>20,992</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade, restaurants &amp; hotels</td>
<td>113,563</td>
<td>24.4</td>
<td>-</td>
</tr>
<tr>
<td>Transport, storage &amp; communications</td>
<td>48,991</td>
<td>10.5</td>
<td>-</td>
</tr>
<tr>
<td>Financing, insurance &amp; real estate</td>
<td>4,693</td>
<td>1.0</td>
<td>-</td>
</tr>
<tr>
<td>Community, social &amp; personal services</td>
<td>154,573</td>
<td>33.2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>346,170</td>
<td>74.3</td>
<td>84,368</td>
</tr>
<tr>
<td><strong>Activities not adequately defined</strong></td>
<td>30,100</td>
<td>6.5</td>
<td>21,761</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>465,538</td>
<td>100.0</td>
<td>138,094</td>
</tr>
</tbody>
</table>

**Notes:**

1) The data include only those members of the gainfully employed population who were aged 10 years or over at the time of the 1971 sample census.

2) The data for 1971 refer to Kotamadya Surabaya, including the five kecamatan incorporated in 1969.

3) The 1971 sample census does not provide a tabulation of the gainfully employed by industry. The above distribution was obtained by subtracting the industry of last employment of the unemployed (including first time job seekers) from the industry of employment of the economically active population. In order to carry out this calculation it was necessary to assume that first time job seekers had the same distribution by industry as the unemployed.

**The 1930 data refer to Old Surabaya (pre-1969 boundaries). Because of differences in the classifications only the general groups are included. More detail may be obtained from Table 2.3.

**Sources:**

1) Indonesia, BPS, No.13, 1973: 225, 228.

2) NEI, Vols. III, VI, VII, 1933-35.
industrial sector but by a burgeoning tertiary sector. As Geertz forecast in 1963: 'Indonesia is moving from industrialisation without urbanisation [during the colonial period] toward urbanisation without industrialisation' (1963a: 145-6).

Two industries dominated the bloated tertiary sector. The major industry was 'community, social and personal services' which included most employees in the huge corps of government civil servants as well as members of the armed forces. Domestic servants were also included within this grouping. In the absence of large-scale industrial development in the early 1950s, government sector employment in the civil service or the armed forces was the one way the new government could offer employment to its expectant supporters. The other major employer within the tertiary sector was the wholesale and retail trade which included hotels and restaurants. Like the civil and armed services, wholesale and retail trading appears to have grown markedly since independence, though unlike employment in the government sector, most of the new entrants to trading activities were probably employed in small-scale informal sector enterprises. Occupational details collected for family heads in Old Surabaya through the population registration survey indicated that 23 per cent of the family heads who specified an occupation were sellers or traders. The descriptions used by the respondents implied that most were petty pedlars in the informal sector.

The 1971 census, unlike the 1930 census (Table 2.3), provides no data on the ethnic composition of the major industrial groupings. This is a serious deficiency, since the closure of some activities to indigenous ethnic groups helps to explain the apparent over-development of the tertiary sector since 1949. Since independence and the withdrawal of Dutch capital, the Chinese community, in particular, has dominated the capital intensive sector of Surabaya's economy. Many senior positions in manufacturing industries, the most capital intensive activities, have been closed to indigenous Indonesians. Many employment opportunities in large-scale retail outlets, largely in the hands of ethnic Chinese, also have been closed to Indonesians. Indigenous Javanese dominate employment opportunities under government control: the civil service, armed
forces and nationalised industries such as the government oil monopoly, government banks and shipping companies. In an attempt to provide employment, many of the tertiary sector enterprises under government control are extremely labour intensive. The one real alternative to government employment has been in the bazaar economy of the informal sector which, as Armstrong and McGee (1968: 362-3) have noted, offers a number of advantages to indigenes. The market traders, the petty pedlars, and most unskilled labourers are Javanese or Madurese. On the other hand, most capitalists are ethnic Chinese or Arabs, as was the case in colonial times (Table 2.3).

The occupational structure of Surabaya, like its land use pattern, demographic character and ethnic composition, reflects its historical role as a colonial port of a metropolitan power. The dominance of the tertiary sector largely reflects Dutch colonial policy which retarded industrialisation. Post-independence policies have attempted to reverse the trend, though current emphasis on large-scale capital rather than labour intensive industries may mean most future employment will be provided by the tertiary sector.

2.7 CONCLUSION

A settlement on the present site of Surabaya pre-dated the arrival of the Dutch in the Indonesian archipelago by three or four centuries. During this period, in particular during the Majapahit dynasty, Surabaya developed as a flourishing port, and with the other port towns and cities of Java's north coast (the Pasisir) it supported a 'seaport culture' characterised by Islam, a heterogeneous population, and the localisation of ethnic sub-communities into quarters of the town.

The arrival of the Dutch in East Java in 1675 did not dramatically change the settlement during the next 200 years. European military fortifications and a small European settlement was established in the lower city, but the small settlement retained many of its pre-European characteristics. All this changed with the entry of large-scale private capital into Java in the 1870s. From 1870
until the end of colonial rule in 1949, Dutch policy created a colonial port city in Surabaya. The colonial city was characterised by extreme social and economic inequality between major ethnic groups. Europeans exercised supreme political and economic power, held the highest status occupations and created enclaves of European-style housing for their families. Other aliens, predominantly Chinese and Arabs, were in a secondary position to the Europeans. They provided the manpower for clerical positions in European-owned enterprises and where possible established commercial enterprises in their own quarters of the city. The Chinese and the Arab communities originally resided in their pre-colonial settlements of Chinatown and near the mosque, but as the Europeans began to move south to the more spacious areas of Embong Malang and Darmo at the end of last century and the early decades of this century, the Chinese and Arab communities moved into the old and congested housing in the lower city abandoned by the Europeans.

The indigenous Indonesian population, predominantly of Javanese or Madurese ethnic origin, formed the base of the colonial hierarchy. They provided labour essential for the European and alien-owned business enterprises and cheap local goods and services required by the wealthy alien residents. Expansion of the modern European sector of the city was built on the cheap labour and goods of the indigenous community. The demand for labour created by the expanding modern sector of the city's economy attracted indigenous inmigrants, but the European-dominated city council did not provide the arrivals with housing or basic urban services until the 1920s. The result was massive overcrowding and the erection of a plethora of sub-standard dwellings in existing kampung and in new kampung on the fringes of the city.

The social and economic dualism between the European elite and the underprivileged indigenes permeated all aspects of life in colonial Surabaya. The economy of the city was differentiated into a modern large-scale, capital intensive sector dominated by Europeans and other aliens, and a small-scale, labour intensive sector, dominated by indigenes. The Dutch saw the NEI as an exporter of primary produce and an importer of manufactured goods. Surabaya, a
colonial port city, was a middleman in the exchange between the export producing estates of interior Java and the markets of metropolitan Holland. The city was required to provide financial, trading, transport and administrative services to facilitate the exchange, and finance was readily available to provide these services for the modern sector of the economy. In 1930, Surabaya was a city of railway yards, docks and warehouses peopled by clerks, coolies, government administrators, bankers and traders. There was little place for manufacturing. The needs of the expanding modern sector were met by imports from Europe, and as early as 1875 imported linens were displacing locally-produced cloth (von Faber, 1937a: 186). Deprived of large-scale employment opportunities in manufacturing and without access to capital, the indigenous population was confined to labouring or low status administrative jobs in the modern sector and small-scale trading and artisan activities in the informal sector of the economy.

With formal independence in 1949, the political structure changed dramatically. The Indonesian community assumed a position of political and military dominance. The economic structure, however, was largely unchanged. Some of the largest nationwide enterprises, such as the oil monopoly and major shipping companies were soon nationalised, as were the major plantations and the banks. However, many of the smaller European owned trading and retail companies passed into the hands of the Chinese, the one group which could immediately manage such concerns. As in colonial times, the private sector of the capital intensive firm economy of Surabaya is today in the hands of an alien ethnic group.

Because most of the privately owned enterprises in the capital intensive sector of the city's economy have remained in alien hands, employment opportunities in these concerns for the indigenous Indonesian community have remained limited. The great many Indonesians who flocked to Surabaya after independence have been accommodated by a massive growth in the workforce of the handful of nationalised enterprises, and an even more massive growth of the armed forces and civil service, sectors of the economy under direct government control. The one other avenue of employment for the fast-growing indigenous workforce has been the informal sector. Compared
with the government sector, the informal sector has the advantage of relative ease of entry, an important consideration for disadvantaged rural-urban migrants without contacts in Surabaya. Contemporary Surabaya has developed an economy which is more unbalanced than was the case in colonial times. Approximately three-quarters of the workforce is employed in the tertiary sector. Underemployment or, perhaps more correctly, unproductive employment is the norm.

The economic collapse of the immediate post-independence period, coupled with the absence of a true social and economic revolution on independence, acted to preserve most of the characteristics of the colonial port in the morphology, employment structure and demography of contemporary Surabaya. Colonial sources indicate that Surabaya has had a long history of immigration, but it appears that the years immediately after independence witnessed the largest influx of modern times. In colonial times indigenous immigrants had a difficult time in Surabaya largely because of the city's dual economic structure and its ethnic composition. Political power has changed hands since independence, but analysis of the occupational structure of Surabaya in 1971 compared with 1930 suggests most post-independence indigenous immigrants have been confronted with a scarce job market similar to that which confronted their predecessors in colonial times.
CHAPTER III

GEOGRAPHIC ORIGINS OF LIFETIME IMMIGRANTS

3.1 INTRODUCTION

The rural or urban character of the places of origin of migrants and the experience gained by migrants in different places of residence prior to their migration to a major urban centre play an important role in influencing subsequent acculturation and occupational mobility within the new urban environment (Raczynski, 1972; Galindo and Goldberg, 1973). The characteristics of the places of origin of immigrants affect also the selectivity of migration flows (Elizaga, 1966). Consequently, the discussion of the origins of immigrants, the theme of this chapter and Chapter Four, will begin with a discussion of their geographic origins. This chapter will consider three aspects of the geographic origins of migrants: the location and nature of their birthplaces, the migration histories of immigrants prior to arrival in Surabaya, and the character of the last place of residence of the immigrants prior to their arrival in Surabaya.

The enumeration and questionnaire surveys carried out for this study provide the major data sources for the analysis (refer Appendices 1.3 and 1.4). Although all survey information was obtained from a random sample of the total lifetime immigrant population of Old Surabaya, such a sample can include only the survivors of earlier migration flows, and must be biased toward the younger survivors of earlier migration. Also, such a survey excludes immigrants who have departed, some to return to their village of origin, some to move to a new place of residence. The survey results should be assessed in the light of these qualifications.

(1) The enumeration survey obtained birthplace locations at the kabupaten (regency) level for approximately 3,850 immigrants. The questionnaire survey obtained birthplace information, detailed migration histories, and last place of residence data at the kecamatan (sub-district) level, for approximately 590 lifetime immigrants aged 15 years or more at the time of first entry to Surabaya.
3.2 MIGRANT BIRTHPLACES

3.2.1 Geographic Distribution

The dramatic 'Indonesianisation' of Surabaya after independence in late 1949 and the subsequent influx of migrants does not mean that prior to the collapse of Dutch rule there was no significant immigration of indigenes to Surabaya. On the contrary, the Dutch census of 1930 revealed that 51 per cent of the city's total indigenous population of 271,275 were lifetime immigrants (NEI, 1934, III: 37); only Bandung of the seven major cities in the NEI achieved a higher proportion (NEI, 1934, III: 29). The high proportion of lifetime immigrants in Surabaya is testimony to the rapid expansion of the city in the first quarter of this century, when the sugar industry and other estate crops enjoyed their greatest boom in East Java. The surveys carried out in this study show that the contemporary proportion of immigrants is similar to that of 1930. The sample population registration survey of 1972-73 indicated that 53 per cent of the sample population within Old Surabaya and 48 per cent of the municipality's sample population were born outside the city boundaries. The 1974 enumeration survey within Old Surabaya gave a proportion of lifetime immigrants of 49 per cent among the 7,983 respondents sampled.

Just as the numerical significance of immigrants within the total population is similar today to what it was in colonial times, so too are the major birthplaces of this immigrant population (Table 3.1). Immigrants born in mainland East Java (excluding Madura) comprise the vast majority of immigrants to Surabaya, with much smaller proportions from Madura and elsewhere in Java (Table 3.1). Since 1930, there have been increases in the proportion of migrants born in the Outer Islands of Indonesia (that is outside Java) and in provinces of Java outside East Java, increases which have been at the expense of East Java- and Madura-born components of the immigrant flow (Table 3.1). This change is an indication of a geographic extension of Surabaya's migration field since independence. The close similarity between the relative contributions of the major birthplace regions in 1930 and 1972-74 is greater than might be expected given
### Table 3.1 - Birthplace of lifetime immigrants to Surabaya, 1930, 1972, 1974

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Birthplace (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>East Java</td>
<td>Madura</td>
<td>Other</td>
<td>Outer</td>
<td>Overseas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>excluding</td>
<td></td>
<td>Provinces</td>
<td>Islands</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Madura</td>
<td></td>
<td>in Java</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1930 census (includes indigenous population only)</td>
<td>67.5</td>
<td>19.4</td>
<td>10.0</td>
<td>3.0</td>
<td>N.A.*</td>
<td>99.9</td>
</tr>
<tr>
<td>1972 population registration survey</td>
<td>72.3</td>
<td>17.5</td>
<td>N.A.**</td>
<td>7.9</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>(Old Surabaya) (all Java except Madura)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974 enumeration survey (Old Surabaya)</td>
<td>60.8</td>
<td>15.3</td>
<td>14.2</td>
<td>8.1</td>
<td>1.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Notes:  
* The proportion of lifetime immigrants born overseas was not available in 1930 as these figures excluded ethnic Chinese, Arabs and Europeans.  
** Not available separately, included with the East Java proportion in column 1.

Sources:  
(i) NEI, 1934, III: 37-38, 160-161.  
the dramatic political changes since 1930. This suggests that the feedback from a continuous flow of migrants from source areas established in the colonial past has played a major role in reinforcing the inertia of Surabaya's migration field during the last four or five decades.

3.2.1.1 Foreign-Born Migrants

The enumeration survey of 1974 provided birthplaces by kabupaten or kotamadya for 3,786 Indonesian-born surviving lifetime inmigrants in Surabaya, and less detailed birthplace information for 64 foreign-born migrants. The majority (81 per cent) of the foreign-born migrants were born in the People's Republic of China. Seventy-one per cent of the China-born were from districts of the Hokkien dialect group, such as Amoy or Chuanchow in southern Fukien province. Cantonese from the neighbouring maritime province of Kwangtung accounted for a further 18 per cent of the China-born migrants, and Hokchiu in northern Fukien province and Chekiang province contributed the remainder. The numerical dominance of the Hokkien dialect group has existed from earliest colonial times; the Cantonese were more recent arrivals. In 1930, the two dialect groups accounted for 51 per cent and 15 per cent respectively, of Surabaya's total ethnic Chinese population (NEI, 1935, VII: 91; 93). The home provinces of these two dialect groups, Fukien and Kwangtung provinces, have had trading links with Southeast Asia for centuries, but particularly active commercial relations occurred during the Ming Dynasty. Emigration to Southeast Asia followed the trade routes, particularly during the late nineteenth and early twentieth centuries when war and natural disasters devastated their homelands in China (Heidhues, 1974: 6-7). Singapore and Hong Kong each contributed 5 per cent of the total number of foreign-born, taking the total contribution of ethnic Chinese to 91 per cent. Pakistan-born inmigrants accounted for 6 per cent of the sample of foreign-born migrants included in the enumeration survey, and persons born in Southern Yemen and West Germany made up the remainder. Obviously, the small absolute number of foreign-born migrants included in the sample enumeration survey precludes detailed analysis, but the relative insignificance of foreign-born migrants within the total inmigrant
population (Table 3.1) and the dominance of China-born within the foreign-born group, are two generalisations valid for all of Surabaya.

3.2.1.2 Indonesian-Born Migrants

Indonesian-born migrants accounted for more than 98 per cent of Surabaya's total population of lifetime immigrants in 1974 (Table 3.1). Some 90 per cent of these migrants were born in Java and Madura. Although this is a slight decline compared with the proportion in 1930, the major ethnic groups of these islands continue to dominate the flow of migrants into the city (Table 3.1). The areal extent of migrant birthplaces is more localised than these figures suggest. According to the 1974 survey over 75 per cent of all lifetime immigrants were born within the local province of Surabaya, East Java, which includes the island of Madura (Table 3.1). Consequently only a small minority of migrants should have been faced with major problems of ethnic acculturation on arrival in Surabaya. The 15 per cent born in Madura experienced some problems, but these have been minimised by the existence of an established and numerically large Madurese community localised in the northeastern sector of the city.

The number of migrants born in each kabupaten and kotamadya was examined in order to analyse the lifetime migration field of Surabaya. These absolute numbers were then standardised by the 1971 population totals (the only recent population data available) of the birthplace kabupaten or kotamadya to obtain a standard measure of the relative intensity of lifetime outmigration from each source kabupaten or kotamadya to Surabaya. Initially it was hoped to explain the intensity of outmigration to Surabaya in terms of a model which was to include socio-economic variables such as: educational level, pressure of population on land resources, relative income levels in source and destination, the level of urbanisation in the areas of origin, and the distance between Surabaya and place of birth. Models which have included these variables have been empirically tested in Africa (Beals, Levy and Moses, 1967) and in West Java (Hugo, 1975a). Unfortunately, relative income data were not available at the kabupaten level in Indonesia and some of the other published data were
of questionable reliability. Also, the enumeration survey results were, of necessity, a small sample of total lifetime migrant flows which have occurred over a long period of time, during which relative income levels and other socio-economic variables have experienced considerable variability, making the construction of an index based on available contemporary data extremely questionable. Finally, the sample nature of the enumeration data meant that only small absolute numbers of migrants were included from some of the less significant source kabupaten. As a result, it would be assumed that the available socio-economic indexes derived from aggregated data for a large areal unit apply to one or two individual migrants to Surabaya, individuals whose personal characteristics or environment in the place of origin may have no relation to the value of the areal index in question. For these reasons the construction of a multivariate model was abandoned.

As an alternative, use has been made of the simple gravity-regression model (Olsson, 1965: 25) applied by Riddell and Harvey (1972: 280-2) in Sierra Leone. This model adapted to lifetime migration to Surabaya may be stated as:

\[
\log\left(\frac{M_{iS}}{P_i}\right) = \log k - b \log (D_{is})
\]

where \(M_{iS}/P_i\) represents the per capita rate of lifetime migration from birth kabupaten/kotamadya 'i' to Surabaya; 'k' and 'b' are empirically derived constants; and \(D_{is}\) the physical distance between the 'ith' kabupaten/kotamadya and Surabaya. The model is based on simple regression analysis with \(\log M_{iS}/P_i\) the index of lifetime migration intensity to Surabaya as the dependent, and \(\log D_{is}\) as the sole independent variable. Distances via the shortest major road between Surabaya and kabupaten capitals or kotamadya were used within Java, Madura and Bali, since road ferry services link all three islands. Lacking details of the popular modes of transport used by migrants from other birthplaces, straight line distances to Surabaya from kabupaten capitals and kotamadya were used for Outer Island birthplaces. It should be emphasised, however, that a major problem in the application of a gravity model to migration in Indonesia is obtaining a measure of distance which is comparable for
both inter-island and intra-island moves (G.J. Hugo, pers. comm., 1979).

The simple gravity model hypothesises that intensity of migration from migrant birthplaces to Surabaya decreases with increased distance between Surabaya and birthplace; it makes no allowance for the relative position in the central place hierarchy of the birthplace, nor does it allow for asymmetric migration fields. An attempt was made to assess the effect of position in the central place hierarchy of migrant birthplace by plotting kotamadya and kabupaten birthplaces separately, since the kotamadya were urban in character. Although kabupaten birthplaces were essentially rural in character, each kabupaten included several urban centres. Except for the increased cost of moving a greater distance, there is no theoretical reason for the deterrent effect of distance on migration, unless we accept that distance acts as a surrogate for other factors, such as economic and social distance which may be expressed by differences in income, language or ethnic group, food preferences and social practices (Riddell and Harvey, 1972: 273; Hugo, 1975a: 224-5, 295-6).

Despite its faults, the gravity model has a number of advantages for the study of migration. First, unlike multivariate analyses the input data required by the model, that is, number of migrants standardised by population at risk and distance, are readily obtainable. Second, if residuals from the simple regression model are plotted, then the model highlights migrant source areas for which the distance explanation of migration rates is particularly inadequate. In this way the model is capable of suggesting other factors besides distance which influence the pattern of migration. Third, Hugo (1975a: 295-6) argues that distance is a useful surrogate for several other independent variables which affect migration rates. For example, he argues that the level of information about opportunities in potential destinations is higher at shorter distances, that there is less chance of intervening opportunities diverting potential migrants if source area and destination are close, and that the shorter the distance between village and city the easier it is for migrants to keep open their options in the village and at the same
time engage in circular migration (Hugo, 1975a: 295). The surrogate roles of distance are acknowledged, but in the absence of reliable indexes of other relevant variables, distance alone is the sole independent variable.

A scattergram of intensity of migration against distance from Surabaya for all kabupaten/kotamadya birthplaces of immigrants in Surabaya sampled in the 1974 enumeration survey is presented in Figure 3.1. Both variables were transformed to log values, and as other researchers have discovered (Olsson, 1965; Riddell and Harvey, 1972; Hugo, 1975a), a reasonably linear relationship results (Figure 3.1). The results of this simple gravity-regression model are presented in Table 3.2.

<table>
<thead>
<tr>
<th>Birthplace</th>
<th>N</th>
<th>Correlation coefficient (r)</th>
<th>r²</th>
<th>Regression coefficient (b)</th>
<th>Standard error of estimate (s)</th>
<th>Degrees of freedom (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All observations (Kabupaten + Kotamadya)</td>
<td>153</td>
<td>-.538****</td>
<td>.290</td>
<td>-.790****</td>
<td>.550</td>
<td>151</td>
</tr>
<tr>
<td>Kabupaten only</td>
<td>117</td>
<td>-.663****</td>
<td>.440</td>
<td>-.927****</td>
<td>.458</td>
<td>115</td>
</tr>
<tr>
<td>Kotamadya only</td>
<td>36</td>
<td>-.625****</td>
<td>.391</td>
<td>-.736****</td>
<td>.424</td>
<td>34</td>
</tr>
</tbody>
</table>

Note: Level of significance: **** p = <0.001
Source: Enumeration survey.

(1) The absolute values of both variables were plotted initially, but the results were not significant. The absolute values of per capita lifetime migration were then plotted against the log of distance from Surabaya, and an r of -0.549 (p <0.001) resulted, which explained 30 per cent of the variation in migration intensity. Examination of the distribution of residuals, however, revealed a systematic departure from a true linear relationship. Therefore both variables were transformed to log values.
Figure 3.1
Number of lifetime migrants in Surabaya standardised by population of birthplace kabupaten and kotamadya by distance from Surabaya

Notes: (i) Named and underlined kabupaten or kotamadya (e.g. Ambon) lie farther than ±2SyC from the relevant regression line
(ii) Named kabupaten or kotamadya (not underlined e.g. Sampang) lie between ±1.5SyC and ±2SyC from the relevant regression line

Source: Enumeration survey
The gravity model explained a significant proportion (29 per cent, $r^2$, Table 3.2) of the inter-kabupaten/kotamadya variation in rates of lifetime migration to Surabaya when kabupaten and kotamadya observations were pooled. Closer examination of the distributions suggested that the rates of migration by distance would be more accurately predicted if kabupaten and kotamadya observations were considered separately (Figure 3.1). Separate analysis of kabupaten and kotamadya birthplaces increased the proportion of variation in migration rates explained by the gravity model to 44 per cent and 39 per cent, respectively ($r^2$, Table 3.2). The regression coefficients ($b$), which Hugo (1975a: 190-1) has likened to distance-friction coefficients, are statistically significant for both kabupaten and kotamadya birthplaces (Table 3.2). If the coefficients of kabupaten and kotamadya birthplaces are compared statistically, however, the effect of distance in reducing rates of migration to Surabaya was significantly less for migrants born in kotamadya than for migrants born in kabupaten. (1)

That urban (kotamadya) born migrants moved greater distances to Surabaya than their rural (kabupaten) born counterparts was expected. Persons born in urban areas are usually more modern, less tied to traditional lands and obligations, possess more information about Surabaya, and have better access to transport to Surabaya than the more rural and more traditional kabupaten-born populations. Riddell and Harvey (1972: 280-2) found some evidence of a similar relationship in Sierra Leone, though the attraction of major employment opportunities in diamond mining and agriculture complicated their analysis. The transfer of government officials between Surabaya and other large towns, and the migration of SMA (senior high school) graduates seeking higher education contribute to the willingness of urban-born migrants to move longer distances than most of the rural-born.

(1) The regression coefficients ($b$) for kotamadya and kabupaten birthplaces were compared according to a $F$-test procedure outlined by Snedecor and Cochran (1972: 433-5). The test revealed that the null hypothesis could be rejected at the 0.001 level of significance.
Although there is a general inverse relationship between distance and the rate of migration from migrant birthplaces to Surabaya, there are a number of birthplaces where the rate of migration to Surabaya is exceptional (Figure 3.1). If the standardised residuals\(^{(1)}\) are examined for kabupaten and kotamadya birthplaces these exceptional areas are highlighted and additional explanatory variables apart from distance are suggested. Those birthplaces with the largest residuals are identified in Table 3.3.

Of the 36 kotamadya birthplaces with lifetime inmigrants in Surabaya, only two, Kotamadya Ambon and Kotamadya Pontianak have residuals in excess of \(+1.5 S_{\text{yc}}\) from the regression line. In the case of Ambon the regression equation has grossly underestimated the rate of lifetime migration to Surabaya, which on a per capita basis is comparable with that from Malang and Probolinggo. The reason for a rate of migration greatly in excess of that expected from a distant birthplace (1776km from Surabaya) is historical. In colonial times, the Dutch recruited large numbers of Ambonese into the armed forces of the NEI; Surabaya as headquarters of the colonial navy, housed large numbers of Ambonese. The colonial census of 1930 indicates that there were over 1,400 persons of Moluccan ethnicity in the municipality; most of these would have been Ambonese (NEI, 1934, III: 154), who at that time were the most numerous indigenous ethnic group in Surabaya after the Javanese and Madurese.

The one other birthplace whose rate of migration to Surabaya has been underestimated by over \(2.0 S_{\text{yc}}\) is the kabupaten of Sangihe Talaud in North Sulawesi (Table 3.3). In 1930, members of ethnic groups from North Sulawesi comprised the fourth most numerous indigenous ethnic group in Surabaya. Christians from this area of the Outer Islands were recruited by the colonial administration as administrators and civil servants.

Historical links, established between particular regions in colonial times, have continued to encourage migration through chain migration and family ties in recent times, quite apart from the fact that many persons born in Ambon and Sangihe Talaud who first migrated

\(^{(1)}\) All residuals were standardised by the standard error of estimate of Y in the relevant regression equation \((Y_{\text{cn}}-Y_{\text{n}})/S_{\text{yc}}\).
### TABLE 3.3 - Birthplace migration rates least adequately explained by the simple gravity-regression model

<table>
<thead>
<tr>
<th>Birthplace</th>
<th>Birthplaces with underestimated rates of migration</th>
<th>Birthplaces with overestimated rates of migration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((Y - \bar{Y})/S &lt; -2S ) (Y ) (c_n ) (n ) (Y ) (c_n ) (n ) (S ) (y_c ) (n ) (Y ) (c_n ) (n ) (S ) (y_c ) (n ) (Y ) (c_n ) (n ) (S ) (y_c ) (n )</td>
<td>((Y - \bar{Y})/S &gt; +1.5S ) (Y ) (c_n ) (n ) (S ) (y_c ) (n ) (Y ) (c_n ) (n ) (S ) (y_c ) (n ) (Y ) (c_n ) (n ) (S ) (y_c ) (n )</td>
</tr>
<tr>
<td>Kotamadya</td>
<td>Ambon</td>
<td>-</td>
</tr>
<tr>
<td>birthplaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kabupaten</td>
<td>Sangihe</td>
<td>Sampang</td>
</tr>
<tr>
<td>birthplaces</td>
<td>Talaud</td>
<td>Nganjuk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maluku Tengah</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ponorogo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kediri</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tulungagung</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Madiun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ende</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bima</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notation:**
- \( Y_n \) - observed migration rate for the \( n \)th birthplace.
- \( Y_{cn} \) - migration rate for the \( n \)th birthplace computed from the gravity-regression model.
- \( S_{yc} \) - standard error of estimate.

**Source:** Enumeration survey.
to Surabaya in colonial times are resident in the city today. Maluku Tengah is another kabupaten whose rate of migration is considerably above that estimated by the gravity-regression model (Table 3.3) and similar historical factors account for the underestimation of that migration flow. Historical ties established between particular regions in colonial times have played a significant role in determining the contemporary pattern of Surabaya's lifetime migration field.

Of the eight other kabupaten with outmigration rates which were underestimated by the simple gravity-regression model, six were within East Java (Table 3.3 and Figure 3.1) which suggests the model has consistently underestimated outmigration to Surabaya from kabupaten in East Java. Indeed, the fitting of a separate line of best fit might be justified for the kabupaten of East Java (Figure 3.1). Such a line would differ from the one already fitted in that it would have a higher intercept on the Y axis, but the coefficient of friction (b) would not be very different. The consistently higher rates of outmigration from kabupaten in East Java to Surabaya reflect Surabaya's position as the provincial capital and its unchallenged primacy within East Java.\(^1\) Ende kabupaten in the island of Flores and Bima kabupaten in Sumbawa are the other birthplaces where outmigration to Surabaya has been underestimated (Table 3.3). The absence of a medium-order local city (such as Ujung Pandang in Sulawesi and Banjarmasin in Kalimantan) which can provide educational or job opportunities in these islands, and thereby act as an alternative destination for outmigrants, may account for the underestimation of outmigration to Surabaya from these two kabupaten.

On the other hand, alternative destinations which can provide as many or more opportunities for a migrant than can Surabaya, is the reason for eight birthplaces to have had their rates of outmigration to Surabaya overestimated by the gravity-regression model (Table 3.3). For example, Kotamadya Pontianak and the kabupaten of Bogor

\(^1\) The size ratio between Surabaya and Malang, East Java's second city was 3.7:1 at the time of the 1971 census.
and Sukabumi are closer to Jakarta, Indonesia's primate city, than to Surabaya. Jakarta has been a more attractive alternative destination for outmigrants, and so the number of those who have come to Surabaya is less than distance alone would suggest. Similarly, Bandung has acted as an alternative destination for outmigrants from Sumedang kabupaten whereas those from Tegal may move to nearby Cirebon, and those from Grobogan and Demak kabupaten are 'next door' to the capital of Central Java, Semarang. The kabupaten of Boyolali is likewise located on the outskirts of Central Java's second city, Surakarta.

Although the overall pattern of Surabaya's lifetime migration field approximates the simple gravity-regression model of Olsson (1965: 25) and Riddell and Harvey (1972: 280-2), empirical testing of the model suggests the need for some modifications. First, the rate of outmigration from kotamadya or urban birthplaces to Surabaya decays at a significantly lower rate with increasing distance from Surabaya than does the rate of outmigration from rural kabupaten birthplaces. In other words, the distance-friction coefficients are greater for rural than for urban birthplaces, which suggests that urban-born migrant populations are more likely to move long distances than rural born migrant populations. Second, the simple gravity-regression model is unable to assimilate historical influences in describing migration rates. Birthplaces with long-established historical ties with Surabaya have consistently higher rates of outmigration to Surabaya than is predicted by the model. Third, the primacy of Surabaya within the province of East Java has meant that within that province the rates of outmigration per kabupaten or kotamadya are consistently above those predicted by the model, though distance-friction coefficients are similar. Fourth, the existence of nearby alternative destinations for migrants has frequently resulted in the overestimation of outmigration rates from kabupaten where such alternatives exist. Conversely, the absence of alternative destinations appears to have resulted in a greater rate of migration to Surabaya than predicted from some of the smaller islands of eastern Indonesia.
3.2.1.3 The Spatial Pattern of Migrant Birthplaces Within Java and Madura.

The spatial pattern of per capita rates of lifetime migration to Surabaya by kabupaten or kotamadya birthplace is presented in Figure 3.2 for the islands of Java and Madura. The pattern suggests that proximity to Surabaya has depressed the intensity of permanent migration from immediately adjacent areas, with the exception of the two closest kabupaten in Madura. The adjacent kabupaten of Surabaya and Sidoarjo do not have the highest rates of outmigration to Surabaya; and the nearest kotamadya of Mojokerto and Pasuruan have lower rates of outmigration to Surabaya than do more distant kotamadya. The explanation appears to be that nearby kotamadya (Mojokerto, Pasuruan and perhaps Malang, and the kabupaten of Surabaya and Sidoarjo) are within daily commuting range of the provincial capital, and so the needs which may motivate permanent migration to the city can be fulfilled by daily or weekly commuting. The 'migration shadow' of Surabaya extends further in the case of kotamadya than kabupaten birthplaces which reflects the elongation of Surabaya's commuting hinterland along the major transport routes toward Mojokerto to the southwest, Malang to the south and Pasuruan to the southeast. A trip from any of these three centres in the early hours of a weekday morning, when mini-bus, truck and rail services are crammed with commuters, impresses the observer with the magnitude of daily commuting, a practice which has increased in recent years with better rail, bus and mini-bus (colt or oplet) services from each centre. Hugo (1978: 99-107) remarked on the significance of commuting around Bandung and Jakarta, and observed a similar pattern of substitution of commuting or weekly circular migration for permanent migration in kabupaten near these two cities (1978: 78).

Another characteristic of the spatial pattern of migration intensity is that many kotamadya which are considerable road or rail distances from Surabaya, such as Madiun and Blitar (170km), Jogjakarta (349km) and Surakarta (285km), have rates of lifetime migration to Surabaya well above that of surrounding kabupaten (Figure 3.2). This is in accord with the general finding throughout Indonesia, that the
Figure 3.2

Intensity of lifetime migration to Surabaya from birthplace kabupaten and kotamadya in Java and Madura

Source: Enumeration survey
'friction effect' of distance on mobility is significantly less for kotamadya-born migrants than for kabupaten-born migrants (Figure 3.1).

If Madura is excluded for the moment, the end result of both factors - the 'shadow effect' of Surabaya's commuting zone and the longer distance mobility of kotamadya-born migrants - is to produce two 'hollow crater' type gradients of migration intensity with increased distance from Surabaya. The peak of intensity of outmigration ('the rim' of this crater-type gradient centred on Surabaya) is located 170km by road from Surabaya for kotamadya birthplaces (Madiun and Blitar kotamadya) whereas the peak for kabupaten birthplaces is located in the kabupaten of Nganjuk and Jombang 123 and 81 kilometres respectively, from Surabaya.

In addition to highlighting the relationship between migration intensity and distance, the areal pattern of migrant birthplaces emphasises that (apart from the kabupaten of Bangkalan and Sampang in Madura) birthplaces with high rates of outmigration to Surabaya are located to the south, southwest, and west of the city (Figure 3.2). Birthplaces with the highest rates of outmigration are located southwest of Surabaya, a reflection of the concentration of major road and rail links with Central Java and West Java in that area. These birthplaces are aligned along the valley of the Brantas River and its major tributary which supports the highest densities of rural population in East Java. For over two centuries this abundantly watered valley, its soils enriched by volcanic ejecta, has experienced waves of settlement from the more densely settled heartland of central Java. Jay (1963: 39) notes in his history of the Pare area, a small kecamatan near Kediri in the Brantas Valley, that the district was an important area of settlement 'at least as early as the Mojopahit period'. During the wars between east Java and Mataram in the 17th and 18th centuries the region was depopulated, but in the early 19th century settlers again arrived in increasing numbers from central Java, driven first by a dislike of the Dutch, then virtually supreme in central Java, and subsequently by the 'population explosion' which began building up there by the middle of the 19th century. The earliest settlement is claimed by a village close
to the town of Morokerto,\(^1\) whose founders came as refugees from the Java war of 1825-30 (Jay, 1963: 40).

The kabupaten southwest of Surabaya are very densely settled because of the agricultural productivity of the Brantas Valley and because of the accessibility of the area to Central and West Java. As landlessness has become more common in rural Java (Palmer, 1977: 210-12) and as opportunities for productive employment in agriculture have decreased (White, 1976: 277; Palmer, 1977: 225-6; Collier, 1978: 43-5), however more of the inhabitants of the area have taken advantage of their position astride the major routeways to Surabaya, and have decided to seek a better life in the city.

The spread of settlement from the heartland to the west had not fully settled the six kabupaten in the relatively remote area east of Malang and Pasuruan (Figure 3.2) by the time the Dutch arrived, and the six kabupaten remained sparsely inhabited until they were developed for plantation crops in the last half-century of Dutch rule. Today, these six kabupaten, in what was referred to as the 'East Hook' of Java, have relatively low population densities and, in comparison with central Java and the Brantas Valley, a plentiful supply of land. Communications with Surabaya are not as well developed in the 'East Hook' as in the Brantas Valley, with the exception of the north coast cities of Pasuruan and Probolinggo; combined with the relatively abundant land resources of the area this appears to explain the low rates of migration to Surabaya (Figure 3.2).

The two kabupaten of Bangkalan and Sampang in the western half of the island of Madura have the highest rates of outmigration to Surabaya of all non-kotamadya birthplaces. The reasons for such a high rate of population outflow from these two nearest kabupaten, and the reasons for a very dramatic fall-off from the other kabupaten on Madura (Figure 3.2), are not clear from aggregate data. Poor communications between Madura and Surabaya outside those areas in close proximity to the ferry terminus at Kamal and the main road from

\(^1\) A pseudonymous name given to the town of Pare by the MIT Centre for International Studies research team of which Jay was a member.
Karaal to Bangkalan, exclude most of Madura from Surabaya's commuter hinterland, and permanent or seasonal migration must be undertaken by most Madurese employed in Surabaya. In addition, the Madurese have been traditionally considered the most economically deprived ethnic group in East Java, and though general man-land ratios do not support this contention, the low fertility of the island's limestone derived soils and an inadequate supply of irrigation water have combined to make the island a major food deficit area, which has encouraged outmigration.

Emigration from Madura is a long-established phenomenon. In 1930 over 250,000 Madura-born emigrants were resident on mainland East Java (NEI, 1934, III: 31), a number equivalent to 13 per cent of Madura's total resident population (NEI, 1934, III: 31; 123). Many of these emigrants migrated to the relatively empty kabupaten of Banyuwangi, Jember, Lumajang, and Malang, where they were employed on plantations developed by the Dutch (NEI, 1934, III: 31; 38; 101). Some 30,000 Madurese had also migrated to Surabaya in 1930, where they accounted for 11.3 per cent of the city's total population of indigenes (NEI, 1934, III: 31; 124). This long history of emigration suggests that economic ties and chain migration have played major roles in maintaining Madura's high rate of emigration.

If rates of migration to Surabaya are examined for individual kabupaten in Madura, we find that in colonial times the per capita rate of lifetime outmigration from Bangkalan to Surabaya exceeded that of Sampang kabupaten by about four to one, whereas Sampang's rate exceeded that of Pamekasan and Sumenep by seven to one and thirteen to one, respectively. The comparative(1) rates between the kabupaten in 1974 suggest that Bangkalan has maintained the highest rate of emigration to Surabaya. However, by 1974 Sampang kabupaten had increased its flow of emigrants to Surabaya until, on a per capita basis, it was almost as important a source of migrants as Bangkalan.

(1) The actual per capita rates are not directly comparable over this time period because the 1930 rates were based on a complete census tally whereas the 1974 rates shown in Figure 3.2 are based on the 1974 sample enumeration survey.
Over the same period Pamekasan and Sumenep have also marginally increased their rates of per capita emigration to Surabaya. Established historical ties, then, have acted to reinforce migration flows. The more eastern kabupaten also have increased their relative rates of emigration to Surabaya; in this instance a result of improved transport links, and the increased attractions of a city which has grown faster than all other urban centres in East Java since independence. In addition, the years since independence have witnessed a decline in the plantations of the East Hook which has caused a contraction in the demand for labour in that area and, thereby, heightened the relative attractiveness of Surabaya as an alternative destination for intending migrants from eastern Madura.

Despite the increase in the per capita rate of emigration to Surabaya from eastern Madura since colonial times, there was still a marked fall-off in lifetime migration to Surabaya from the two easternmost kabupaten of Madura (Figure 3.2). Increased distance from the capital of East Java explains some of the fall-off, but the proximity of the alternative destinations of Probolinggo, Banyuwangi, Lumajang and Jember to these two kabupaten appears a more significant factor, and one which helps to explain the contrast between rates of outmigration from Sampang and Pamekasan to Surabaya (Figure 3.2). There are no current data available which prove that these more eastern destinations have been preferred to Surabaya by intending outmigrants from Pamekasan and Sumenep kabupaten. In 1930, however, the major destinations of outmigrants from these two kabupaten were the kabupaten of Banyuwangi, Jember, Bondowoso, Lumajang, and Panarukan (NEI, 1934, III: 38); ties established in these earlier years may have continued to reinforce the importance of these destinations in the East Hook.

The provincial boundary between East Java and Central Java appears to act as an approximate outer boundary to Surabaya's

---

(1) The 1930 census is the only source available which provides details on the numbers of Madurese in the various kabupaten of East Java. The 1961 and 1971 censuses did not collect any information about the Madurese as a distinct ethnic group.
migration field (Figure 3.2). At least for kabupaten birthplaces, the rates of emigration to Surabaya appear to increase significantly on crossing the provincial border, a conclusion which is in agreement with the earlier comment that the simple gravity-regression model appears to have consistently underestimated lifetime migration rates from kabupaten and kotamadya birthplaces within East Java (Figure 3.1). There is a fall-off in emigration rates also from kotamadya birthplaces on crossing the provincial border, but this is not nearly as marked as for kabupaten, illustrative of the greater mobility space of urban based as opposed to rural based populations (Figure 3.2).

The immigrant birthplace data so far presented have been at the kabupaten or kotamadya level. This is a gross level of analysis since the average population of this level of administrative unit within East Java approximated 689,000 persons in 1971. However, the questionnaire survey collected birthplace information at the kecamatan level. The mean population of kecamatan in East Java was 46,924 persons in 1971. The survey comprised a 25 per cent sample of all lifetime immigrants included in the enumeration survey who were aged 15 years or more at time of first entry to Surabaya. The geographic pattern of kecamatan birthplaces within the major migration field of East Java is shown on Figure 3.3, which included birthplace data from 396 respondents. Since the small number of migrants from each kecamatan precluded standardisation, the relative proportions of the total immigrant flow from East Java which originated from each kecamatan have been shown (Figure 3.3).

As was evident at the kabupaten and kotamadya level (Figure 3.2), the pattern of immigrant birthplaces reflects the effect of the migration shadow of Surabaya in reducing short-term or permanent migration from areas within its commuting hinterland: only one

(1) Except for kecamatan birthplaces within kotamadya, where respondents failed to provide accurate kecamatan data and so the kotamadya totals have been retained in Figure 3.3

(2) Of the 598 respondents sampled in the questionnaire survey, 75 per cent were born in Surabaya's home province of East Java.
Figure 3.3
Birthplace by kecamatan and kotamadya of East Java born lifetime in-migrants

Source: Enumeration survey
kecamatan adjacent to the city was among those cited by immigrants interviewed in Surabaya (Figure 3.3). A finding not evident at the kabupaten level, is the influence which accessibility to a major road or railway line has had on determining whether particular kecamatan are significant source areas of migrants. Indeed, accessibility to major roads or rail links to Surabaya was a critical factor influencing the location of migrant source areas. For example, nearly all of the birthplace kecamatan located southwest of Surabaya toward Jombang, Kediri and Madiun, which have been the birthplace of immigrants sampled in the questionnaire survey, are intersected by or adjacent to major road or railway routes. Approximately half of the 165 separate kecamatan birthplaces shown (Figure 3.3 - excluding the seven kotamadya birthplaces), were intersected by major railway lines, four-fifths had some of their territory located on a national or provincial road and 48 per cent were serviced by both rail and road. Only 16 per cent of kecamatan birthplaces were not serviced by either a major road or rail route. Although the kecamatan level of analysis is the best available, accessibility may play a critical role at a more micro level. For example, the intending outmigrant may have far more difficulty reaching the local kecamatan capital from his desa of birth, than in reaching Surabaya from the kecamatan capital. The initial journey may have to be on foot across local physical barriers such as hilly or swampy terrain, but on arrival in the kecamatan capital, either a mini-bus, taxi-car (oplet), or inter-town bus or rail service is available to provide transport to the kabupaten capital and on to Surabaya.

Another finding from the analysis of kecamatan birthplace data is the frequent clustering of the more important source kecamatan around kabupaten capitals. For example, the two kecamatan which include the kabupaten capitals of Jombang and Tulungagung have been relatively important birthplaces of migrants to Surabaya; the kecamatan which include the kabupaten capitals of Bondowoso, Jember, Banyuwangi and Pacitan, though themselves relatively minor source areas, are of greater importance than other kecamatan in their kabupaten (Figure 3.3). An obvious reason for such clustering is the accessibility to transport services of these locations. This finding
supports the conclusion that urban populations have a great propensity to migrate, though the vast majority of migrant birthplaces are rural in character. Table 3.4 gives the percentage of migrant birthplaces with specific numbers of urban features; those with seven or more urban features were defined as urban in order to conform with the definition used by LEKNAS in 1973. According to these data, which were obtained from 583 individual migrants, 64 per cent of migrant birthplaces were rural in character and only 36 per cent urban. Moreover, almost four out of every ten migrant birthplaces could be classed as 'basic rural' since these birthplaces possessed less than two of the urban features used to define urban settlements (Table 3.4).

<table>
<thead>
<tr>
<th>Position in settlement hierarchy</th>
<th>Number of urban features*</th>
<th>Percentage of total migrant birthplaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic rural</td>
<td>2</td>
<td>38.8</td>
</tr>
<tr>
<td>Other rural</td>
<td>2-6</td>
<td>25.5</td>
</tr>
<tr>
<td>Lower order urban</td>
<td>7-8</td>
<td>13.2</td>
</tr>
<tr>
<td>Higher order urban</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Notes: * The urban features referred to are: (i) residential electric lighting; (ii) hospital or clinic; (iii) government school of at least lower secondary level (SMP); (iv) general bank; (v) cinema; (vi) general store; (vii) post, telegraph and telephone office; (viii) beggars; (ix) government office of at least kabupaten status.

Source: Questionnaire survey.

Other features, such as the absence of kecamatan birthplaces in the more eastern areas of East Java, are consistent with findings.

(1) The features, chosen to identify an urban settlement correspond to those used in a national survey of migration by LEKNAS in 1973.
Figure 3.4
Cumulative per cent of rural and urban born in-migrants who arrived in Surabaya during selected periods by distance of birthplace

Source: Enumeration survey
from the map of kabupaten birthplaces. However, one major feature of the birthplace characteristics of Surabaya's inmigrant population highlighted by the kecamatan distribution (Figure 3.3), is the very large number of different kecamatan or kotamadya birthplaces (N=172) quoted by 396 East Java-born respondents. For example, the kecamatan of Omben in Madura, the most frequently cited birthplace, contributed only 3.5 per cent of the flow of lifetime immigrants from East Java. This observation implies that most migrants to Surabaya may not have moved in well defined migration streams.

3.2.2 Changes in the location of migrant birthplaces since colonial times.

The enumeration survey gathered birthplace data at the kabupaten and kotamadya level and year of first entry to Surabaya from some 3,500 lifetime inmigrants. These data provide an opportunity to examine changes in the location of migrant birthplaces. However, the data are a sample of the surviving immigrant population; the deceased and those who have departed from Surabaya are excluded.

Table 3.5 provides a breakdown of the proportion of surviving inmigrants from major birthplace regions by period of migration. There is a consistent decline in the proportion of migrants born in Madura since independence. This decline is noticeable also from a comparison with the 1930 census results, though the 19 per cent of immigrants born in Madura quoted in that census (refer Table 3.1) is significantly less than the 29.8 per cent found among the pre-1950 arrivals in the enumeration survey (Table 3.5). A possible explanation for the decline in the proportion of Madurese is the large influx of Madurese who came to work in the dockyards during the Japanese occupation of 1942-45. As a result the pre-1950 figures show a higher proportion of Madurese than those of 1930 and post-1950. A relative increase in the number of inmigrants from other areas of East Java appears to have made up for the relative decline in the number of Madurese since independence, since the proportion of inmigrants from all East Java has remained fairly constant at 74 to 78 per cent (Table 3.5).
The relative contribution of inmigrants born in other provinces of Java and the Outer Islands has risen consistently since before independence (Table 3.5), and since the census of 1930 (Table 3.1). Hugo (1975a: 261), noted that inmigrants from Outer Islands have become more numerous in Bandung since independence. The ability of potential migrants to move relatively long distances between their place of birth and ultimate destination appears to have increased since independence.

TABLE 3.5 - Surviving inmigrants by birthplace and period of migration

<table>
<thead>
<tr>
<th>Birthplace</th>
<th>Period of first entry to Surabaya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madura</td>
<td>30%</td>
</tr>
<tr>
<td>Mainland East Java</td>
<td>48%</td>
</tr>
<tr>
<td>Other Provinces in Java</td>
<td>10%</td>
</tr>
<tr>
<td>Outer Islands</td>
<td>5%</td>
</tr>
<tr>
<td>Overseas</td>
<td>7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Enumeration survey.

Two factors which may have assisted greater mobility are the improvement of communications since 1949, and the removal of restrictions on population mobility imposed by the colonial regime prior to independence. Although the post-independence period has been one of increased ease of movement for the Indonesian-born population, intending foreign immigrants have been severely restricted. Since 1949, immigration (particularly from China) has been prohibited, and in 1959-60 many Chinese were repatriated. The results of these policies are obvious in Surabaya, where the proportion of China-born inmigrants decreased substantially, from 7 per cent of the pre-1950 arrivals to 1 per cent of recent arrivals (Table 3.5).
Analysis of the cumulative percentage of immigrants from rural and urban birthplaces within specified distances of Surabaya by period of migration summarises contrasts between rural and urban-born migrants, and changes in the migration field of Surabaya over time (Figure 3.4). In each period of migration the vast majority of immigrants, urban and rural-born, have come from birthplaces less than 400km from Surabaya. In each period of migration a higher proportion of urban-born migrants has moved greater distances than rural born arrivals (Figure 3.4).

Of particular interest, however, is that migrants arriving in more recent times have come from more distant birthplaces than their predecessors. Of the surviving pre-1950 arrivals, 95 and 64 per cent of those from rural and urban birthplaces, respectively, came from birthplaces less than 200km from Surabaya; among 1950-59 arrivals the comparable proportions were 90 and 61 per cent; among 1960-69 arrivals the proportions dropped to 84 and 55 per cent, and among the most recent (1970-74) arrivals, 79 per cent and 50 per cent of the rural and urban-born migrants, respectively, were from birthplaces less than 200km from Surabaya (Figure 3.4). There has been a significant geographic extension of Surabaya's migration field since independence. Developments which have played a role in this extension are post-independence improvements in transportation, the removal of colonial restrictions on the mobility of Indonesians, the greater mobility of a rapidly expanding civil service and defence force, plus information in the Outer Islands and in the desa about modern city life, through films and, more recently, colour television. Hugo (1975a: 247-8) found evidence of the geographic extension of Jakarta's migration field within West Java and throughout Indonesia from 1930 to 1972, illustrating that the mobility space of lifetime immigrants to major cities in Indonesia has increased over the past 40 to 45 years.

(1) Within Java and Bali the actual road distance between Surabaya and the kotamadya or kabupaten capital of the kabupaten which contained the migrant's birthplace was the distance plotted in Figure 3.4. Outside Java and Bali the straight-line distance between the kabupaten capital of the migrant's birthplace kabupaten and Surabaya was utilised, since the route and mode of transport to Surabaya were unknown.
Because of the extension of its migration field over time, Surabaya is becoming a potential destination for an ever-increasing number of relatively distant residents, particularly within eastern Indonesia, where the greater distance of Jakarta relegates Surabaya to the position of regional primate city. Indeed, recent work has indicated that by 1971 Surabaya was so attractive as an alternative destination that persons resident in provinces within its migration field such as East Java, Bali, West Nusatenggara, South Sulawesi, South Kalimantan and Central Kalimantan were less likely to migrate to Jakarta than persons resident in provinces more distant from Jakarta, such as North Sumatra (Pryor, 1979: 316, 320). Given government encouragement, Surabaya has the potential to rival Jakarta as a major destination of metropolitan inmigrants. As the migration field of Surabaya is extended, so are the effects of migration transferred back to an ever-increasing hinterland of sending areas and sending families through information feed-back, cash transfers and return migration. Viewed in this light, research is required into the effects of migration on individual inmigrants.

3.3 MIGRATION HISTORY

Ravenstein (1885) was the first to note that migration to the city tended to proceed by stages:

It often happens that a migrant in search of work wanders from parish to parish, settling down at each place for a time, until on the day when the census is taken he finds himself far away from the place from which he originally started. There can be no doubt, for instance, that many if not most of the natives of Ireland to be found in London did not travel from their homes in Ireland direct to their present place of residence, but reached it by stages. (1885: 183).

This original concept made no assumptions or predictions about the position in the settlement hierarchy of each 'stage': it did not distinguish between stages and it did not predict a sequence of movement between stages. Pryor (1969: 69) has termed this process 'simple step migration', but I think the simple term stage migration more appropriate.
Since Ravenstein, the concept of stage migration has been refined to include both hierarchical and sequential assumptions about migration (Hagerstrand, 1957; Olsson, 1965; Sternstein, 1975; Riddell and Harvey, 1972; Harvey and Riddell, 1975). The refined concept 'implies a migration by stages or steps from a rural environment via lower-order centres to higher-order places' (Riddell and Harvey, 1975: 53). Although a consensus has not been reached on terminology, I will refer to this process as stepwise migration (Harvey and Riddell, 1975: 53). Care should be taken to distinguish stepwise migration from chain migration, a term which has been used in at least two senses in the literature. Chain migration has been used to describe the process whereby higher order centres draw their population from intermediate centres while these places receive, in turn, migrants from lower order centres (Hagerstrand, 1957; Riddell and Harvey, 1972; Harvey and Riddell, 1975); chain migration has also been used in a sociological sense to describe pioneer migrants' encouragement of family and friends to join them (Caldwell, 1969; Harvey and Riddell, 1975; Hugo, pers. comm., 1979).

In this section I will assess the incidence of stage and stepwise migration among lifetime inmigrants to Surabaya. Although the extent of stage migration may be readily assessed from the number of moves before migration to the present place of residence, an assessment of stepwise migration requires detailed migration histories which include data about the sequence of moves and the position in the settlement hierarchy of each place of residence. Except for studies in Sierra Leone (Riddell and Harvey, 1972; Harvey and Riddell, 1975) and Bangkok (Sternstein, 1975) there has been little empirical evaluation of the concept of stepwise migration. Both concepts are important for this study of the origins and occupational mobility of inmigrants to Surabaya, since research in Mexico City (Galindo and Goldberg, 1973), Santiago (Raczynski, 1972), Lima (Weller, 1974) and Ankara (Galindo and Goldberg, 1973) implies that the character of migrant source areas and the amount of urban experience gained by migrants prior to migration to the city are important influences on acculturation and occupational mobility in the new urban environment.
3.3.1 Direct Migration or Migration by Stages?

The number of migrations involving residence in one place for six months or more made by Indonesian-born respondents before their migration to Surabaya is shown in Table 3.6. Over three-quarters of the Indonesian-born migrants in Surabaya moved directly from their birthplace without residing in another place. Stage migration was uncommon among immigrants to Surabaya. Such a finding is usual in Southeast Asia. A 1954 survey (Heeren, 1955: 704) in Jakarta showed that 80 per cent of the inmigrants moved directly to the city, and a more recent study in the same city in 1972 (Temple, 1975: 78) indicated that 83 per cent had never changed their place of residence prior to migrating to Jakarta. Sternstein (1975: 72), in a survey of working inmigrants to Bangkok in 1970, found an even higher proportion (86 per cent) had moved direct to Bangkok from their birthplace, perhaps reflecting the greater primacy of Bangkok compared with Jakarta or Surabaya. (1)

Among the 22 per cent of migrants who did move to Surabaya in stages, by far the largest proportion made only one intermediate move, and diminished proportions of migrants made two, three, four or more moves (Table 3.6). The rapid decrease in the proportion of migrants making more than one move prior to migration (multiple movers) was observed in Jakarta in the 1954 survey, when the proportions making one, two, three and over three moves prior to migration were 8.1, 4.9, 1.2 and 5.4 per cent, respectively (Heeren, 1955: 704).

Geographic analysis of birthplaces which were the source area of 'stage migrants' or multiple movers was handicapped by the small number of multiple movers per kecamatan. For example, only two birthplace kecamatan in all of Madura - those far from Surabaya - were the birthplace of multiple movers. On mainland East Java there was a

(1) In 1970 Bangkok had a population 33 times as large as the next largest centre in Thailand. In comparison, the population of Jakarta exceeded the population of Surabaya by a ratio of 2.9:1 in 1971, whereas Surabaya's population exceeded the population of Malang, the next largest city within East Java, by a ratio of 3.7:1.
tendency for birthplace kecamatan far from Surabaya to act as source areas for 'stage migrants', with the converse applying near Surabaya, especially in the Brantas Valley where multiple movers were under-represented. These observations are consistent with the tentative conclusions of Riddell and Harvey (1972: 282-3) in Sierra Leone, though the few multiple movers from each birthplace prevents further analysis.

A different picture emerges if the proportion of migrants making one move or more prior to migration to Surabaya is examined by last place of residence before Surabaya: higher order urban centres, led by the municipalities (kotamadya) and followed by the regency (kabupaten) capitals and other towns, were the destinations for many more stage migrants or multiple movers than were the villages (Table 3.6). The proportion of multiple movers in the municipalities (kotamadya) was approximately 48 per cent, whereas in the regency (kabupaten) capitals and other towns the proportion fell to approximately 35 per cent. In the village source areas multiple movers accounted for only 6 per cent of the total number who migrated to Surabaya. A greater concentration of multiple movers in high-order urban centres would be expected if upward stepwise migration was frequent among multiple movers to Surabaya. The observation does not prove the existence of upward stepwise migration, however, since the multiple movers may have originated from other high-order urban centres, a likely possibility given the greater distances covered by urban-born inmigrants to Surabaya.

In summary, direct migration was of greater importance than migration by stages. More than three-quarters of all the migrants to Surabaya moved direct from their birthplace to the city. The few multiple movers or stage migrants were concentrated in the high-order urban centres just prior to their move to Surabaya, but even in these centres, the majority of migrants who eventually moved to Surabaya were born locally.
### TABLE 3.6 - Number of moves made prior to migration to Surabaya as a percentage of all moves, by last place of residence before Surabaya

<table>
<thead>
<tr>
<th>Number of moves prior to migrating to Surabaya</th>
<th>All sources</th>
<th>Municipalities (kotamadya)</th>
<th>Regency (kabupaten) capitals and all other towns*</th>
<th>Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>78.1</td>
<td>52.1</td>
<td>65.5</td>
<td>93.7</td>
</tr>
<tr>
<td>1</td>
<td>13.0</td>
<td>30.5</td>
<td>20.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>4.8</td>
<td>9.0</td>
<td>5.5</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>2.2</td>
<td>4.2</td>
<td>4.5</td>
<td>0.6</td>
</tr>
<tr>
<td>4+</td>
<td>1.9</td>
<td>4.2</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Notes:** * Defined as an administrative area with seven or more of the following:

(i) residential electric lighting;
(ii) hospital or clinic;
(iii) government school of at least lower secondary level (SMP);
(iv) general bank;
(v) cinema;
(vi) general store;
(vii) post, telegraph and telephone office;
(viii) beggars;
(ix) government office of at least kabupaten status.

**Source:** Questionnaire survey.
3.3.2 Stepwise Migration and the Migration Histories of Surabaya Inmigrants

The traditional view of the process of stepwise migration is that 'in which an individual or group of individuals migrate into higher order nodes from rural areas moving by way of intermediate centres' (Riddell and Harvey, 1972: 272). The concentration of multiple movers in high-order urban centres just prior to their move to Surabaya accords with the process of upward stepwise migration, but as noted above, it does not provide conclusive evidence since it ignores earlier places of residence and the sequence of earlier moves. Data presented in Table 3.7 overcome these problems.

The most significant result is that the percentage of multiple movers who moved to urban centres classed as higher order urban, increased with each move (Table 3.7). For example, of the multiple movers who made only one move prior to migrating to Surabaya, 28 per cent were born in centres classed as higher order urban, and yet after one move, the proportion residing in higher order urban centres increased to 65 per cent. Similar increases in the proportion residing in centres classed as higher order urban occurred with each move for all multiple movers, whether they made one, two, three, or four or more moves prior to entering Surabaya. The consistency of this trend shows that in aggregate terms, there has been a move upwards toward higher order urban settlements with each succeeding destination.

Although there is this consistent trend of upward stepwise migration toward the higher order urban centres with succeeding moves, the process at the lower end of the central place hierarchy is not so consistent. For example, if the multiple movers who made two or more moves prior to entering Surabaya are considered and their second move is examined (first destination compared with second destination), then upward stepwise migration from 'rural' to 'lower urban' centres did not occur (Table 3.7). Indeed, there were more migrants residing in rural villages after the second move than before it (Table 3.7). In aggregate terms, then, a majority of migrants took one step down the urban hierarchy when making their second move, but the fact that the
<table>
<thead>
<tr>
<th>Number of moves prior to migrating to Surabaya (N)</th>
<th>Birthplace</th>
<th>First destination</th>
<th>Second destination</th>
<th>Third destination</th>
<th>Fourth destination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Lower urban</td>
<td>Higher urban</td>
<td>Rural</td>
<td>Lower urban</td>
</tr>
<tr>
<td>none (458)</td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1 (76)</td>
<td>51.3</td>
<td>20.3</td>
<td>28.4</td>
<td>14.7</td>
<td>20.0</td>
</tr>
<tr>
<td>2 (28)</td>
<td>48.2</td>
<td>22.2</td>
<td>29.6</td>
<td>14.3</td>
<td>39.3</td>
</tr>
<tr>
<td>3 (13)</td>
<td>53.8</td>
<td>23.1</td>
<td>23.1</td>
<td>23.1</td>
<td>30.8</td>
</tr>
<tr>
<td>4+ (11)</td>
<td>54.5</td>
<td>9.1</td>
<td>36.4</td>
<td>10.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Notes: * Rural, lower order urban, and higher order urban origins and destinations were defined as those which contained <7, 7 or 8, and all 9 of the following urban features, respectively: (i) residential electric lighting; (ii) hospital or clinic; (iii) government school of at least lower secondary level (SMP); (iv) general bank; (v) cinema; (vi) general store; (vii) post, telephone and telegraph office; (viii) beggars; (ix) government office of at least kabupaten status.

Source: Questionnaire survey.
same downward step was taken by those who then went on to make two, three, four or more moves prior to migrating to Surabaya, casts doubt on the general application of the theory of upward stepwise migration, particularly in the case of the second move among migrants who made two or more moves prior to entering a major city.

The fact that this step down the central place hierarchy appears to universally occur during the multiple mover's second move prior to migrating to Surabaya (Table 3.7) is of particular interest, and suggests that unique factors may apply during the migrant's second move to cause this rather deviant downward step. An additional observation tending to support the unique nature of the second move, is that those migrants who then went on to make more moves prior to entering Surabaya, resumed their upward stepwise migrations after this second move. For example, the proportion choosing lower and higher order urban centres for their third destination increased, whilst the proportion choosing village destinations declined (Table 3.7).

With the exception of migrants who moved to lower order centres because of random factors, the major reason for the prevalence of 'downward steps' was that some migrants took the opportunity to return to their village of birth after a period of residence in a larger centre. The major reason for their return was the presence of parents or family in their home village who could provide emotional and economic security at a time of uncertainty, such as after the completion, or partial completion of schooling, or after failure in job-seeking ventures in outside urban centres. When problems arose, be they economic, emotional or even security disturbances, the home village and family was a refuge, a refuge which had particular significance after a migrant's first foray into a new and unfamiliar environment.

In almost all cases the role of the village as a refuge was temporary; after several years most returnees again moved off to urban centres. (1) As the migrants aged and became more committed to

---

(1) These comments refer only to inmigrants who were resident in Surabaya in 1974. Migrants who returned to the refuge of the village permanently and did not move to Surabaya have been excluded from this study.
other destinations where they may have owned a house and had children at school, and as expectations increased with the experience gained from a number of moves, the importance of the home village as a potential destination declined (Table 3.7).

The general question of stepwise migration by individuals who made at least one move prior to migration to Surabaya will now be considered with reference to the origin and destination of each move made by lifetime immigrants interviewed in Surabaya (Table 3.8). Movement between higher order urban centres accounted for approximately four out of every ten moves made by migrants prior to entering Surabaya. The second most common flow was a stepwise movement from rural settlements to higher order urban centres (15 per cent). Other significant flows occurred from lower order urban centres to higher order centres, from rural settlements to lower order urban centres, between rural settlements, and between lower order urban centres. On the other hand, downward stepwise moves were insignificant as a proportion of total moves, except perhaps in the case of the exceptional second move, which has been examined.

Overall, most moves made by migrants prior to their migration to Surabaya were between settlements of equal status in the settlement hierarchy ('lateral moves', Table 3.8). Approximately one-third of the moves were to higher order centres in the settlement hierarchy, and about one in ten of the moves involved a step down the hierarchy. The data suggest that stepwise migration should not be seen as a one-way upward movement through the central place hierarchy, though the evidence came from a limited area within one LDC, and despite the fact that the division of the settlement hierarchy within Surabaya's migration field into three categories may be simplistic. Stepwise migration should be viewed as a multi-directional process involving steps up the hierarchy to higher ranked centres, down the hierarchy to lower ranked centres, and laterally to similarly ranked central places. The traditional view of stepwise migration as a consistent upward movement through the settlement hierarchy needs qualification. Upward moves by migrants are often followed by downward moves or return migrations, especially after the first move from a migrant's village, when the migrant may have been less successful in his new
TABLE 3.8 - Proportional distribution of moves prior to migration to Surabaya by direction of move within settlement hierarchy

<table>
<thead>
<tr>
<th>Source - destination*</th>
<th>Movement within settlement hierarchy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upward</td>
</tr>
<tr>
<td>From rural settlement to:</td>
<td></td>
</tr>
<tr>
<td>Rural settlement</td>
<td>9.7</td>
</tr>
<tr>
<td>Lower order urban</td>
<td></td>
</tr>
<tr>
<td>Higher order urban</td>
<td></td>
</tr>
<tr>
<td>From lower order urban to:</td>
<td></td>
</tr>
<tr>
<td>Rural settlement</td>
<td>8.0</td>
</tr>
<tr>
<td>Lower order urban</td>
<td></td>
</tr>
<tr>
<td>Higher order urban</td>
<td></td>
</tr>
<tr>
<td>From higher order urban to:</td>
<td></td>
</tr>
<tr>
<td>Rural settlement</td>
<td>2.7</td>
</tr>
<tr>
<td>Lower order urban</td>
<td></td>
</tr>
<tr>
<td>Higher order urban</td>
<td></td>
</tr>
<tr>
<td>T O T A L</td>
<td>35.3</td>
</tr>
</tbody>
</table>

Notes: * Rural, lower order urban, and higher order urban origins and destinations were defined as those which contained 7, 7 or 8, and all 9 of the following urban features, respectively: (i) residential electric; (ii) government school of at least lower secondary level (SMR); (iv) general bank; (v) cinema; (vi) general store; (vii) post, telephone and telegraph office; (viii) beggars; (ix) government office of at least kabupaten status.

Source: Questionnaire survey.
destination than he had hoped and returns to his home village. Among migrants who subsequently moved to Surabaya, the downward step was usually only a pause before upward stepwise migration was resumed, but returnees who have since remained in the village have not been detected in this study and this may have resulted in an underestimate of downward migration.

The age structure of the migrants at the time of each move prior to migration to Surabaya is presented in Table 3.9. Most multiple movers made their first move from their village of birth at a young age, almost half of them as children. Overall, 38 per cent of all moves were made by migrants aged less than 15 years, which suggests that many of the moves made prior to migration to Surabaya were made for family-related reasons or else for education.

If the reasons for making all moves prior to migration to Surabaya are considered, then the dominance of family and education-related motives is clear-cut (Table 3.10). For example, 35 per cent of all movers stated their sole reason for moving was to accompany parents or a family member; another 12 per cent moved to follow or accompany their spouse, meaning that almost half (46 per cent) of all the moves made prior to migration to Surabaya were made solely for family related reasons. An additional 19 per cent grouped education and family reasons together, and it is impossible to say whether the whole family moved for the sake of the child's education, or whether education was a secondary consideration. In addition, a further 4 per cent cited education as the sole reason for migrating, but it may be assumed that the desire for this education was determined by parents. Overall, approximately seven out of every ten moves made prior to migration to Surabaya have been either family-oriented, or education and family-oriented moves. In such a situation, where few moves prior to migration to Surabaya have been made independently of the family, the significance and spatial location of family contacts cannot be overemphasised.

When moves within the settlement hierarchy prior to migration to Surabaya are compared to the reasons for migrating, three general relationships were observed. The first was that 'education and
TABLE 3.9 - Age structure of migrants at time of first, second, third and fourth moves prior to migrating to Surabaya as a percentage of the total number of migrants making each move

<table>
<thead>
<tr>
<th>Age in years</th>
<th>First move</th>
<th>Second move</th>
<th>Third move</th>
<th>Fourth move</th>
<th>All moves prior to Surabaya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>0 - 4</td>
<td>10.1</td>
<td>3.8</td>
<td>-</td>
<td>-</td>
<td>7.2</td>
</tr>
<tr>
<td>5 - 9</td>
<td>17.8</td>
<td>1.9</td>
<td>12.5</td>
<td>18.2</td>
<td>12.0</td>
</tr>
<tr>
<td>10 - 14</td>
<td>20.2</td>
<td>19.2</td>
<td>20.8</td>
<td>-</td>
<td>19.1</td>
</tr>
<tr>
<td>15 - 19</td>
<td>30.1</td>
<td>27.0</td>
<td>20.8</td>
<td>18.2</td>
<td>27.7</td>
</tr>
<tr>
<td>20 - 24</td>
<td>12.4</td>
<td>27.0</td>
<td>37.5</td>
<td>45.4</td>
<td>21.0</td>
</tr>
<tr>
<td>25 - 29</td>
<td>7.8</td>
<td>13.5</td>
<td>4.2</td>
<td>9.1</td>
<td>9.1</td>
</tr>
<tr>
<td>30 - 34</td>
<td>0.8</td>
<td>3.8</td>
<td>4.2</td>
<td>9.1</td>
<td>2.4</td>
</tr>
<tr>
<td>35 - 39</td>
<td>-</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>40 - 44</td>
<td>0.8</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
</tr>
<tr>
<td>45 and over</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: Owing to computation difficulties only the details of the first four moves made prior to migration to Surabaya have been included in this table, but as these first four moves account for the vast majority of all moves, the effect is minimal.

Source: Questionnaire survey.
family' plus 'education only' reasons appeared to play a more significant role in upward moves from rural and lower order places of origin, and in lateral moves between higher order urban centres, than in other moves within the settlement hierarchy (Table 3.10). This relationship was expected, since Indonesian government policy located higher level educational facilities in the larger centres.

Second, family-related reasons appeared important in downward stepwise migrations from lower order urban centres to rural villages, and from higher order urban to lower order urban centres. This was related to the backward pause in upward stepwise migration which often occurred during the migrant's second move, when he or she on completion of schooling or job-seeking in a location outside the village decided to return to the social and economic security of the family in the home village.

The third relationship was the importance of security-related motives in moves from higher order urban centres to rural villages. Such moves were common in Java during the Japanese occupation, the Indonesian revolution, and more recently in the army and PKI conflict of 1965-67, when many villagers, fearful of acts of retribution by one side or the other, fled their usual residence for the relative security of their home village. Security related moves, however, were common between all levels of the settlement hierarchy (see moves from rural areas Table 3.10). For example, during the 1965-67 conflict when the army took military action in PKI areas, many villagers from PKI rural strongholds fled their home villages for the relatively anonymous surroundings and security of the large urban centres.

In summary, my findings indicate that a minority of lifetime migrants to Surabaya experienced stage or stepwise migration prior to their move to Surabaya. More than three-quarters of the inmigrants moved directly from their birthplace to Surabaya, without intermediate residences of at least six months duration. Of all pre-Surabaya moves made by the 22 per cent of migrants who moved to Surabaya in stages (Table 3.6), only one-third (Table 3.8) were stepwise migrations upward through the settlement hierarchy from lower to higher order
TABLE 3.10 - Reasons for moves within the settlement hierarchy prior to migration to Surabaya as a percentage of all reasons for moves

<table>
<thead>
<tr>
<th>Reasons for migrating</th>
<th>From rural to:</th>
<th>From lower urban to:</th>
<th>From higher urban to:</th>
<th>All moves prior to Surabaya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Lower urban</td>
<td>Higher urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Family:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Parents or family members move, or general family related reasons</td>
<td>31.6</td>
<td>31.9</td>
<td>27.3</td>
<td>62.5</td>
</tr>
<tr>
<td>(11) Spouse moves</td>
<td>15.8</td>
<td>4.5</td>
<td>6.1</td>
<td>12.5</td>
</tr>
<tr>
<td>Education &amp; family</td>
<td>10.5</td>
<td>9.1</td>
<td>30.3</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>5.3</td>
<td>9.1</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td>Occupation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) General occupation related reasons</td>
<td>15.8</td>
<td>22.7</td>
<td>18.2</td>
<td>-</td>
</tr>
<tr>
<td>(11) Job transfer</td>
<td>-</td>
<td>9.1</td>
<td>-</td>
<td>25.0</td>
</tr>
<tr>
<td>Occupation &amp; family</td>
<td>-</td>
<td>9.1</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td>Security</td>
<td>10.5</td>
<td>4.5</td>
<td>12.1</td>
<td>-</td>
</tr>
<tr>
<td>Personal</td>
<td>10.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Notes: 1) Owing to computation difficulties, only the details of the first four moves made prior to migration to Surabaya have been included in this table, but as these first four moves account for the vast majority of all moves, the effect is minimal.

2) When asked the reasons for each move the respondent was requested to provide reasons for leaving his previous residence as well as reasons for choosing his future destination. When the respondent provided two different reasons for a particular move then a combined reason such as education and family is shown.

Source: Questionnaire survey.
settlements. The majority of pre-Surabaya migrations consisted of lateral moves between centres of similar status within the settlement hierarchy (Table 3.8). There was also a significant number of downward movements from higher to lower order settlements; migrations back to the village of origin were particularly common among the downward movements. This suggests that the traditional view of stepwise migration should be modified to incorporate lateral and downward moves within the settlement hierarchy. These lateral and downward moves appeared to act as pauses, or staging posts, before more irrevocable migrations were subsequently made to more distant destinations. Since most migrants made these pre-Surabaya migrations when children, migrations independent of family-oriented motives were relatively rare, though education and security-related factors appear to have played a significant role in determining the direction of some migrations through the settlement hierarchy.

3.4 LAST PLACE OF RESIDENCE BEFORE SURABAYA

3.4.1 Geographic Distribution

The relative proportion of the total migrant flow from individual kecamatan and kotamadya in East Java is shown in Figure 3.5. The pattern is very similar to the birthplace distribution (Figure 3.3) because most migrants moved directly from their birthplace to the city. Perhaps the prime example is the island of Madura where the geographic distribution of birthplace kecamatan (Figure 3.3) was almost replicated in the distribution of last places of residence prior to migration to Surabaya (Figure 3.5). Direct migration was the cause, some 96 per cent of all Madura-born migrants moved directly from the kecamatan of their birth to Surabaya. The proximity of Madura to Surabaya and the 'coarse' settlement hierarchy of the island may explain the high incidence of direct migration to Surabaya.

Although in general, the distribution of birthplaces was similar to the distribution of last places of residence, there were some contrasts. For example, the proportion of migrants resident in East Java kotamadya immediately prior to migration to Surabaya was 17
Figure 3.5

Last place of residence before migration to Surabaya of in-migrants from East Java by kecamatan and kotamadya
per cent, but the same kotamadya were the birthplace for 12 per cent of all immigrants. One reason for the increased proportion was upward stepwise migration through the settlement hierarchy by a significant number of immigrants; another cause was the tendency of multiple movers to move laterally within the settlement hierarchy from kotamadya in other provinces to East Java kotamadya, before moving to Surabaya. Another contrast between the distribution of birthplaces and last places of residence is that some kecamatan close to major urban centres (such as kecamatan close to the kotamadya of Malang, Blitar, and Madiun, or the kabupaten capital of Ponorogo) were less important as last places of residence, than as birthplaces (Figures 3.3 and 3.5). Their decreased importance was caused by upward stepwise migration. The kecamatan close to major urban centres acted as the rural birthplaces of multiple movers who moved to nearby urban centres before moving to Surabaya. An additional difference between the two geographic patterns concerns the kecamatan which contain the kabupaten capitals of Pacitan, Trenggalek and Lumajang. Unlike the major urban areas, these kecamatan were less important as last places of residence than as migrant birthplaces (Figures 3.3 and 3.5), which suggests the second-order urban centres were not the last destination of multiple movers prior to their migration to Surabaya. Instead, these centres were either bypassed by multiple movers on their way to Surabaya, or they were migrant destinations during earlier steps in the migration process.

3.4.2 Rural or Urban Character of Last Place of Residence and Problems Experienced by Migrants

Research in Latin America (Galindo and Goldberg, 1973; Weller, 1974; Racynski, 1972), Southeast Asia (Green, 1978; Tirasawat, 1978) and Surabaya (McCutcheon, 1977) indicates that immigrants from urban places of origin are more likely to obtain high status occupations on arrival in the city than immigrants from villages. There is a difference of opinion, however, as to the significance of previous urban residence as a causal factor. Some researchers maintain that place of origin is a surrogate for other causal factors, such as level of educational attainment, and when the effects of the other determinants are taken into consideration few
differences persist between the post-arrival occupational and socio-economic status of rural and urban immigrants (Galindo and Goldberg, 1973: 9). Other studies have found that immigrants from urban places of residence are occupationally advantaged relative to rural immigrants even when the comparison is confined to migrants with equal education (Tirasawat, 1978: 96). In view of these research findings it is essential to examine the rural and urban character of the previous place of residence of immigrants to Surabaya.

Fifty-seven per cent of the lifetime migrants to Surabaya came from rural previous places of residence, three-fifths of which possessed none, or only one, of the nine specified urban features (Table 3.11). Another 13 per cent of the migrants came from lower order urban centres with seven or eight urban features, and 30 per cent came to Surabaya from higher order urban settlements. The proportion of migrants from rural, lower order urban and higher order urban previous places of residence varied with the source region of the immigrant. Immigrants from Madura were predominantly from rural last places of residence (84 per cent) as were immigrants from mainland East Java (65 per cent). On the other hand, migrants from other areas of Java and the Outer Islands, the more distant source areas, were mostly from higher order urban centres (Table 3.11). This suggests that local urban centres acted as alternative destinations to Surabaya for most rural-urban migrants in the other provinces of Java and in the Outer Islands. Long distance migration to Surabaya was more common among the urban-born or among rural-urban immigrants who had moved to a regional urban centre before moving to Surabaya.

The conditions experienced by migrants in their last place of residence before migration to Surabaya varied considerably with the rural or urban nature of the settlement (Table 3.12). Most migrants from urban places had no difficulties in their previous place of residence just prior to migration, and probably came to Surabaya as 'aspiring' rather than 'dislocated' migrants. Those migrants from higher order urban centres who had problems in their last place of residence, mainly complained of inadequate educational facilities; a 'problem' for those who aspired to education.
### TABLE 3.11 - Percentage of last places of residence with specific numbers of urban features by region

<table>
<thead>
<tr>
<th>Number of urban features* present</th>
<th>Location of last place of residence prior to migration to Surabaya</th>
<th>All sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mainland East Java</td>
<td>Madura</td>
</tr>
<tr>
<td>0</td>
<td>19.5</td>
<td>32.4</td>
</tr>
<tr>
<td>1</td>
<td>17.0</td>
<td>36.5</td>
</tr>
<tr>
<td>2</td>
<td>11.8</td>
<td>12.2</td>
</tr>
<tr>
<td>3</td>
<td>5.8</td>
<td>2.7</td>
</tr>
<tr>
<td>4</td>
<td>3.6</td>
<td>0.0</td>
</tr>
<tr>
<td>5</td>
<td>3.8</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>3.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Total rural</td>
<td>64.8</td>
<td>83.8</td>
</tr>
<tr>
<td>7</td>
<td>3.8</td>
<td>0.0</td>
</tr>
<tr>
<td>8</td>
<td>8.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Total lower urban</td>
<td>12.3</td>
<td>5.4</td>
</tr>
<tr>
<td>9</td>
<td>22.9</td>
<td>10.8</td>
</tr>
<tr>
<td>Total higher urban</td>
<td>22.9</td>
<td>10.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Notes: *The urban features were: (i) residential electric lighting; (ii) hospital or clinic; (iii) government school of at least secondary level (SMP); (iv) general bank; (v) cinema; (vi) general store; (vii) post, telephone and telegraph office; (viii) beggars; (ix) government office of at least kabupaten status.

Source: Questionnaire survey.
TABLE 3.12 - Problems experienced by immigrants in last place of residence prior to
migration to Surabaya by position of that place of residence
in settlement hierarchy

<table>
<thead>
<tr>
<th>Problem in last place of residence</th>
<th>Basic rural (2 urban features*)</th>
<th>Other rural (2-6 urban features*)</th>
<th>Lower urban (7-8 urban features*)</th>
<th>Higher urban (9 urban features*)</th>
<th>All sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal or family problems</td>
<td>16.3</td>
<td>14.9</td>
<td>17.6</td>
<td>12.9</td>
<td>15.1</td>
</tr>
<tr>
<td>Economic difficulties</td>
<td>14.3</td>
<td>12.7</td>
<td>9.4</td>
<td>2.8</td>
<td>9.9</td>
</tr>
<tr>
<td>Inadequate educational facilities</td>
<td>1.5</td>
<td>6.0</td>
<td>10.8</td>
<td>15.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Land shortage</td>
<td>11.4</td>
<td>6.7</td>
<td>0.0</td>
<td>0.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Unemployment</td>
<td>10.4</td>
<td>2.2</td>
<td>1.4</td>
<td>3.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Married Surabaya resident</td>
<td>4.9</td>
<td>4.5</td>
<td>6.8</td>
<td>5.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Security disturbances</td>
<td>2.5</td>
<td>3.0</td>
<td>1.3</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Natural disasters</td>
<td>5.0</td>
<td>0.7</td>
<td>1.3</td>
<td>0.0</td>
<td>2.0</td>
</tr>
<tr>
<td>No problem</td>
<td>33.7</td>
<td>49.3</td>
<td>51.4</td>
<td>57.0</td>
<td>46.5</td>
</tr>
</tbody>
</table>

| TOTAL                             | % 100.0                       | 100.0                           | 100.0                            | 100.0                           | 100.0       |
| N                                 | 202                           | 134                             | 74                               | 179                             | 589         |

Note: Urban features are defined in Table 3.11

Source: Questionnaire survey.
Approximately two-thirds of the migrants who moved to Surabaya from basic rural settlements experienced major problems prior to migration (Table 3.12). If personal or family problems and marriage to a Surabayan resident are judged ubiquitous factors which are independent of location, the most common problems experienced by villagers were economic difficulties, land shortages, unemployment, and natural disasters, such as droughts, famines or floods. Similarly, in the other rural source areas, economic difficulties and land shortages were the major problems among the 51 per cent of the migrants who declared a problem (Table 3.12). In both basic rural areas and other rural locations, major problems existed which discouraged even non-aspiring migrants from continued residence.

The extent to which migrants cited 'economic difficulties' or 'inadequate educational facilities' as the major problem in their previous place of residence provides an insight into the relative socio-economic status of migrants from rural and urban previous places of residence (Table 3.12). For example, 'economic difficulties' was a more common complaint among migrants from rural locations than among migrants from urban previous places of residence. On the other hand, almost 16 per cent of the migrants whose last place of residence prior to migration was a higher order urban centre complained of inadequate educational facilities, whereas less than 2 per cent of the inmigrants from basic rural settlements expressed concern at the inadequate educational facilities in their home villages. These contrasts summarise the variation in problems and aspirations of migrants from different locations along the rural-urban continuum. At the rural end, migrants appeared beset by economic difficulties and land shortages, they were not affluent enough to aspire to higher educational qualifications and did not feel adversely affected by the absence of junior and senior high schools from their home village. Migrants resident in urban centres prior to migration were less likely to be experiencing economic problems, they could afford to aspire to higher educational qualifications and the lack of tertiary-level educational establishments in their home town was a problem of immediate concern.
The relationship between perceived problems and the rural or urban character of the immigrant's last place of residence had a spatial component, since Madura and mainland East Java were the major source areas of rural immigrants, and the rest of Java and the Outer Islands were the dominant source areas of urban migrants. In the predominantly rural source areas of Madura and East Java the most common problems were economic difficulties and land shortages, followed by unemployment. Setting aside personal and family problems, migrants from kotamadya in East Java, other provinces of Java, and the Outer Islands, cited inadequate educational facilities as the most common problem in their last place of residence.

3.4.3 Accessibility of Last Place of Residence of Recent Immigrants (1969-74)

In the hope of assessing the effect of accessibility on the location of migrant source areas, recent immigrants were asked to estimate the distance of their last place of residence from the local kecamatan capital. The resulting distribution indicates that more than 75 per cent of the recent immigrants interviewed came to Surabaya from either a kecamatan capital, a large centre serving as a kecamatan capital, or a village located within five kilometres of the capital of the kecamatan (Figure 3.6). The nodular pattern of migrant source areas which resulted from their spatial clustering around urban centres reflects the comparative advantage of those areas in terms of accessibility to transport links with Surabaya (Figure 3.5). Half of the recent immigrants came to Surabaya from places on regular bus routes and 70 per cent of the places of previous residence were accessible to ordinary vehicles. In addition, villages located within five kilometres of a kecamatan capital were within commuting range; this encouraged ties with an urban way of life and perhaps subsequent migration to Surabaya.

(1) In some cases a nearby urban centre such as a kabupaten (regency) capital or a kotamadya (municipality) acted as the kecamatan capital. For the purposes of this discussion and Figure 3.6, these centres were treated as the kecamatan capital.
Figure 3.6
Distance from kecamatan capital of last place of residence of recent migrants* to Surabaya

Note: * Migrants who arrived in Surabaya during the period 1969-74

Source: Questionnaire survey
3.4.4 Recent Inmigrants' Perceptions of Economic Conditions in Their Last Place of Residence Prior to Migration

Recent inmigrants were asked to compare the economic prosperity of their last place of residence with that of other towns or villages in the same kecamatan. The results are set out in Table 3.13. Most migrants described the economic prosperity of their last place of residence as 'average' in comparison with that of other places in the kecamatan. Almost twice the number of locations were described as 'below average' than as 'above average', however, which implies that most migrants prepared to venture positive or negative views thought their last place of residence relatively underprivileged. In terms of region of origin, 29 per cent of recent migrants from Madura described their last place of residence as 'below average'; not one migrant from Madura described it as 'above average', or the wealthiest village or town. Similarly, migrants prepared to express positive or negative opinions and whose last place of residence was elsewhere in East Java and outside municipal areas, tended to regard their last place of residence as 'below average' (24 per cent) rather than 'above average' (8 per cent) or the wealthiest location (1 per cent). Madura and the non-kotamadya last places of residence in East Java were predominantly rural locations; this suggests that the rural migrants tended to regard their last place of residence as either 'average' or 'below average' compared with other locations in that kecamatan. On the other hand, the majority of migrants from urbanised regions, such as the kotamadya of East Java, other provinces in Java, or the Outer Islands, tended to regard their last place of residence as either 'average' or 'above average' in terms of economic prosperity. The results suggest that urban inmigrants regarded themselves as positively selected migrants from economically advantaged places of origin; whereas rural inmigrants claim they moved from economically disadvantaged villages; this implies they were more likely to be negatively selected migrants 'dislocated' from their place of origin by unfavourable conditions (Taylor, 1969).
TABLE 3.13 - Economic conditions in last place of residence prior to migration to Surabaya according to recent* inmigrants

<table>
<thead>
<tr>
<th>Relative economic prosperity of last place of residence</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealthiest area</td>
<td>1.0</td>
</tr>
<tr>
<td>Above average</td>
<td>10.9</td>
</tr>
<tr>
<td>Average</td>
<td>69.7</td>
</tr>
<tr>
<td>Below average</td>
<td>18.4</td>
</tr>
<tr>
<td>Far below average</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>


Source: Questionnaire survey.

3.5 CONCLUSION

In this chapter I examined the place of origin and pre-arrival migration histories of lifetime migrants to Surabaya. The analysis focused on the migrants' birthplaces, migration histories prior to entry to Surabaya, and characteristics of their last place of residence before Surabaya.

Viewed in terms of a gravity model, distance alone 'explained' approximately four-tenths of the variation in per capita rates of lifetime migration to Surabaya from kabupaten and kotamadya birthplaces. The migration rates from kabupaten (rural) and kotamadya (urban) birthplaces were different. A comparison of the regression models computed for each distribution showed that the intensity of outmigration from kotamadya birthplaces decayed at a significantly lower rate with increased distance from Surabaya than the rate of outmigration from kabupaten birthplaces. Urban-born migrants were more willing and more able to move long distances to Surabaya than rural-born migrants.
Because of its simplicity, the gravity-regression model frequently underestimated migration to Surabaya from areas with long-established colonial ties with Surabaya, just as it underestimated migration from within East Java, because of the extreme primacy of Surabaya within its own province. The model made no allowance for the presence or absence of intervening destinations; such as Jakarta, for potential migrants from West Java. Map analysis revealed the effect of the 'migration shadow' of Surabaya in depressing migration rates within its commuting hinterland, the continuation of traditional west-east migrations in Java, and the role of accessibility to transport in the creation of a pattern of spatial clustering of migrant birthplace.

Analysis of birthplace data over time showed Surabaya has been extending its migration field since independence, for both rural and urban-born migrants. This has great significance for Indonesia's development strategy as it indicates that given government encouragement Surabaya has the potential to rival Jakarta as a major destination of metropolitan immigrants. Indeed, analysis of the probability of migrating to Jakarta suggested that by 1971 Surabaya was diverting away from Jakarta metropolitan bound migrants from East Indonesia.

Examination of the migration histories of immigrants resident in Surabaya indicated that the vast majority (78 per cent) moved directly from their birthplace to the city. Consequently, the pre-arrival work and residential experience of most migrants to Surabaya was not affected by pre-arrival migrations, but was determined by conditions in the place of birth. Of the pre-Surabaya moves made by the 22 per cent of migrants who did move to Surabaya by stages, only one-third followed the process of upward stepwise migration. The frequency of moves from high order centres to villages and the dominance of lateral moves through the settlement hierarchy suggest that the traditional view of stepwise migration as a predominantly upward progression through the settlement hierarchy should be modified to incorporate lateral and downward moves. Since most migrants who engaged in stage migration made their pre-Surabaya moves at young ages, migrations independent of family-oriented motives
were relatively rare, though education and security-related factors played a significant role in determining the direction of some migrations through the settlement hierarchy.

Analysis of the rural or urban character of the migrant's last place of residence prior to migration indicated that 57 per cent of all migrants came to Surabaya from rural places. Migrants from Madura, mainland East Java and overseas came, predominantly, from rural areas; a majority of those from other provinces in Java and the Outer Islands came from urban places. The likelihood of migrants experiencing difficulties in their previous place of residence and the nature of those difficulties was related to the rural or urban character of the previous place of residence. In almost all cases, migrants from rural places were more underprivileged than migrants from urban centres. This implies that migrants from rural places of origin were more likely to be negatively selected or dislocated migrants, whereas those from urban places were more likely to be an aspiring positively-selected group.

In summary, analysis of the geographic origins of migrants to Surabaya has revealed: the relevance of a simple gravity regression model in the interpretation of rates of migration to Surabaya; the need for modification of the concept of stepwise migration; and the contrasting pre-arrival experience and perceptions of migrants from rural and urban previous places of residence.
CHAPTER IV

DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS
OF LIFETIME MIGRANTS TO SURABAYA

In the preceding chapter I examined the question of where the inmigrants came from. This chapter focuses on the demographic and socio-economic characteristics of the migrants when they departed for Surabaya from their previous place of residence. The discussion of their demographic characteristics begins with an overview of the age and sex composition of the inmigrant population; it then examines changes in sex composition by period of migration. The analysis of socio-economic origins begins with a discussion of the ethnic and religious background of the migrants; it continues with a discussion of educational attainment and personal characteristics and an analysis of changes in educational attainment over time. The educational selectivity of inmigrants from East Java is then examined, and the chapter concludes with a brief analysis of the occupational status and personal characteristics of migrants prior to migration to Surabaya.

4.1 AGE-SEX DISTRIBUTION OF INMIGRANTS IN 1973-74 AND AT TIME OF MIGRATION

Data collected for this study emphasised the numerical significance of lifetime inmigrants in the population of Old Surabaya in 1973-74. For example, 53 per cent of the respondents sampled in the population registration survey were found to be lifetime inmigrants. The comparable proportion among the enumerated population was 49 per cent. An analysis of the age-sex structure of the migrant and non-migrant populations of Old Surabaya in 1973-74 revealed that migrants were a clear majority among those aged 20 or over (Figure 4.1). Seventy-eight per cent and 79 per cent of all the family heads sampled in the population registration survey and the enumeration survey, respectively, were non-Surabaya born. On the other hand, the Surabaya-born population dominated the juvenile age cohorts of the old city's population (Figure 4.1). Most children born in Surabaya were
Age-Sex Structure of Surabayan Born and Lifetime In-migrants
According to Population Registration and Enumeration Surveys of Old Surabaya

(a) Population Registration Survey - 1973

- Lifetime in-migrants (N=5124; sex ratio=98.0)
- Surabayan born (N=4551; sex ratio=97.4)
Total sex ratio=97.7

(b) Enumeration Survey - 1974

- Lifetime in-migrants (N=3927; sex ratio=78.7)
- Surabayan born (N=4046; sex ratio=95.6)
Total sex ratio=86.9
born to lifetime inmigrants. (1) Surabaya is a city dominated by lifetime migrants and their Surabaya-born offspring.

Although data from the population registration and enumeration surveys were in agreement over the general age-sex structure of the immigrant population of Surabaya in 1973-74, estimation of the sex composition of the immigrant population was complicated by a significant difference between the sex ratios (Figure 4.1). The population registration survey gave a sex ratio of 98.0 males per 100 females for the immigrant population, the enumeration survey a sex ratio of 78.7. There appear to be two major reasons for the higher proportion of females in the enumeration survey. First, there is evidence of a sample bias in favour of recent female migrants in the enumeration and questionnaire surveys; (2) a bias caused by factors beyond my control. Although the bias qualifies the degree to which the enumeration and questionnaire sample populations are representative of all immigrants resident in Old Surabaya, it must be emphasised that the aim of this study was to determine the occupational mobility experienced by immigrants as a result of their move to Surabaya and to relate their occupational mobility and occupational status in 1974 to their pre-migration origins. A sex bias in one of the sample populations is of no significance in this context.

The second reason for the different sex composition of the two sample populations is that the population registration survey and the enumeration survey were samples from two different populations of inmigrants. The population registration survey was a sample of the de_

(1) The population registration survey revealed that 36.3 per cent of all the Surabaya-born persons sampled were children still living with their parents, both of whom were born outside the city. Another 6.3 per cent had one parent still living with them, and that parent was born outside Surabaya. An additional 18.2 per cent of the Surabaya-born respondents sampled were children living with both parents, one of whom was born outside the city. Therefore at least half of all the Surabaya-born respondents were children still living with a parent or parents, at least one of whom was a lifetime immigrant.

(2) Refer Appendix 1.6 for a detailed evaluation of sample bias in the enumeration and questionnaire surveys.
jure population of the city rather than a sample of the de facto population (refer Appendix 1.2), though the two populations were not discrete. The registration survey seriously underestimated non-official residents, recent arrivals, short-term and seasonal residents, all of whom were unlikely to be registered as permanent de jure Surabaya residents. As a result, the population registration data contained a higher proportion of older immigrants who were probably earlier arrivals than the enumeration survey (Figure 4.1). On the other hand, the enumeration survey appears to have been a more valid sample of Surabaya's de facto resident population and, unlike the registration survey, it included a sample of short-term recent female immigrants.

In view of the de jure nature of the population registration data it seems that the total population included in the registration survey may be considered to be comparable with the 1971 census population, since the 1971 census also discriminated against short-term and circular migrants, and non-official residents (Hugo, 1975a: 17). Indeed, sex ratios for Old Surabaya from the two sources were almost identical, at 95.2 males per 100 females according to the census and 97.7 according to the registration survey (Figure 4.1). Since the two data sources appear comparable, the sex composition of the immigrant population of Old Surabaya (according to the registration survey) may be compared with the sex composition of the major migrant source areas in East Java and the immigrant population of Jakarta.

With a sex ratio of 98.0 males per 100 females, the overall stock of lifetime immigrants in Old Surabaya was slightly more male dominated than both the 'other urban population' (sex ratio 94.0) and the rural population (sex ratio 95.5) of East Java in 1971. This implies that over the long term, flows of immigrants from major source areas in East Java to Surabaya have been selective of male migrants,

(1) For example, the enumeration unit of Jarak (enumeration unit 14, Appendix 1.5) consisted almost entirely of prostitutes, most of whom were young recent arrivals who said they intended to be short-term residents of Surabaya. Only a small proportion of these young females were registered as Surabaya residents.
though like the Surabaya and East Java populations generally, the long-term stock of migrants has more females than males. However, the differences in sex composition were of minor significance. Moreover, the lifetime immigrants included in both the registration and enumeration surveys may not be representative of the migrants who have left Surabaya or the migrants who have died since return and onward migration and mortality have probably been sex selective. Lacking detailed data it is wise to emphasise that the sex composition of the lifetime immigrant population of Old Surabaya was very similar to the sex composition of the population of East Java in 1971.

In contrast to the immigrant population of Old Surabaya with its sex ratio of 98 males per 100 females, the long-term stock of immigrants in Jakarta was strongly male dominated in 1971. Hugo (1975a: 335) estimated that the sex ratio of migrants who had been in the city for at least 10 years was 110 males per 100 females, and Temple (1974: 92) estimated their sex ratio at 121. Perhaps the explanation for the higher proportion of males in the migrant stock of Jakarta is that as the nation's capital, Jakarta has been a more important destination of long-distance migrants than Surabaya. According to the 1971 census (Series E) only 43 per cent of Jakarta's lifetime immigrants were born in the adjacent province of West Java (Hugo, 1975a: 198; Hugo and Temple, 1975: 27). In marked contrast, 76 per cent of Surabaya's lifetime immigrants were born within the city's home province, East Java (Table 3.1). Since the adjacent or home province was the major source of female migrants for both cities, the higher incidence of long-distance migration to Jakarta was responsible for its greater male stock of immigrants.

Details of the age and sex structure of the immigrant population at time of migration were collected in the enumeration survey. The results are shown in Figure 4.2 for all immigrants enumerated, all adult immigrants enumerated, and all adult immigrants interviewed. The age-sex pyramids shown in Figures 4.2b and 4.2c are not comparable with the age-sex pyramid of all immigrants (Figure 4.2a) as they include only those immigrants aged 15 or more at time of migration. Comparison of the age-sex pyramids for adult migrants indicates that though the questionnaire survey (Figure 4.2c) exhibited
Figure 4.2: Age-sex structure of migrants at time of departure for Surabaya

Age-Sex Structure of Migrants at Time of Departure for Surabaya

(a) All In-migrants Enumerated
(N = 3925)
Sex ratio = 78.7 males per 100 females

(b) All Adult In-migrants Enumerated
(N = 2344)
Sex ratio = 74.1 males per 100 females

(c) All Adult In-migrants Interviewed
(N = 594)
Sex ratio = 64.5 males per 100 females

Source: Enumeration Survey & Questionnaire Survey
a slight sample bias in favour of females when compared to the enumeration survey of adult migrants (Figure 4.2b), there was no significant age bias.

From the age structure of inmigrants at time of migration it is clear that, in common with migrants to Bombay (Zachariah, 1966: 382-3), Santiago (Elizaga, 1966: 355-7), Bangkok (Sternstein, 1971: 50, 63) and Jakarta (Temple, 1975: 122), migrants to Surabaya were concentrated in the adolescent and young adult age groups (Figure 4.2a). The greater mobility at these younger ages has been traditionally explained in terms of: 'the search for first employment, for further education, or for marriage, and is supported by a lack of family commitments and a greater ability to adjust to new circumstances' (Pryor, 1975: 5). Like the most recent migrant flows to Jakarta (Hugo, 1975a: 339), the modal age group was 15-19 years, which comprised 22 per cent of all inmigrants. The 20-24 age cohort was the second in size, followed by the 0-4 and 10-14 age groups (Table 4.1). Relatively few inmigrants came to Surabaya aged 25-29, and even fewer arrived aged 30-34 or 35-39. The significant number of young children aged 0-4 among the inmigrants indicates that parents frequently brought young children with them when they moved to Surabaya.

If the age distribution of inmigrants at time of migration is compared to the 1974 age distribution of the Surabaya-born population, the migrants appear as an older population with fewer dependent children in the 0-4 and 5-9 age groups, despite the high proportion of young adolescents and young adults (Table 4.1). The corollary of this imbalance in the younger age groups is that 59 per cent of migrants were in the working age groups of 15-54 years, compared to 39 per cent of the Surabaya-born population; this emphasises the importance of occupation related moves among migrants.

On the other hand, the major migrant source populations of rural East Java, Java and Madura, and the national population, have significantly higher proportions of persons in the over 30 age cohorts than the Surabaya inmigrant population (Table 4.1). Specifically, a
<table>
<thead>
<tr>
<th>Age group</th>
<th>Lifetime immigrants at time of migration to Surabaya</th>
<th>Surabaya-born population of rural East Java, 1974</th>
<th>Population of Java and Madura 1971</th>
<th>Total Indonesian Population 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>15.6</td>
<td>21.3</td>
<td>14.8</td>
<td>15.6</td>
</tr>
<tr>
<td>5-9</td>
<td>9.9</td>
<td>21.0</td>
<td>15.6</td>
<td>15.7</td>
</tr>
<tr>
<td>10-14</td>
<td>14.7</td>
<td>16.3</td>
<td>11.3</td>
<td>11.8</td>
</tr>
<tr>
<td>15-19</td>
<td>21.8</td>
<td>13.0</td>
<td>8.5</td>
<td>9.3</td>
</tr>
<tr>
<td>20-24</td>
<td>18.9</td>
<td>8.3</td>
<td>6.0</td>
<td>6.6</td>
</tr>
<tr>
<td>25-29</td>
<td>7.7</td>
<td>3.7</td>
<td>7.7</td>
<td>7.5</td>
</tr>
<tr>
<td>30-34</td>
<td>4.7</td>
<td>3.5</td>
<td>7.2</td>
<td>6.9</td>
</tr>
<tr>
<td>35-39</td>
<td>2.9</td>
<td>3.0</td>
<td>7.9</td>
<td>7.1</td>
</tr>
<tr>
<td>40-44</td>
<td>1.4</td>
<td>2.8</td>
<td>5.9</td>
<td>5.5</td>
</tr>
<tr>
<td>45-49</td>
<td>0.9</td>
<td>2.5</td>
<td>4.6</td>
<td>4.1</td>
</tr>
<tr>
<td>50-54</td>
<td>0.6</td>
<td>1.8</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td>55-59</td>
<td>0.3</td>
<td>0.9</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>60-64</td>
<td>0.2</td>
<td>0.7</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>65-69</td>
<td>0.1</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>70-74</td>
<td>0.1</td>
<td>0.5</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>75+</td>
<td>0.0</td>
<td>0.3</td>
<td>0.6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

| N         | 3925                                          | 4046                                          | 21,814,076                      | 75,969,634                     | 118,367,850                    |

Note: Due to rounding some columns do not add to 100 per cent.

Sources: 1) My enumeration survey conducted in Surabaya during 1974.
2) 1971 Population Census of Indonesia, Series E.
3) Indonesia, Biro Pusat Statistik, 1975 Statistik Indonesia (Statistical Pocketbook Indonesia), Jakarta.
mere 11 per cent of all migrants to Surabaya were aged 30 years or more at time of migration, suggesting that the city offered few job opportunities for older migrants. In marked contrast, at least 30 per cent of the total population of each of the migrant source areas was aged 30 or more in 1971. The probability of persons moving to Surabaya declined dramatically once they reached the age of 30.

A comparison of the age structure of male and female inmigrants at time of migration indicates the age selectivity of migration was similar regardless of sex (Figure 4.3). If the Index of Dissimilarity \( I_D^{(1)} \) is calculated to measure the difference, then an \( I_D \) of 8.1 per cent results, indicating that an 8.1 per cent of migrants of one sex would have to be redistributed to different age groups to reproduce an identical age structure for both sexes. In contrast, if Indices of Dissimilarity are calculated between the age structures of lifetime inmigrants and the Surabaya-born and the various source populations shown in Table 4.1, then the indices range in value between 25 per cent and 31 per cent. Therefore, the difference in the age structures of male and female migrants is insignificant relative to the difference in the age structure of migrants compared to the Surabaya-born population or the major source populations of Java and Madura.

Female migrants were more concentrated in the 15-19 age group at migration than male migrants, despite the overall similarity of the age structures (Figure 4.3). A major reason appears to be the propensity for married females to migrate at younger ages than married males (Figure 4.4), a fact which reflects both their younger age at marriage and the greater frequency of marriage migrations among females. It may be argued, however, that due to marriage migration

\[
I_D^{(1)} = \frac{1}{k} \sum_{i=1}^{k} (x_i - y_i)^2
\]

where

- \( x_i = \% \) of "x" population (e.g. males) in the \( i \)th age group
- \( y_i = \% \) of "y" population (e.g. females) in the \( i \)th age group
- and \( k = \) total number of age groups.
Figure 4.3: Age structure of male and female migrants at time of migration to Surabaya

Age Structure of Male and Female Migrants at Time of Migration to Surabaya

Source: Enumeration Survey
and the younger age at marriage of females relative to males in many LDCs, most observers would expect more married female migrants than married male migrants in the young age groups at time of migration. The unexpected feature of Surabaya's inmigrant population was that never-married female migrants were more numerous in the 15-19 age group than never-married males (Figure 4.4). Indeed, the high incidence of never-married females in the 15-19 and 20-24 age groups was the major factor responsible for a sex ratio of 64.5 males per 100 females for the total adult inmigrant population. Sample bias in the residence-based enumeration and questionnaire surveys in favour of young never-married females clustered together in institutions and the 'red light' district of Surabaya explains the high proportion of females in the youngest age groups (Appendix 1.6 and Figure 4.4). A high proportion of both groups of female immigrants intended a short-term stay in Surabaya and many were not registered as official residents of the city. Despite sample bias, however, these short-term female migrants were an important component of the de facto inmigrant population of Surabaya.

Contrasts in the age distribution of male and female inmigrants at migration imply that males aged 25-44 were more likely to migrate to Surabaya than females of the same age (Figure 4.3). This difference between the sexes was due to the greater incidence of job transfers, particularly in the public sector, among male migrants. On the other hand, females aged 45 or more were more likely to migrate to Surabaya than males of the same age. Most of the females aged 45 or more at migration were widows who joined their children or other surviving family members in Surabaya on the death of their husband (Figure 4.4).

The marital status of inmigrants at time of migration varied significantly with sex. Over 42 per cent of female migrants were already married at time of migration compared to 26 per cent of male migrants. Almost all the other male migrants were single (73 per cent), only two male migrants (1 per cent) were divorced or separated. In comparison, 41 per cent of female migrants were never-married at the time of their migration, another 11 per cent were divorced or separated, and 6 per cent were widowed.
Figure 4.4: Age-sex structure and marital status of adult migrants at time of migration to Surabaya

Age-Sex Structure and Marital Status of Adult Migrants at Time of Migration to Surabaya

Sex ratio = 64.5 males per 100 females

Marital Status

- Never married (N=317)
- Married (N=216)
- Widowed, divorced or separated (N=61)

Source: Questionnaire survey
If the age-specific marital status of adult migrants to Surabaya at time of migration is compared with the age-specific marital status of the 1971 rural population of East Java, the major source area of immigrants, then migration appears to be selective of never-married persons with few ties in their previous place of residence (Table 4.2). The relationship appears valid for both sexes in the younger age cohorts, with the percentage of never-married migrants being consistently greater than the percentage of never-marrieds within the rural population of East Java. The absence of never-married migrants from the older age cohorts (Table 4.2 and Figure 4.4) suggests the relationship did not apply at older ages.

Another interesting relationship suggested by the age-specific marital status of immigrants and the rural population of East Java was that the death of a spouse or the separation or divorce of a spouse did not appear to encourage migration among males. Although a significant proportion of all males over 20 in rural East Java were either widowed, divorced or separated from their spouse in 1971, only two were represented in the nearly 600 immigrants interviewed (Figure 4.4 and Table 4.2). On the other hand, widowed, divorced or deserted females were disproportionately represented in the immigrant population interviewed (Table 4.2). This occurred at all ages over 20. It illustrates forcibly the fact that though divorce is common in rural Java (especially after the first marriage which is frequently arranged by parents when the girl is still very young, see Geertz, 1961: 69-73) there is strong social disapproval in rural areas of a woman who remains divorced or widowed for a long period.

It would be wrong, however, to suggest that social pressures were the main consideration for older widowed villagers in rural Java. The death of the husband and breadwinner created crippling economic problems for older women in rural areas, especially if the children had emigrated to an urban area. In these cases, the elderly widowed villagers had little choice but to emigrate from their home villages to join children or family members in an alternative location.
TABLE 4.2 - Age-specific marital status of migrants (at time of migration) compared with the age-specific marital status of the rural population of East Java, 1971

<table>
<thead>
<tr>
<th>Age</th>
<th>Lifetime immigrants at time of migration</th>
<th>Rural population of East Java 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never-married</td>
<td>Married</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>97.7</td>
<td>2.3</td>
</tr>
<tr>
<td>20-24</td>
<td>85.9</td>
<td>14.1</td>
</tr>
<tr>
<td>25-29</td>
<td>39.4</td>
<td>57.6</td>
</tr>
<tr>
<td>30-34</td>
<td>25.0</td>
<td>68.7</td>
</tr>
<tr>
<td>35-39</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>40-44</td>
<td>14.3</td>
<td>85.7</td>
</tr>
<tr>
<td>45-49</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>50-54</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>55+</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>65.4</td>
<td>28.8</td>
</tr>
<tr>
<td>20-24</td>
<td>36.7</td>
<td>45.0</td>
</tr>
<tr>
<td>25-29</td>
<td>11.4</td>
<td>72.7</td>
</tr>
<tr>
<td>30-34</td>
<td>0.0</td>
<td>80.0</td>
</tr>
<tr>
<td>35-39</td>
<td>0.0</td>
<td>37.5</td>
</tr>
<tr>
<td>40-44</td>
<td>0.0</td>
<td>66.7</td>
</tr>
<tr>
<td>45-49</td>
<td>0.0</td>
<td>25.0</td>
</tr>
<tr>
<td>50-54</td>
<td>0.0</td>
<td>25.0</td>
</tr>
<tr>
<td>55+</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Sources: i) 1971 Indonesian Population Census, Series E.  
ii) Questionnaire survey.
4.2 PERIOD OF MIGRATION AND CHANGES IN SEX COMPOSITION OF MIGRATION FLOWS

After December 1941 when Surabaya had a population of 400,361 persons (excluding approximately 6,500 military personnel), the city witnessed substantial immigrations of Indonesians, particularly during the Japanese occupation (1942-45), the last years of Dutch rule (1948-49), and the first years of independence in the early 1950s (Figure 2.5). Population growth was temporarily reversed in 1945-46 when the British landed troops in Surabaya. A majority of the Indonesian population fled the city to avoid the re-imposition of Dutch colonial authority and by 1946 the population had declined to 209,000. Registration data suggest that during the immediate post-independence years there was large-scale immigration of Indonesians into Surabaya, and in 1961 the city's population was approximately 1.0 million (1961 census). By 1971 Surabaya had over 1.5 million inhabitants. Net immigration appears to have been responsible for just under half of Surabaya's post-colonial growth, but available data do not provide an accurate picture of migration flows in this period.

In an attempt to provide some information about the volume of migration over time, it was decided to analyse the year of migration data provided by immigrants included in the enumeration survey. The annual totals were 'smoothed' and the results graphed (Figure 4.5). The resulting profile does not provide more than a notional idea of the volume of migration flows over time since faulty recall probably resulted in a clustering of migration dates in more 'significant' years; earlier migration flows are systematically understated because of higher mortality among the earlier and older immigrants; and early immigrants were more likely to have left Surabaya than recent arrivals.

Despite inadequacies, the year of migration profile implies that immigration to Surabaya in the three years prior to the enumeration survey of 1974 significantly exceeded the intake of previous years (Figure 4.5). Some of this boost in migrant numbers probably reflects a real increase in the volume of migration to Surabaya, stimulated perhaps by economic development and political
Figure 4.5: Absolute number of in-migrants by year of first entry to Surabaya (3 year running means)

Absolute Number of In-Migrants by Year of First Entry to Surabaya
(3 Year running means)

Source: Enumeration survey
stability in the early 1970s. On the other hand, some of the boost in numbers may reflect a relative over-representation of recent migrants in the enumeration survey caused by a large component of short-term migrants who have not yet returned to their place of origin or by higher mortality among earlier arrivals. Contrary to expectations of decreased numbers because of higher mortality, the annual intake of migrants in the early independence years of 1949-51 was above the average for the late 1950s and also at least three times greater than the mean annual intake during the Japanese occupation. This observation implies that during 1949-51 immediately before and after the departure of the Dutch, Surabaya witnessed a massive influx of migrants intent on claiming the fruits of independence. The year of migration profile indicates also that the attempted coup in September 1965 had no significant effect on the annual intake of migrants (Figure 4.5). Except for the post-independence influx and the increased intake after 1970, the number of migrants entering Surabaya per annum has been fairly constant since 1952-53 (Figure 4.5).

In addition to providing notional information about the volume of migration flows, the enumeration survey provided data about temporal changes in the sex composition and the age-sex distribution (at time of migration) of migration flows (Figures 4.6 and 4.7). Differential mortality, however, has meant that the age-sex pyramids of the surviving migrants from the early periods of migration, especially 1950-59 and pre-1950, are not representative of the age structure of migrants in those early flows. For example, the effect of higher mortality rates among migrants who were older at time of migration can be observed from the 'flattened' shape of the pre-1950 age-sex pyramid in comparison to the 1960-69 pyramid (Figure 4.7). On the other hand, general trends in the sex ratio of annual migration flows are an invaluable data source for evaluating changes in the sex composition of migration flows (Figure 4.6). Ratios for individual years should not be overemphasised, however, because of the possibility of faulty recall of the year of migration and minor differences in mortality between male and female migrants.

The first observation from an examination of the sex ratio of annual migration flows is that males dominated migration flows during
Figure 4.6: Sex composition of annual flows of surviving in-migrants to Surabaya (1940-74)

Source: Enumeration Survey
Figure 4.7: 
Age-Sex Structure of Lifetime Immigrants at Time of Migration by Period of First Entry

(a) First Entered Surabaya 1970-74
(N=1050)
Sex ratio = 48.9 males per 100 females

(b) First Entered Surabaya 1960-69
(N=1218)
Sex ratio = 83.4 males per 100 females

(c) First Entered Surabaya 1950-59
(N=969)
Sex ratio = 97.0 males per 100 females

(d) First Entered Surabaya before 1950
(N=668)
Sex ratio = 105.5 males per 100 females

Source: Enumeration Survey
the struggle for national independence in 1945-50 and immediately afterward (Figure 4.6). Since elderly males usually experience higher age-specific mortality rates than females, the high sex ratios of 1945-51 could not have been caused by differential mortality, and it appears the high sex ratios may underestimate the male composition of migration flows in those years. In view of the political and military upheavels of the 1945-51 period it is not surprising that most immigrants were male. In the second half of the 1940s Surabaya was an enclave of Dutch authority in an island where the majority of the populace supported the Republic. In such an atmosphere the only Indonesians likely to enter the city were those with jobs provided by the Dutch, or villagers fleeing from military skirmishes in the countryside. In the last six months of 1949 Indonesians began to move into civil service positions formerly reserved for Europeans. This process was further accelerated in 1950 and 1951 and much of the male migration over the period 1949-51 consisted of Indonesian civil servants and military personnel moving to Surabaya to occupy whatever positions were available in the wake of the departure of the Europeans. Throughout the last years of colonial rule Surabaya was not a popular destination among female migrants and even marriage migrations were uncommon compared with subsequent periods.

From 1952 until the early 1960s almost all of the annual migration flows were dominated by females (Figure 4.6). This was in marked contrast to the male dominance of the preceding decade which suggests the possibility of a lag response, whereby wives, widowed parents and extended family members began joining male family members who in the previous decade had begun claiming the cities of Indonesia as their own. Consistent with this interpretation was the fact that the 1950s inflow had the largest proportion of females moving to Surabaya to accompany or join their husbands. There was also a marked increase in marriage migration in the 1950s, some of which was probably due to marriage deferral during the Japanese occupation and the struggle for independence from 1945 to 1949.

After an interruption of two years in 1962 and 1963 annual migration flows to Surabaya were again dominated by females in the decade 1964-74 (Figure 4.6). The sex composition of migration flows
from 1964 to 1970 was approximately 75 males per 100 females, but from 1971 to 1973 the sex ratio approximated 60 males per 100 females and by 1974 the sex imbalance had become more pronounced with just 25 males per 100 females.

One reason for the low sex ratios of the 1971-74 period is that the enumeration survey exhibited a sample bias which favoured the selection of female inmigrants clustered in institutions and the red light district of Surabaya (Appendix 1.6). As noted above, a majority of these females were recent migrants and many were short-term residents who intended to leave Surabaya within five years of the enumeration survey of 1974.

Another possible explanation of the increased sex imbalance in recent migrant flows is suggested by the obvious observation that recent annual flows of migrants contained a larger proportion of short-term migrants than earlier flows. Data about the intended duration of residence of adult migrants included in the questionnaire survey indicated that of the migrants who arrived in Surabaya in 1974, 1973, 1972, 1971 and 1970, approximately 68 per cent, 40 per cent, 32 per cent and 8 per cent respectively, intended to remain in Surabaya for less than 6 years after 1974. According to Temple (1974: 93-4) and Hugo (1975a: 335), female migrants to Jakarta have a greater rate of turnover than male migrants, particularly those employed in the service sector (domestic servants and prostitutes) or in petty trading. This implies that short-term migrants are more likely to be female than male and consequently that recent annual flows of migrants have a larger female component than earlier migration flows. Data on intended duration of residence in Surabaya indicated that females were more likely to be short-term migrants than males: 47 per cent of the female arrivals in 1970-74 claimed they intended to leave Surabaya before 1980 compared to 29 per cent of the male arrivals. Because of the bias of my enumeration survey in favour of the selection of recent female short-term migrants, and due to widespread agreement (Hugo, 1978: 109; P. McDonald, pers. comm., 1980) that the 1971 census under-enumerated young adult males who should be an important component of circular and short-term migration flows, the contention that females are more likely to be short-term migrants than males,
remains to be proven for migrants to Surabaya, and Jakarta. Several African studies (Connell et al., 1976: 42-3), however, claim that female rural-urban migrants are less likely to return to the village than male rural-urban migrants.

The increased female composition of the more recent annual migration flows to Surabaya, however, cannot be explained by sample bias in favour of recent female migrants and a higher proportion of short-term (predominantly female) migrants in recent migration flows. Every year since 1964, with the possible exception of 1970, has witnessed a substantial sex imbalance in favour of female inmigrants. The sample bias and short-term migrant component could not have had a significant effect on sex composition before 1970 (Figure 4.6). In addition, if short-term migrants are set aside for the moment and the annual flows of the remaining migrants are grouped into four periods, the relevant sex ratios of adult migrants who entered Surabaya in 1970-74, 1960-69, 1950-59 and before 1950 were: 36, 87, 88 and 111 males per 100 females. Clearly, there has been a consistent increase in female migration to Surabaya since 1950. Since 1964, and in particular since 1970, the sex imbalance has become more pronounced than it was in the late 1950s (Figure 4.6).

Examination of the age-sex distribution of lifetime migrants who entered Surabaya in 1970-74 and 1960-69 indicates that the largest sex imbalance in favour of female migrants was in the 15-19 and 20-24 working-age groups (Figure 4.7). This was in accord with results from Jakarta, where the dominance of females was highest among migrants in the 15-19 age group who had lived in Jakarta for less than one year at the 1971 census (Temple, 1974: 93). Analysis of the age-sex distribution and marital status of adult inmigrants by period of migration indicates that most of the recent (1970-74) female inmigrants in the 15-19 and 20-24 age groups were unmarried at time of migration, though the 20-24 age group contained a significant proportion of divorced or separated females (Figure 4.8). Migration streams from places in mainland East Java were dominated by young working-age female migrants (Figure 4.9). 'Basic rural' and 'other rural' places of origin were the major source areas of young female migrants (Figure 4.10).
Figure 4.8: Demographic character of adult in-migrants at time of migration by period of first entry

Sex ratio = 27.0 males per 100 females

1970-74 (N=188)

1960-69 (N = 182)

Sex ratio = 83.8 males per 100 females

1950-59 (N = 128)

Sex ratio = 82.9 males per 100 females

Before 1950 (N=96)

Sex ratio = 118.2 males per 100 females

Source: Questionnaire survey
Figure 4.9: Demographic character of adult in-migrants at time of migration by region of previous place of residence

- **Mainland East Java (N=366)**
  - Sex ratio: 89.7 males per 100 females
  - Male distribution by age:
    - 20-24: 5
    - 25-29: 6
    - 30-34: 1
    - 35-39: 0
    - 40-44: 0
    - 45-49: 0
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0
  - Female distribution by age:
    - 20-24: 2
    - 25-29: 1
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 0
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0

- **Madura (N=74)**
  - Sex ratio: 85.0 males per 100 females
  - Male distribution by age:
    - 20-24: 0
    - 25-29: 0
    - 30-34: 0
    - 35-39: 0
    - 40-44: 1
    - 45-49: 0
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0
  - Female distribution by age:
    - 20-24: 2
    - 25-29: 0
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 0
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0

- **Elsewhere in Java (N=109)**
  - Sex ratio: 85.0 males per 100 females
  - Male distribution by age:
    - 20-24: 7
    - 25-29: 6
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 2
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0
  - Female distribution by age:
    - 20-24: 7
    - 25-29: 2
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 2
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0

- **Outer Islands (N=37)**
  - Sex ratio: 85.0 males per 100 females
  - Male distribution by age:
    - 20-24: 7
    - 25-29: 6
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 2
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0
  - Female distribution by age:
    - 20-24: 7
    - 25-29: 2
    - 30-34: 0
    - 35-39: 0
    - 40-44: 0
    - 45-49: 2
    - 50-54: 0
    - 55-59: 0
    - 60-64: 0
    - 65-69: 0
    - 70-74: 0

Source: Questionnaire Survey
Figure 4.10: Demographic character of adult in-migrants at time of migration by position in settlement hierarchy of previous place of residence

In-Migrants From Basic Rural Places of Origin (N = 203)

Sex ratio = 51.5 males per 100 females

Age

In-Migrants From Other Rural Places of Origin (N = 134)

Sex ratio = 45.7 males per 100 females

Age

In-Migrants From Lower Order Urban Settlements (N = 174)

Sex ratio = 72.1 males per 100 females

Age

In-Migrants From Higher Order Urban Settlements (N = 179)

Sex ratio = 103.4 males per 100 females

Age

Source: Questionnaire survey
It appears that changes in employment opportunities in rural areas of East Java since the late 1960s have been responsible for the increased migration of females to Surabaya, since a majority of the recent (1970-74) female inmigrants moved to Surabaya because of occupation-related reasons and since most of the young females responsible for the recent sex imbalance in migration flows to Surabaya came from rural areas in mainland East Java. Village level studies of labour productivity in Java provide an insight into the technological, social and economic changes which have induced an increased number of young females to leave their home village in search of employment in the cities of Java.

Village studies in rural Java (Edmundson, 1972; Penny and Singarimbun, 1972 and 1973; White, 1976; and Collier, 1978) have revealed that labour utilisation is characterised 'by low labour productivity or labour efficiency, which for a landless or near-landless household means a lot of work to do, with very low returns' (White, 1976: 277). In common with Penny and Singarimbun (1973: 28, Table 16), White (1976: 275) discovered that only about 22-25 per cent of the actual working hours of adult men were spent in rice cultivation, though it remained the most important single activity of all villagers with access to sawah either as owners, sharecroppers or renters. Returns to labour from rice cultivation are generally regarded as very low in Java(1) and they are even lower for landless farm labourers than for land owners. Most significantly for this study, the low returns appear to have declined even further during the early 1970s. A study by Makali (cited by White 1976: 277) of 20 villages in Java, showed that over the 5 years from 1968-69 to 1972-73, the real wage for a half-day's work (when expressed as the amount of rice it could purchase) declined by about one-third. The decline in real returns appears to have affected both male and female rice cultivators, as White discovered in his survey village in Central Java. In this village in 1971 and 1972, 'a man's wage for a half-day in the sawah would purchase two-thirds kg of rice and a woman's

(1) White (1976: 277) cites a study by Sajogyo in Central Java, where "the average level of labour productivity ranged from 0.8 kilograms of milled rice per man-hour (with local varieties) to 1.2 kg/man-hour (with the new 'miracle rice' varieties)."
slightly less than a half kg, but by late 1973 men's wages barely reached half a kg and women's barely one-third kg' (White, 1976: 277). White states that the women's lower level of wages, in this instance for transplanting, are compensated by their subsequent higher wages at harvest time, when they are paid a share in kind of the amount they harvest, varying from 1/6 or even more to 1/12, depending on their relationship to the farmer's household (White, 1976: 277).

Although returns to labour were low in rice cultivation, they were even lower in most other productive activities in which most villagers spent the majority of their time (White, 1976: 278-9). Because of the small area of land available to most villagers, the vast majority had no choice but to obtain most of their income from these less productive off-farm activities, such as labouring on government-financed construction projects (males) or acting as petty traders (women). As population growth continues to reduce the size of farms' the less productive activities will increase in relative importance, further reducing already critically low levels of labour productivity in rural areas.

The channelling of labour into less productive off-farm activities was hastened in the late 1960s and early 1970s by several other developments, some of which appear to have had a disproportionately adverse affect on the female members of the rural workforce. Work by Collier and others (Collier et al., 1973 and 1974) has shown that since the early 1970s large farmers and landlords have limited the number of harvesters in their fields or reduced the wages given them. This process has been implemented by the increased use of a procedure known as tebasan - a system whereby the standing rice crop is sold to a penebas (middleman) not long before it is harvested (Ihalauw and Utami, 1975: 164). Under this system the buyer is responsible for harvesting the crop. As noted by Temple (1975b: 14) the significant consequences of the increased use of the system is that it 'alters social relations by shifting the employment allocation decision to someone not bound by the traditional obligations of the landlord. The landlord can ease into his role of commercial decision maker because tebasan reduces the resulting social tensions'. Collier et al. (1973: 43) estimate that tebasan reduces labour requirements
at harvest from 180 to 80 people per hectare, largely because the penebas, freed from the traditional social obligations of the landlord\(^{(1)}\), will be interested in harvesting the crop in the quickest and most efficient way. This means he will usually prefer stronger male labourers who will use sickles rather than the traditional anj-ani (small hand-knife used for cutting individual rice stalks).

Harvesting traditionally has been carried out by women, who are paid a share in kind (bawon) of the amount they harvest, varying from a sixth or even more, to one-twelfth, depending on their relationship to the farmer's household (White, 1976: 277). The returns to the female labourers during harvest are higher than those available to them from other agricultural work and the harvest period has traditionally been a major source of income for village households. Indeed, White (1976: 280) maintains that 'women will often stop or reduce their trading or mat-weaving activity during harvest time to take advantage of the better returns in harvesting. Men may remain at home, cooking and babysitting to free their wives for the harvest ...'. The increased use of the tebasan system places at risk these traditional rights of a share in the harvest in return for labour; in many cases village women have already lost this important source of livelihood.

A second development which has accelerated the movement of women into less lucrative activities, has been the dramatic increase in the use of small machine rice-hullers in recent years. These are owned by wealthier villagers and are used to replace hand-pounding in the processing of the rice harvest. White reports from his survey village:

\(\text{(1)}\) In 1973 and 1974 when Collier and other researchers first made these observations, sickles were generally only used if the farmer/landowner had sold the crop to a penebas (middleman). This was a convenient way of disclaiming responsibility by the farmer of landowner. White (1976: 288 footnote 31) has since learnt from personal communications with Collier that 'visitors to the same villages a year later found that some wealthy villagers were employing sickle-harvesters without recourse to a penebas'.

In Kali Loro(1) the wage paid to women for hand-pounding (before the introduction of hulling machines in the late 1960s) was one-tenth of the amount hulled. Although many households still hand pound their own rice for their daily needs, hand-pounding for wages (in which the returns to labour approached those of harvesting) has completely disappeared. One result of this change in Kali Loro was a dramatic rise in the number of women traders operating with tiny amounts of capital, consequent further saturation of the market system and presumably (although this is harder to document retrospectively) further diminution of their profits. In our 478-household sample, almost 40 per cent of women over 15 years of age are now engaged in some form of seasonal or year-round part-time or full-time trading (1976: 282).

Although Temple (1975b: 14-5) has shown that both tebasan and the changeover to sickles are not new ideas(2), their widespread adoption along with the development of mechanical rice-hullers is a recent occurrence. White (1976: 283) notes the conjunction of a number of factors in the late 1960s which combined to create a social, economic, and political climate which allowed commercial production relations to flourish for the first time at the indigenous village level in Java. Some of the factors responsible were: the national political changes from the Sukarno era to the 'New Order'; the widespread adoption of the technology of the so called 'Green Revolution' by the 'New Order'; the opening up of the Indonesian economy and a wave of consumerism, and the 'freezing' of grass-roots political activity in the villages. In this way the 'Traditional Village', as identified by Temple (1975b: 5), with its 'rules of production and distribution ... handed down by tradition' and income distribution 'still determined by the social ties between labourer and decision maker' was slowly changed in the 1960s to the 'Commercial Village', where 'the price system began very slowly to replace a traditional, communal system of employment allocation' (Temple, 1975b: 11), while profit maximization and cost cutting became the goal of farmers and landlords alike.

---

(1) White used 'Kali Loro' as a pseudonym.

(2) Temple says that others have noted reference to the tebasan system in 1905 and to the use of sickles before 1927.
The effect of these changes in the late 1960s and early 1970s has been a drastic decline in the relative bargaining power of poorer and landless villagers. Women, in particular, have been adversely affected, with many being forced out of the more lucrative agricultural activities of harvesting and hand-pounding, into a large variety of other activities in which the returns to labour are even lower. The result is a longer and even harder working day for women in the rural areas of Java. Many women in rural Java have chosen migration to the largest local city as an alternative to continued life, and work, in the increasingly crowded and under-productive village economy. The increase in the number of young working-age females moving to Surabaya over recent years was a response to these changed conditions.

4.3 ETHNIC AND RELIGIOUS ORIGINS OF INMIGRANTS

The rich ethnic diversity of Indonesia was reflected among inmigrants to Surabaya, who when asked their ethnic origins cited 17 different sukubangsa (ethno-linguistic groups). Ninety-two per cent of the inmigrants, however, were either Javanese, Madurese or Chinese, and the Javanese alone comprised 72 per cent of the total migrant population (Table 4.3). The major migration streams were also dominated by one, two, or three major ethnic groups, except for the more diverse migration stream from the Outer Islands. This stream contained large components of ethnic Javanese and Chinese migrants. The Javanese originated from provinces which have been sites of transmigration schemes and some may have been returnees. The Chinese migrants were mainly from urban centres.

The ethnic origin of migrants was not related to sex selectivity except in the case of the Madurese; who were more reluctant than other sukubangsa to allow outmigration of young females. Similarly, there was no overall relationship between the ethnic origins and the marital status of inmigrants, though Javanese migrants were disproportionately over-represented among female migrants divorced or separated from their spouse at time of migration. A majority of the Madurese and Javanese inmigrants came to
### TABLE 4.3 - Ethnic composition of major migration streams to Surabaya

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Region of last place of residence</th>
<th>All adult migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mainland E. Java</td>
<td>Madura</td>
</tr>
<tr>
<td>Javanese</td>
<td>93.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Madurese</td>
<td>0.3</td>
<td>95.8</td>
</tr>
<tr>
<td>Sundanese</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Minangkabau</td>
<td>0.3</td>
<td>-</td>
</tr>
<tr>
<td>Batak</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td>Banjarese</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bugis - Makassarese</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td>Toraja</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gorontalo - Sangir</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balinese</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sumbawan</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lombok</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Flores - Timor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ambonese</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arab</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>Pakistani</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chinese</td>
<td>5.1</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>369</td>
<td>74</td>
</tr>
</tbody>
</table>

* Two inmigrants failed to supply adequate data and were excluded from the tabulation.

**Source:** Questionnaire survey.
Surabaya from rural places, whereas most other indigenous Indonesians and Chinese came from urban previous places of residence.

The ethnic composition of the four major flows of migrants to Surabaya has varied significantly with period of first entry ($\chi^2 = 28.9; p<0.001$). The proportion of Javanese in each migrant flow increased steadily from a low of 56 per cent in the pre-1950 period, to a high of 79 per cent in the 1970-74 inflow. Policies of the colonial administration and the struggle for independence did not encourage immigration by Javanese during the thirties and early 1940s. Improved communications and a decline in productive employment opportunities for females in rural Java have boosted recent intakes. The proportion of Madurese in the migrant flows has remained constant at 10 per cent since 1950, but in the pre-1950 period the Madurese accounted for 23 per cent of all immigrants, their numbers being boosted by deliberate recruitment policies of the Dutch and Japanese administrations, which required coolie labour in the port areas of Perak and Kali Mas, and at the Ujung naval base.

The proportion of each migrant flow consisting of persons belonging to other indigenous Indonesian ethnic groups remained in the 6-10 per cent range in each period. The proportion of immigrants who were members of foreign ethnic groups (1) has declined consistently since independence, from a high of 15 per cent in the pre-1950 period, to a low of 3 per cent in the 1970s. This trend reflected the contrasting attitude of the Dutch colonial government and the Indonesian government toward the immigration of Chinese. The former government was favourably disposed toward immigration, perceiving increased numbers of Chinese as a way of boosting commerce in the NEI. In contrast, the Indonesian government effectively banned immigration by Chinese in 1950, and most of the Chinese who have entered Surabaya since that date have come from elsewhere in Indonesia, often in response to the government policy of concentrating ethnic Chinese in non-rural areas.

(1) Ninety-three per cent of the foreign ethnic group were Chinese, the remainder were either Arabs or Pakistanis.
In Indonesia, ethnic origin is closely associated with religious or spiritual belief. Ethnic groups such as the Javanese, Madurese, Sundanese, Minangkabau, Banjarese, Bugis, Makassarise and Sumbawans are overwhelmingly Muslim; few describe themselves as Christians (Table 4.4). On the other hand, the ethnic groups from North Sumatra, North Sulawesi and East Indonesia such as the Batak, Toraja, Sangir, Flores, Timorese and Ambonese are predominantly Christian.

The percentage distribution of adult immigrants and of the total population who were members of the major religions may be compared as follows:

<table>
<thead>
<tr>
<th>Per cent of adult immigrants</th>
<th>Per cent of Indonesia population in 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Islam</td>
<td>86.4</td>
</tr>
<tr>
<td>Christianity</td>
<td>9.6</td>
</tr>
<tr>
<td>Buddhism</td>
<td>0.3</td>
</tr>
<tr>
<td>Hinduism</td>
<td>0.3</td>
</tr>
<tr>
<td>Confucianism</td>
<td>3.4</td>
</tr>
<tr>
<td>Others</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The two distributions are similar, though the immigrant population contained relatively more Christians and Confucians in comparison to the national population. One explanation for the greater number of Christians is that Surabaya has traditionally been a major trading port; and is the major metropolitan centre for East Indonesia, a region which contains a higher proportion of Christians than any other major geographical region in Indonesia. A second explanation relates to Dutch colonial policy. Surabaya was the major commercial city, the major export port, and the naval headquarters of the NEI during the early decades of this century. It was a major destination of Chinese immigrants in colonial years when overseas immigration was encouraged, and in the boom years of the 1920s the Chinese population of Surabaya grew at 5.8 per cent per annum (Table 2.2). Dutch colonial policy also encouraged immigration to Surabaya by particular ethnic groups such as the Minahasa(1) and Ambonese who were employed by the Dutch as clerks in the colonial administration (Jones, 1976: 39) and formed

(1) A suku bangsa located around Menado in North Sulawesi.
<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Islam</th>
<th>Christianity</th>
<th>Buddhism</th>
<th>Hinduism</th>
<th>Confucianism</th>
<th>TOTAL</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Javanese</td>
<td>94.0</td>
<td>6.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>431</td>
</tr>
<tr>
<td>Madurese</td>
<td>98.6</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>73</td>
</tr>
<tr>
<td>Sundanese</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>16</td>
</tr>
<tr>
<td>Minangkabau-Banjarese</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>15</td>
</tr>
<tr>
<td>Bugis-Makassarese-Sumbawans</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>3</td>
</tr>
<tr>
<td>Arab - Pakistani</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>12</td>
</tr>
<tr>
<td>Batak - Toraja -</td>
<td>25.0</td>
<td>75.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>3</td>
</tr>
<tr>
<td>Gorontalo - Sangir - Timorese</td>
<td>66.7</td>
<td>33.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>3</td>
</tr>
<tr>
<td>Ambonese</td>
<td>51.2</td>
<td>4.9</td>
<td>-</td>
<td>43.9</td>
<td>-</td>
<td>100.0</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Questionnaire survey.
the backbone of the armed forces, including the navy of the NEI based in Surabaya. Both of these suku were well educated and predominantly Christian. Data on the period of first entry indicate that 22 per cent of Christian immigrants and 40 per cent of immigrants professing Confucianism\(^{1}\) arrived in Surabaya before 1950, compared to 15 per cent of Muslim immigrants. Migrant flows to Surabaya in colonial times contained a disproportionate number of Chinese and well educated Christians from the Outer Islands, and a large number of Madurese, as noted above; but since independence the flows have been dominated by short-distance migrants, predominantly Javanese, the majority of whom profess Islam.

4.4 LEVEL OF EDUCATIONAL ATTAINMENT OF IMMIGRANTS AT TIME OF MIGRATION

The level of educational attainment of immigrants at the time of their migration to Surabaya is of fundamental importance for this study for three reasons. First, it is perhaps the best single index of the relative socio-economic status of the individual immigrant and his immediate family. One reason for the close relationship between education and socio-economic status is the heavy burden placed on parents by school fees and costs of materials in Indonesia (Hugo, 1975a: 356; Daroesman, 1971: 62). Another, is the economic importance of children to rural families (White, 1973: 9-21) which implies that the loss of their labour while they attend school imposes additional indirect opportunity costs on poorer rural households.\(^{2}\) Educational attainment is also important because

\(^{1}\) The Chinese who still profess Confucianism in Indonesia today are usually the older Totok Chinese ('pure' or traditional members of the Chinese community). Many of the younger, more modern Peranakan Chinese (more-assimilated Chinese who can speak an Indonesian language) have become Christians in recent years, particularly in the aftermath of persecution of Chinese in 1959-60 and 1966-67 (Jones, 1976: 20, 25).

\(^{2}\) White (1973: 9-21) has shown that at the age of 8 years children usually begin regular tasks in the rural household such as water-carrying, animal care, baby care and (in the case of girls) rice planting and harvesting; this work although not income-producing, frees other members of the household for income-producing activities. At the age of 13 years, children of both sexes begin all kinds of wage-earning activities (White, 1973: 9).
research in Indonesia and elsewhere (Hugo, 1975a: 357-60; Suharso et al., 1976: 43-5, 51; Mowat, 1977: 54-5; Caldwell, 1969: 60-6; Connell et al., 1976: 59-61) has shown that educational attainment affects migrant selectivity; the propensity to migrate increases with the educational level attained. Third, research in Surabaya and elsewhere (McCutcheon, 1976: 23; 1978: 85-6; Raczynski, 1972: 195; Green, 1978: 74-6) has shown that the educational level attained is closely associated with the post-arrival occupational status of urban immigrants.

A comparison of the educational attainment of adult inmigrants at time of migration to Surabaya with the Indonesian population aged 15 and over in 1971 indicates that despite remarkable advances in educational provision since independence, educational levels of both populations remained low (Table 4.5). Also, at the time of their migration inmigrants were better educated than the average Indonesian citizen in 1971, and in terms of educational attainment females were greatly disadvantaged in comparison to males, whether they were inmigrants or members of the general population. This comparison, however, ignores the dramatic expansion of educational facilities in Indonesia since 1949, which has meant that the post-independence generations have had a greater access to education than their parents, particularly at the elementary level. Consequently, any comparison of educational attainment must consider the age structures of the relevant populations.

4.4.1 Educational Attainment and the Age and Sex of Migrants

Analysis of the proportion of male and female inmigrants who had successfully completed elementary schooling at time of migration by age in 1974, indicates a sharp increase in the proportion of elementary school graduates among the younger inmigrants (Figure 4.11). The widespread growth of elementary schooling among the younger age cohorts since independence, observed by Jones (1976: 45, 51) among the populations of selected provinces in 1971, is equally evident among the lifetime inmigrant population of Surabaya. The data analysed by Jones (1976: 51) suggested that those aged 35 or over in 1971 had a much lower incidence of completed elementary education.
### TABLE 4.5 - Educational attainment of adult migrants to Surabaya and total Indonesian population aged 15 years and over, by sex

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Adult* inmigrants at time of migration</th>
<th>Total Indonesian population aged 15 years &amp; over, 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>No formal education</td>
<td>12.8</td>
<td>31.2</td>
</tr>
<tr>
<td>Some elementary education</td>
<td>21.3</td>
<td>25.7</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>27.7</td>
<td>18.5</td>
</tr>
<tr>
<td>Completed junior high school</td>
<td>22.6</td>
<td>13.5</td>
</tr>
<tr>
<td>Completed senior high school</td>
<td>13.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Academy or University</td>
<td>2.6</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>235</td>
<td>362</td>
</tr>
</tbody>
</table>

Note: * Aged 15 or over at time of arrival in Surabaya.

Sources: i) Questionnaire survey.

ii) Suharso et. al., 1976: 51; 1971 Population Census, Series D.

The 1974 data for all migrants (if male and female totals are combined in Figure 4.11 - not shown) suggest the break occurred at the age of 40, a directly comparable age given the later date of these data and the grouping of ages into 5 year categories.

In accordance with the provincial populations in 1971 (Jones, 1976: 51), the youngest age group of migrants had fewer elementary school graduates than the 20-24 and 25-29 age groups (Figure 4.11). The smaller number was due to delays in completion of elementary education.
school(1) caused by either delayed school entry by children of legal school age, or by failure of individual students at particular levels. Data suggest that in the case of female migrants other factors were at work, since the proportion of females in the 20-24 age group who had graduated was below the peak achieved by the 25-29 age cohort (Figure 4.11). Such a decrease in the more mature 20-24 age group cannot be due to delayed completion of schooling, instead there appears to be a real decline in the proportion of younger female migrants who had successfully completed elementary school.

All of the females aged 15-19 were recent arrivals (1970-74);(2) 80 per cent of the 20-24 age cohort arrived in the 1970s; only 46 per cent of the 25-29 age group were recent arrivals. The young adult female inmigrants who arrived in Surabaya during the 1970s appear to be less well educated than their predecessors now in the 25-29 age group. This trend is contrary to the overall improvement in education which has occurred in Indonesia since independence, and suggests that recent female migrants have been negatively selected in comparison with earlier arrivals. Other factors may be confounding this relationship, however, given the increased proportion of recent female arrivals coming to Surabaya from rural areas of Java, and the consistent educational differential in favour of migrants from urban origins (Figure 4.12). In addition, unlike earlier migration flows, recent flows of female migrants contained a significant proportion of short-term migrants who may not have been as well educated as permanent immigrants. These factors will

(1) Indonesian children are required to begin elementary schooling at the age of 7 years, and since it continues for 6 years they should complete their elementary schooling at 13. However, the initial enrolment is sometimes delayed, and if this occurs, or if a student fails more than one year, then successful graduation may not be completed by the time the child has reached the age of 15 or 16, which of course depresses the proportion of elementary level graduates in the 15-19 age group (R. Daroesman, pers. comm., 1979).

(2) Since only those migrants who were aged 15 or over at the time of their migration were interviewed, all of the age cohort must have arrived in the 1970s.
Figure 4.11:
Percentage of Male and Female In-Migrants Completed Elementary School at Time of Migration, by Age in 1974

Ratios 1.9 1.7 1.4 2.0 1.3 2.3 0.7 2.2 1.5

Source: Questionnaire Survey
Figure 4.12:
Educational Attainment of In-Migrants at Time of Migration by Rural or Urban Character of Previous Place of Residence by Sex and Age in 1974

[Bar charts showing educational attainment of in-migrants by rural or urban character of previous place of residence, sex, and age group (15-39 and 40+).]

Source: Questionnaire Survey.
be considered in a subsequent discussion of the educational selectivity of male and female inmigrants from East Java.

There was a marked difference between the sexes in the proportion who had completed elementary education. Female migrants were less well educated than males at every age except in the 45-49 age group, where the smaller absolute numbers created erratic jumps in the percentage distribution (Figure 4.11). Contrary to the finding among the general population, that 'sex inequality in education has also lessened dramatically over time' (Jones, 1976: 48), it appears that among migrants to Surabaya, sex inequality in education has remained relatively constant, at the continued expense of female migrants. If the ratio\(^1\) of the proportion of male and female elementary school graduates is compared between age groups then, overall, the differential has remained fairly constant (Figure 4.11).

When these findings are compared to the work of Jones' two conclusions emerge. First, even among older migrants there was never anything like the huge educational differential between the sexes which Jones has noted among the total population, with ratios in excess of 5:1 existing among the 50-54 age cohort in East Java in 1971 (1976: 51). This suggests that during the colonial period when most of the older female migrants of today first entered Surabaya, female migrants were more positively selected than male migrants, if the differential between the educational status of the sexes in their source regions is considered. On the other hand, the young (15-19, 20-24 age cohorts, Figure 4.11) and recent female migrants of the seventies appear to be more disadvantaged in comparison to male migrants than the sex differential in educational status in their source regions would suggest. For example, the ratios of the proportion of male and female elementary school graduates in the 15-19 and 20-24 age groups in Figure 4.11 are 1.9 and 1.7, respectively. Comparable ratios for East Java in 1971 were 1.3 and 1.3, though the ratios were higher in Central Java, at 1.4 and 1.7, respectively (Jones, 1976: 51).

---

(1) Calculated as shown in Figure 4.11 to enable direct comparison with the findings of Jones (1976: 51).
4.4.2 Ethnic Origin, Religion and Educational Attainment

Statistical analysis revealed a significant association between the ethnic origin of migrants and their level of educational attainment at time of migration. Ethnic groups from the Outer Islands\(^1\) (described in Table 4.6 as 'other indigenous ethnic groups') had the highest educational qualifications; the Madurese had the lowest, 63 per cent of their number having had no formal education (Table 4.6). Foreign ethnic groups (comprised predominantly of ethnic Chinese) and the Javanese were in an intermediate position educationally, though the foreign suku were slightly better educated. These results suggest that the educational attainments of migrants from each ethnic group have mirrored the levels of educational attainment in their source areas. For example, the four kabupaten which comprise Madura were among the kabupaten with the lowest primary school participation rates in East Java during 1973 and 1975 (Heneveld, 1978: 77-9). Interestingly, if land tax (IPEDA) per capita is used as an index of economic prosperity\(^2\), then the four kabupaten which comprise Madura were the poorest kabupaten in all of East Java in 1975 (Heneveld, 1978: 77-9). In comparison, Jones' work reveals the higher educational standards attained by the populations of most of the provinces in the Outer Islands in comparison to Java in 1971 (1976: 51).

In view of earlier comments it is important to examine whether the educational differential between the major ethnic groups persists if the age in 1974 and sex of immigrants is considered. When male migrants aged between 15 and 34 are examined, the educational differential between migrants of different ethnic origin is not

\(^1\) This description is correct with the exception of the Sundanese, who were also included in the 'other indigenous ethnic groups' category. Refer to Table 4.3 for details of the ethnic groups included in this category.

\(^2\) Refer to Heneveld (1978: 64-5, 77-9) and Booth (1974) for more details of Ipeda and its use as an index of economic prosperity.
<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Ethnic grouping</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Javanese</td>
<td>Madurese</td>
</tr>
<tr>
<td>No formal education</td>
<td>19.9</td>
<td>63.0</td>
</tr>
<tr>
<td>Some elementary education</td>
<td>26.9</td>
<td>16.4</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>22.3</td>
<td>6.9</td>
</tr>
<tr>
<td>Completed junior high school</td>
<td>19.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Completed senior high school or attending academy or university level courses</td>
<td>11.6</td>
<td>9.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>N</td>
<td>431</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Questionnaire survey.
statistically significant,\(^{(1)}\) whereas there is a significant educational differential by ethnic origin among male migrants aged 35 or more in 1974. This result indicates that though earlier migrant flows (consisting mostly of migrants aged 35 or more in 1974) accurately reflected the educational differentials between suku existing within colonial Indonesia, more recent flows reflect the decreased size of the differentials, at least among male migrants. The single most important explanation for the elimination of the differential among younger migrants, however, was an improvement in the educational standards of Madurese migrants. Of the male Madurese migrants aged 35 or more in 1974, none had successfully completed primary school at the time of their migration. Among the 15-34 age group of more recent migrants, 69 per cent were primary school graduates or better.

Both younger (15-34) and older (35+) female migrants exhibit significant educational differentials according to ethnic origin. It appears that unlike male migrants from disadvantaged ethnic origins, female migrants have been unable to avail themselves fully of the improved educational facilities developed since 1949. It is also likely that the persistence of the educational differential among young female migrants has been aided by the recent migration to Surabaya of disadvantaged and short-term female migrants from rural areas of East Java.

If the relationship between educational attainment and the religion of migrants is examined with sex and the age of the migrants in 1974 standardised, the results are almost identical with those just described in the discussion of ethnicity and religion. The small number of Confucians, Buddhists and Hindus meant that the comparison had to be between Muslims and non-Muslims. It was found that among the younger (15-34) male migrants educational status did not vary significantly between Muslims and non-Muslims, though a higher

---

\(^{(1)}\) For the analysis of educational attainment and ethnicity, and for the analysis of educational attainment and its association with religion, the age categories of 15-34 and 35 and over were used, since they provided a more even spread between categories than the generally adopted 15-39 and 40 and over groupings.
proportion of non-Muslims successfully completed senior high school. Among older male migrants (aged 35 or more in 1974) there was a statistically significant difference between Muslims and non-Muslims. Christians possessed the best educational qualifications: 31 per cent of their number having completed senior high school level studies, again a reflection of educational differentials according to religion in colonial times. The Muslim migrants ranked next at the higher levels of education, though the Confucians ranked better than the Muslims at the lower levels.

Among the younger (15-34) and the older (35+) female migrants, educational attainment varied to a statistically significant degree between Muslims and non-Muslims, with the Christians being more numerous at the higher levels of education. For example, almost 44 per cent of the younger Christian female migrants were graduates of senior high schools, compared to a mere 12 per cent of the younger female migrants of the Islamic faith. These results are very similar to those obtained in the analysis of ethnicity and religion.

Both sets of results emphasise that educational differentials according to religion and ethnicity are more marked among the generations of migrants educated in colonial times than among these educated since independence. However, the improvement in the equality of educational opportunities between migrants from different suku and religions has been restricted to male migrants. Some of the educational inequality among female migrants has been reduced since independence, but even among the post-independence educated generation of female migrants, migrants who were Javanese, Madurese or of the Islamic faith were relatively underprivileged with regard to educational qualifications, compared to Outer Island, peranakan Chinese and Christian migrants.

Jones (1976: 48-55) has made similar observations on a nationwide basis and also noted the effect on female labour force participation rates; Christian women usually entering the workforce at a younger age than Muslim women. (1) This analysis has shown that

---

(1) Jones discussed the effects of education and religion on women's employment in the draft version of his paper, but the discussion was excluded from the published paper.
the same educational inequalities according to ethnicity and religion, which have occurred between regions and over time nationally, have been reflected in the educational attainment of Surabaya's inmigrant population.

4.4.3 Educational Attainment and Period of Migration

McCutcheon (1976: III, 23-9) has concluded that recent migrants who arrived in Surabaya in the five years prior to her survey in early 1975 were better educated than earlier arrivals. McCutcheon (1976: III, 28) claims that there are two reasons for the improvement in educational standards: the dramatic improvement in educational standards across Indonesia in recent decades, the results of which are most obvious in the young, who account for a large proportion of migrants; and 'to a new stream of older, highly educated migrants moving to Surabaya in the last five years' (1976: III, 28).

According to McCutcheon (1976: III, 27) this 'stream' consisted of relatively mature males aged 35-39 when they first arrived in Surabaya during the early 1970s. McCutcheon (1976: III, 27) maintains that they were better educated than younger male migrants who enjoyed wider educational opportunities overall, and suggests that they may comprise experienced and well educated managerial elites drawn to Surabaya by industrial expansion in the 1970s.

Although results from this study support the general contention that recent migrants were better educated than earlier arrivals (Table 4.7), the improvement in educational attainment was not universal. Female inmigrants of the 1960s were better educated at the higher and lower levels of educational attainment than the female arrivals of the 1970s. However, when the contrasting age distributions of migrants in the major migration flows are standardised, differences in educational attainment by period of migration disappear for all except one of the migrant cohorts (Table 4.8). Differences in educational attainment by period of migration, though real and significant, reflect general improvements in educational opportunities throughout Indonesia since independence rather than marked changes in the educational selectivity of inmigrants. One migrant cohort was the exception to this rule: male
<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Some elementary education</td>
<td>10.0</td>
<td>9.6</td>
<td>29.3</td>
<td>40.4</td>
<td>34.4</td>
<td>23.5</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>32.5</td>
<td>30.2</td>
<td>29.3</td>
<td>17.3</td>
<td>16.9</td>
<td>22.4</td>
</tr>
<tr>
<td>Completed junior high school</td>
<td>25.0</td>
<td>32.5</td>
<td>15.5</td>
<td>11.5</td>
<td>11.5</td>
<td>14.3</td>
</tr>
<tr>
<td>Completed senior high school or attending academy or university</td>
<td>27.5</td>
<td>20.5</td>
<td>13.8</td>
<td>1.9</td>
<td>14.9</td>
<td>15.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Questionnaire survey.
<table>
<thead>
<tr>
<th>Educational attainment and sex</th>
<th>Migrants aged 15-39 in 1974</th>
<th>Migrants aged 40 and over in 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Period of first entry 1970-74</td>
<td>Period of first entry 1970-74</td>
</tr>
<tr>
<td><strong>MALE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>5.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Some elementary education</td>
<td>10.5</td>
<td>5.6</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>28.9</td>
<td>30.6</td>
</tr>
<tr>
<td>Completed junior high school</td>
<td>26.4</td>
<td>36.0</td>
</tr>
<tr>
<td>Completed senior high or</td>
<td>28.9</td>
<td>22.2</td>
</tr>
<tr>
<td>attending academy or university</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>38</td>
<td>72</td>
</tr>
<tr>
<td><strong>FEMALE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>18.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Some elementary education</td>
<td>35.5</td>
<td>23.5</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>18.1</td>
<td>25.9</td>
</tr>
<tr>
<td>Completed junior high school</td>
<td>12.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Completed senior high school</td>
<td>16.0</td>
<td>14.8</td>
</tr>
<tr>
<td>or attending academy or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>university</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>138</td>
<td>81</td>
</tr>
</tbody>
</table>

Source: Questionnaire survey.
inmigrants aged 40 or over in 1974 (Table 4.8). Immigrants in this cohort who entered Surabaya in the 1950s were significantly better educated than other male migrants aged 40 or over who moved to Surabaya in the 1960s or before 1950. In terms of educational attainment, male migrants who moved to Surabaya in the 1950s were more positively selected than earlier or later migrants. The reason for the educational selectivity of male arrivals of the 1950s was the takeover of the colonial administration and some foreign companies by Indonesian authorities after December 1949. This necessitated the large scale transfer of educated civil servants from other urban centres throughout Indonesia to Surabaya, the second largest city and a major military, industrial and commercial centre of the newly independent nation.

In an attempt to identify the elite flow of well educated male migrants which McCutcheon (1976: III, 26-8) suggests moved into Surabaya in the early 1970s, the data presented in Table 4.8 were examined by five year age groups and five year periods of first entry. There was no evidence of such an elite flow of immigrants among the migrants sampled in this study. According to my data, male migrants who moved into Surabaya in the early 1970s at the age of 35-39 were poorly educated relative to other male migrants.

Although recent migrants to Surabaya are better educated than earlier arrivals almost all of the educational improvement is a function of the general widening of educational opportunities in Indonesia since independence. There is no evidence to suggest that, in terms of educational attainment, recent migrants have been more positively selected than their predecessors; indeed, male migrants in the immediate post-independence years were the most positively selected immigrants (Table 4.8).

4.4.4 Educational Selectivity of Inmigrants from East Java

In this section the educational qualifications of immigrants from East Java are compared to the educational qualifications of the total population of East Java according to the 1971 Population Census (Series E), in an attempt to assess the educational selectivity of the
inmigrant population. The educational selectivity of migrants from other major source regions should be assessed also, but because of the need to standardise educational attainment by the age and sex of the inmigrants and the urban or rural status of their previous place of residence, the inmigrant population from East Java was the one migrant cohort with sufficient numbers to permit analysis (N=435, Figure 4.13).

The age-specific educational attainments of male and female inmigrants from rural and urban previous places of residence in East Java are compared with the educational attainments of the total resident population of rural and urban East Java in Figure 4.13. Of the 31 age groups compared in Figure 4.13, all except five showed inmigrants of that age cohort were either better educated or at least as well educated (in terms of the proportion who had completed elementary school) as their source populations. If the educational attainments of migrants and the total East Java population are compared at the lower and upper levels of educational attainment, inmigrants again emerge as a positively selected group (Table 4.9). Persons without formal education were more numerous among the rural or urban populations of East Java than they were among migrants from these two source regions to Surabaya. Persons with a senior high school certificate were more common among migrants than they were among the populations of rural and urban East Java (Table 4.9). Clearly, the vast majority of migrants were educationally superior or equal to their source populations.

This finding agrees with most research opinion from the Third World (Connell, et.al., 1976: 59-61; Caldwell, 1969: 65; Pryor, 1975: 16-7). Hugo (1975a: 357, 261-2) and Mowat (1977: 54) came to a similar conclusion about migrants to Jakarta, though Hugo's data were not standardised by age. Explanations usually advanced for the positive educational selectivity of migrants focus around two themes. First, that the educational process itself, by increasing aspirations among those it educates, actually induces migration, although Connell et.al. (1976: 64-5) argue that in the absence of employment prospects in alternative locations, education alone cannot for long induce significant rates of migration. Nevertheless, in the sense that education 'makes it easier for the student than the non-student to
Figure 4.13: Educational attainments of migrants from rural and urban East Java at time of migration compared to residents of rural and urban East Java, by age* and sex

Educational Attainments of Migrants from Rural and Urban East Java at Time of Migration Compared to Residents of Rural and Urban East Java, by Age* and Sex

(a) Males - Rural East Java

(b) Females - Rural East Java

(c) Males - Urban East Java

(d) Females - Urban East Java

Notes: *Age of migrants refers to age at time of questionnaire survey in 1974, whereas age of residents refers to age at the time of the 1971 census enumeration.
**This profile of all immigrants included:
122 permanent in-migrants, 42 short-term in-migrants (who intended to leave Surabaya before 1980), and 36 in-migrants who did not indicate intended duration of residence.

Source: Questionnaire survey, 1974; 1971 Population Census, Series E, East Java
TABLE 4.9 - Proportion of inmigrants from rural and urban areas of East Java who had no formal education or had completed senior high school at time of migration, compared to proportion of total population with similar educational attainments, by sex and age group

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age group*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-39</td>
<td>40 &amp; over</td>
</tr>
<tr>
<td>RURAL EAST JAVA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of immigrants with no formal education</td>
<td>14.6</td>
<td>40.7</td>
</tr>
<tr>
<td>Proportion of rural population of East Java with no formal education</td>
<td>31.2</td>
<td>64.2</td>
</tr>
<tr>
<td>Proportion of immigrants successfully completed senior high school or tertiary studies</td>
<td>12.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Proportion of rural population of East Java successfully completed senior high school or tertiary studies</td>
<td>1.8</td>
<td>0.3</td>
</tr>
<tr>
<td>URBAN EAST JAVA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of immigrants with no formal education</td>
<td>2.6</td>
<td>28.6</td>
</tr>
<tr>
<td>Proportion of urban population of East Java with no formal education</td>
<td>9.8</td>
<td>32.7</td>
</tr>
<tr>
<td>Proportion of immigrants successfully completed senior high school or tertiary studies</td>
<td>28.6</td>
<td>14.3</td>
</tr>
<tr>
<td>Proportion of urban population of East Java successfully completed senior high school or tertiary studies</td>
<td>15.9</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Note: * The age of inmigrants refers to their age at the time of the questionnaire survey in 1974, whereas the age of the source area populations of East Java refers to their age at the time of the 1971 census.

conceive of removing himself from the environment in which he is familiar' (Sabot, 1972: 32 quoted by Connell et al., 1976: 64), education helps select who migrates. The second way in which education affects the selection of migrants is that educational qualifications increase the employment opportunities of those who possess them, particularly in the formal and government sectors of a city's economy.

The second major finding was that male and female migrants from urban settlements had a more consistent educational advantage at all ages in comparison with the population of their source area than migrants from rural areas (Figure 4.13). The educational advantage of urban migrants was evident among even older migrants (1) who had fewer educational opportunities.

One reason for the consistency of the educational advantage enjoyed by urban migrants was Dutch colonial policy, which provided enough schools in the urban areas to enable significant numbers of Indonesians to complete primary or junior high school. In rural areas the number of older migrants who completed primary school was extremely small (Figure 4.13). The existence of a numerically significant educated population in urban centres in colonial times meant that when opportunities for migration did arise, there were enough educated persons in the urban areas to allow educational selectivity within migration flows. A second reason for the educational selectivity of urban migrants is that urban settlements contain most of the population employed in the 'modern' or 'formal' sector of the economy. Educational qualifications are usually necessary to obtain entry into the formal sector but once employed, a person's chances of migration by transfer to another urban centre such as Surabaya, are automatically increased by the well-developed linkages between the major urban centres. Thus the type of employment opportunities open to formally educated persons in the urban centres also induce migration to other urban centres such as Surabaya, for those with adequate educational qualifications.

---

1 If the more erratic 'bumps' in the profile of male migrants are ignored, since they merely reflect the smaller absolute number of migrants in the older age groups.
A third reason for the educational advantages of urban migrants is suggested by the opinions held by immigrants about their living standards prior to migration:

<table>
<thead>
<tr>
<th></th>
<th>Rural immigrants</th>
<th>Urban immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Below average</td>
<td>43.2</td>
<td>47.3</td>
</tr>
<tr>
<td>Average</td>
<td>51.5</td>
<td>49.7</td>
</tr>
<tr>
<td>Above average</td>
<td>5.3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Immigrants from rural areas were more likely to regard themselves as economically disadvantaged than immigrants from urban places. This difference was reflected in the incidence of education related moves. Six per cent of the male and two per cent of the female migrants from rural areas said they moved to Surabaya for education related reasons; the proportions among urban migrants were 28 per cent and 11 per cent, respectively. This implies that most rural migrants were probably too poor to aspire to educational qualifications above those available in their local school. On the other hand, a significant proportion of the urban migrants moved to Surabaya intent on continuing their education, and a migration flow which contains a significant proportion of such migrants must be highly selective in terms of educational attainment (Figure 4.13 and Table 4.9).

In contrast to the immigrants from urban areas, male and female immigrants from rural areas ceased to enjoy any educational advantage relative to their source populations once they reached the ages of 34 and 39, respectively (Figure 4.13). One reason for the lack of educational selectivity among older immigrants from rural areas has been alluded to: the general inadequacy of educational facilities in rural areas during colonial times when older immigrants were educated. The effects of colonial neglect are obvious in Figure 4.13, where the proportion of the total rural population of East Java who have successfully completed primary school is 10 to 19 per cent among the males aged 40 and over, and less than 5 per cent among the females aged 40 and over. Indeed, a remarkable 81 per cent of the female population of rural East Java aged 40 or over had no formal education in 1971 (Table 4.9).
A second reason for the lack of educational selectivity among the older migrants, who were also to a large extent the earlier inmigrants from the rural areas of the province, is that many of these migrants were deliberately recruited to provide either coolie labour on the wharves or domestic help in the home. Rural inmigrants recruited for such tasks during Dutch colonial rule and the Japanese occupation did not need a formal education. Dutch-owned businesses, however, required educated and trained staff for their major offices in Surabaya, and these were recruited from branch offices of the companies located in urban centres of East Java.

The analysis of educational selectivity also revealed that though young male migrants from rural areas are educationally more positively selected relative to their source population than older and earlier migrants (Figure 4.13a); young female migrants from rural areas (all inmigrants, Figure 4.13b) are less positively selected relative to their source population than female inmigrants aged 25-39. The smaller educational differential among younger females is due to the inability of the young inmigrants to improve their educational qualifications to the same extent as young females in rural East Java (Figure 4.13b).

The reason for the unusually low educational selectivity of the young (15-19 and 20-24) and recent female migrants from rural areas is that they were the only migrant cohort which comprised a large proportion of short-term inmigrants who intended to leave Surabaya before 1980. As Hugo (1975a: 362) predicted in Jakarta, most short-term or circular migrants had little formal education. For example, 75 per cent and 100 per cent of the short-term female migrants aged 15-19 and 20-24, respectively, had failed to successfully complete elementary level schooling compared with 50 per cent and 36 per cent of the permanent female inmigrants in the same age cohorts. The critical role played by short-term migrants in depressing the educational qualifications of the 15-19 and 20-24 age cohorts is evident when the educational qualifications of the 122 permanent female inmigrants from rural areas are graphed separately (Figure 4.13b, refer permanent inmigrants). Without the 42 short-term migrants and the 36 migrants who did not specify their intended
duration of residence, the age-specific educational profile of female migrants indicated increased educational differentials among younger age groups, and the overall profile resembled that exhibited by male migrants from rural areas of East Java (Figures 4.13a and 4.13b).

4.5 OCCUPATIONAL STATUS, SEX AND MARITAL STATUS OF IMMIGRANTS

The classification of occupations has been designed to provide a hierarchy arranged according to relative socio-economic status. The relative position of a specific occupational category has been determined by the formal skills required by members of that occupation, the relative earning power of its members, and the social prestige and political power which they possess. At least to the level of 'small scale pedlars and traders' it conforms closely with Friedmann and Sullivan's (1974: 388) model of urban employment in a developing economy. However, persons not in the workforce, such as pensioners, students and housewives, have been included, along with farmers and farm labourers, to provide some idea of the activities of all immigrants prior to migration (Table 4.10).

The occupational status of male and female immigrants prior to departure for Surabaya is presented in Table 4.10. The young age at which most immigrants departed for Surabaya (Figure 4.4) is reflected in their occupational status: almost 22 per cent of all future immigrants were in schools or other educational establishments prior to migration; another 20 per cent classed themselves as not working, but of these only a minority stated they had spent one week or more of their time looking for work. This implies that the 'not working' category included many young adults who had recently completed school and not yet begun the task of searching for employment or, in the case of young females, were engaged in home duties, but preferred to state they were not employed. The Urban Unemployment Survey (Universitas Indonesia, Lembaga Demografi, 1972: 10-1) observed this practice among males in the major cities of Jakarta, Surabaya and Bandung; the survey report commented: 'It is noteworthy that about 10 per cent of males aged 15-19, and about 6 per cent of males aged 20-24 were recorded as neither working, looking for work or in school during the reference week'. My survey among
### TABLE 4.10 - Occupational status of male and female immigrants prior to departure for Surabaya

<table>
<thead>
<tr>
<th>Occupational status*</th>
<th>Adult immigrants**</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males N %</td>
<td>Gender</td>
<td>Females N %</td>
<td>Excluding home duties N %</td>
<td>TOTAL N %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heads of government departments/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>private companies/large-scale entrepreneurs</td>
<td>1 -</td>
<td>- -</td>
<td>-</td>
<td>1 -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-medium level clerical,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>administrative, technical and teaching employees/medium-scale entrepreneurs</td>
<td>25 11</td>
<td>13 4</td>
<td>5</td>
<td>38 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary ranks and junior officers of armed forces and police</td>
<td>15 7</td>
<td>- -</td>
<td>-</td>
<td>15 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled craftsmen and artisans (trained on the job)</td>
<td>12 5</td>
<td>3 1</td>
<td>1</td>
<td>15 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>8 3</td>
<td>8 2</td>
<td>3</td>
<td>16 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small-scale pedlars or traders</td>
<td>7 3</td>
<td>22 6</td>
<td>8</td>
<td>29 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory labourers</td>
<td>1 -</td>
<td>2 1</td>
<td>1</td>
<td>3 -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers and farm labourers</td>
<td>49 21</td>
<td>74 20</td>
<td>29</td>
<td>123 21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>37 16</td>
<td>84 23</td>
<td>32</td>
<td>121 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 week looking for work</td>
<td>(9) (48)</td>
<td>(57)</td>
<td>(15)</td>
<td>(34)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4 weeks looking for work</td>
<td>(7) (8)</td>
<td>(15)</td>
<td>(15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;4 weeks looking for work</td>
<td>(8) (7)</td>
<td>(15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failed to specify time spent looking for work</td>
<td>(13) (21)</td>
<td>(34)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home duties</td>
<td>- -</td>
<td>104 29</td>
<td>-</td>
<td>104 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>76 33</td>
<td>53 15</td>
<td>20</td>
<td>129 22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>231 99@</td>
<td>363 99@</td>
<td>99@</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * The hierarchy proceeds in descending order until the not working category is reached, the 'student' and 'home duties' categories being activities outside the labour force. The immigrants who were still students at the age of 14-15 just prior to their migration, tend to be of a high socio-economic status.

** Immigrants aged 15 or over at time of migration.

@ Totals do not equal 100 per cent due to rounding.

Source: Questionnaire survey.
Surabaya's inmigrant population suggests that a similar group of young future inmigrants who were neither working, looking for work, nor in school existed in the major migrant source areas of Surabaya. An exceptionally large proportion of females said they were 'not working' prior to migration, suggesting the proportion of females engaged in home duties is seriously under estimated in Table 4.10. This appears likely since only wealthy families can afford hired domestic labour.

A significant proportion of the future inmigrants were engaged in farming activities, either as owner-operators or else as farm labourers (Table 4.10). Other migrants were either self-employed or non-paid workers in small family enterprises in the informal sector, where they engaged in small-scale trading, particularly of foodstuffs in the local market or at portable food stalls (warung) on the roadside. Other inmigrants, taught a skill by parents or friends, set themselves up in business in the informal sector. This latter group has been classed as semi-skilled craftsmen and artisans in Table 4.10, since they possess marketable skills. On the other hand, unskilled labourers or factory labourers were usually employed by large private or government companies in the more capital-intensive formal sector.

The proportion of migrants engaged in occupations which could be described as skilled in the Indonesian context (such as low-to medium-rank clerical jobs which require literacy and therefore a formal education) was relatively small, and the proportion in more senior skilled positions was even smaller. Even if members of the armed forces and police are included in the skilled category, a mere 9 per cent of all inmigrants were employed in skilled occupations at the time of their departure for Surabaya (Table 4.10: first three categories combined). These findings suggest that the occupational status of most inmigrants prior to their migration was relatively low. However, if the 'not working' who were not looking for employment, students, and those engaged in home duties are excluded on the grounds that they are not normally regarded as members of the workforce, the proportion of inmigrants in skilled occupations increases to 20 per cent.
If the 104 females engaged in home duties prior to migration are excluded from the comparison of the occupational status of male and female inmigrants, females show up as underprivileged in occupational status, with only five per cent of their number employed in the top three categories requiring skilled personnel compared to 18 per cent of the males (Table 4.10). Thirty-two per cent of the females not engaged in home duties stated they were not working, twice the proportion of males in that category. The proportion of females involved in small-scale peddling was almost three times that of the males, and the proportion employed in unskilled labouring jobs which may be expected to show a bias in favour of men, was almost the same as that of males. Even if allowance is made for an overstatement of the number of females not working in comparison to the male inmigrants, females were heavily concentrated in either the less privileged occupations, or else not working. The lower socio-economic status of female inmigrants and their relative lack of education in comparison to males was reflected in the lower proportion of females attending educational institutions prior to migration.

The proportion of females involved in farm activities was larger than the proportion of males, illustrating the important role played by women in farm activities in rural Java. Approximately half the male inmigrants engaged in farming worked on self-operated farms or farms operated by family members, compared to 64 per cent of the females engaged in farming. Among recent inmigrants who were farmers before migration only 11 per cent of the males and 19 per cent of the females possessed either ownership or rental rights in their last place of residence during the six months prior to their migration; and of the small number with some form of land rights, 67 per cent had rights to less than 0.5 hectares of land. According to Sajogyo (cited by Palmer, 1977: 223) 0.5 ha is not enough land to support a family without off-farm income, even if it is all good quality sawah and the farmer has nominal access to the new technology of high-yielding rice varieties and modern fertilisers. It appears the majority of the

(1) Palmer (1977: 223) gives some emphasis to the problem of indebtedness among small farmers, which she claims is a major reason why farms of less than 0.5 ha cannot fully participate in the new technology nominally available to them.
immigrants who stated they were farmers prior to migration were small farmers or landless farm labourers struggling to obtain a livelihood in increasingly crowded and under-productive village economies, in which 'working hours must become even longer if the meagre level of subsistence is not to decline' (White, 1976: 286). The low socio-economic status of migrants involved in farming is emphasised by their low level of educational attainment: 77 per cent of the males and 92 per cent of the females failed to complete primary school successfully prior to migration, failure rates twice that of the total male and female immigrant populations.

A comparison of the occupational status of the major marital cohorts reveals that the younger never-married males and females were overwhelmingly concentrated in either the 'student' or the 'not working' categories (Table 4.11). The female never-married cohort, however, was underprivileged in comparison with the male, having a smaller proportion of students (consistent with the earlier school leaving age of females) and higher proportions in the categories 'not working', 'small-scale pedlars', and 'unskilled labourers'. Married males, in keeping with their relative seniority, were more concentrated in the skilled occupations than their younger counterparts. The male marrieds were split among skilled occupations, farming, and semi-skilled or unskilled occupations in the informal sector, with a small minority being able to afford not to work, though this was probably a temporary state prior to migration.

Most married females were engaged in home duties, but 10 per cent classed themselves as farmers or farm labourers, indicating the importance of farm labour, even to older women. Five per cent of married females were small-scale pedlars, four per cent were employed in skilled occupations, and another one per cent worked as semi-skilled artisans.

Without a spouse to assist in their financial support, most widowed, divorced or separated female immigrants were gainfully employed prior to migration, though a significant proportion of widows, some of whom were elderly, were not working (Table 4.11). As a group, the widowed, divorced or separated female migrants appear
TABLE 4.11 - Occupational status of adult* inmigrants prior to departure for Surabaya by sex and marital status

| Occupational status | Males | | | Females | | | Divorced/ | | | Separated | |
|---------------------|-------|---|---|---------|---|---|---|---|---|---|
|                     | %     | % |   | %       | % | Widowed | % |   |   |   |
| Heads of government departments/private companies/ large-scale entrepreneurs | -     | 2 |   | -       | - | - |   | - |   | - |
| Low-medium level clerical, administrative, technical and teaching employees/medium-scale entrepreneurs | 8     | 19|   | 3       | 4 | - | 3 |   |   |   |
| Ordinary ranks and junior officers of armed forces and police | 4     | 13|   | -       | - | - |   | - |   | - |
| Semi-skilled (trained on-the-job) craftsmen or artisans | 2     | 14|   | 1       | 5 | 3 |   |   |   |   |
| Unskilled labourers | 2     | 5 |   | 4       | 5 | 3 |   |   |   |   |
| Small-scale pedlars or traders* | 2     | 5 |   | 4       | 5 | 14| 13|   |   |   |
| Factory labourers | 1     |   |   | -       | - | - | 5 |   |   |   |
| Farmers and farm labourers | 17    | 32|   | 23      | 10| 29| 46|   |   |   |
| Not working - | | | | | | | | | | |
| Didn't look for work | (6)   | (-)|   | (18)    | (9)| (19)| (8)|   |   |   |
| Looked for work | (8)   | (2)|   | (9)     | (1)| (5)| (-)|   |   |   |
| Didn't specify details of search for work | (6)   | (5)|   | (8)     | (3)| (14)| (5)|   |   |   |
| Home duties | -     |   |   | 1       | 61| 9 | 15|   |   |   |
| Students | 44    | 3 |   | 30      | 6 |   |   |   |   |   |
| T O T A L | 100   | 100|   | 100     | 100| 100| 100| 101@|   |   |
| N | 167   | 62|   | 148     | 155| 21 | 39|   |   |   |

Notes:  
* Inmigrants aged 15 or over at time of migration.  
** No male inmigrants were widowed at time of migration, and only two were separated or divorced.  
@ Total does not equal 100 per cent due to rounding.  
Source: Questionnaire survey.
more economically disadvantaged than any other group prior to migration, and 14 per cent of the widows and 13 per cent of the divorced or separated females found it necessary to engage in petty trade. Higher proportions were employed in farming activities, most as farm labourers.

Total monthly incomes were requested of all recent inmigrants (1969-74 arrivals). Because of the high proportion of persons in either the 'not working' student, or home duties occupational categories, and also because of problems involved in the estimation of the value of subsistence farm production, the data are of limited value (Table 4.12). However, monthly income data are available for 17 of the 28 recent female migrants who were divorced or separated prior to migration. In addition, enough of the other recent migrants supplied monthly income data to obtain an approximate idea of the income of never-married females, all recent female migrants and all recent male migrants.

The most important observation is the absolute poverty of inmigrants prior to migration to Surabaya. According to these data, which must be treated with caution because of the small number of observations, male inmigrants who were gainfully employed received an average monthly income from all occupations (both in cash and goods), of Rp.9,230. Females received just over one-third of this figure, Rp.3,559 per month. At current exchange rates the monthly incomes totalled A$19.03, and A$7.34 respectively, for males and females.

Female income per day (Rp.119) was below the average income in the region of origin of the poor of Jakarta (Rp.145), sampled in an interview survey in 1972 (Papanek, 1975: 5). On the other hand, the mean daily income of male inmigrants (Rp.308) was twice that of the poor of Jakarta prior to their move to the city. Lacking information on the number of dependants and the total family size of income earners, and without the ability to standardise by age and sex, these data cannot be compared to the Indonesian per capita income figure which was estimated at over Rp.40,000 per annum in 1972 (Papanek, 1975: 3). According to estimates by Papanek (1975: 3), however, income earners among the urban poor had a daily income (Rp.250) less
TABLE 4.12 - Monthly income of recent (1969-74) adult immigrants prior to departure for Surabaya

<table>
<thead>
<tr>
<th>Monthly income in Rupiah*</th>
<th>Never-married female immigrants</th>
<th>Divorced or separated female immigrants</th>
<th>All female immigrants</th>
<th>All male immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Unpaid family workers**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3,000</td>
<td>9</td>
<td>35</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td>3,001 - 6,000</td>
<td>5</td>
<td>19</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>6,001 - 9,000</td>
<td>7</td>
<td>27</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Over 9,000</td>
<td>4</td>
<td>15</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>T O T A L</td>
<td>26</td>
<td>100</td>
<td>17</td>
<td>101@</td>
</tr>
</tbody>
</table>

Mean monthly income        | 2,985 | 3,388 | 3,559 | 9,230 |
Mean income per day         | 99    | 113   | 119   | 308   |
Median monthly income       | 1,825 | 2,500 | 3,000 | 7,000 |

Notes:  
* In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp.485=A$1.00 and Rp.415=US$1.00.  
** All unpaid family workers were employed as farmers or farm labourers.  
# There were 157 females and 50 males interviewed in the questionnaire survey of recent immigrants, but many were not gainfully employed and some of those employed did not supply income data.  
@ The total does not equal 100 per cent due to rounding.

Source: Questionnaire survey.
than half of the average for Indonesia. If the average income of all income earners in Indonesia is assumed to be a conservative Rp.500 in 1972 (Papanek, 1975: 3), then recent immigrants who were gainfully employed prior to entering the city were among the poorest groups in the nation. An important qualification is that this finding applies only to those gainfully employed prior to migration. As noted (Table 4.12), a majority of the immigrants to Surabaya were either attending educational establishments prior to migration, not working, or engaged in home duties, and were not gainfully employed. It appears that those who could afford to continue their studies at the ages of 14 or 15 prior to their migration comprise a positively selected group of immigrants. On the other hand, some of the not working group may be more economically disadvantaged in comparison to their source population than most of those gainfully employed.

The second observation from Table 4.12 is that the young never-married female cohort had a lower daily income than divorced or separated females. Some of this differential reflected the younger age structure of the never-married females. Divorced or separated females, however, frequently had dependents to support without outside financial help unlike the young never-married who could obtain assistance from their family, which implies divorced or separated females were more economically disadvantaged. Recently arrived never-married males who were gainfully employed prior to migration had a mean monthly income of almost Rp.11,000 and, in the absence of dependents, appear to be the most economically advantaged cohort. Recent male immigrants who were married prior to migration received a mean monthly income of Rp.8,352, not a high income considering that they probably had several dependents to support. In comparison with divorced or separated females, however, both married and unmarried male migrants were economically advantaged.

(1) The national average income figure is depressed significantly by the lower incomes of the rural population which still constitute over four-fifths of Indonesia's total population. The figure of Rp.500 was arrived at by assuming an average of four dependents per income-earner, and by assuming income-earners worked 300 days per year (Papanek, 1975: 3).
4.6 SUMMARY AND CONCLUSIONS

In this chapter I have examined some of the salient demographic and socio-economic characteristics of immigrants at the time of their migration to Surabaya. Slightly different immigrant populations were sampled by each of the surveys used in this study. The registration survey identified an older and more male dominated de jure immigrant population than the enumeration survey, which provided a better sample of the de facto population of Old Surabaya in 1974.

The majority of immigrants moved to Surabaya as adolescents or young adults; the 15-19 and 20-24 age groups predominated and, overall, 59 per cent of all migrants moved to Surabaya at working ages (15-54 years). Females were more likely to move to Surabaya at the ages of 15-19 and 20-24 than males, because of the concentration of marriage migrations at these ages and because of the high incidence of short-term migrants among young working-age females. Males were more likely to move between the ages of 25-44 than females, because of the high incidence of job-related moves at these ages, but in the older age groups (above 45) females predominated owing to the movement of widows to Surabaya in order to join other family members. Migration was selective of never-married persons of both sexes and of divorced, separated and widowed females.

The sex composition of migration flows has varied with period of migration. During and immediately after the struggle for independence (1945-51) migration flows were dominated by males, but by 1952 the sex composition had changed in favour of females, many of whom were moving to join spouses in Surabaya. Since the late 1960s, female dominance of annual migration flows has increased consistently. Some of the increase can be attributed to a sample bias in the enumeration survey in favour of recent short-term migrants, but when short-term migrants are set aside, the proportion of females in annual migration flows has increased consistently since the late 1960s. Most of the increased female component comprised young females from rural areas of East Java who appear to have moved to Surabaya because of a significant decline in productive employment opportunities for females in rural Java since the widespread adoption
of high-yielding rice varieties and the associated technology in the late 1960s. Research by White (1976), Collier (1978) and Collier et al. (1973; 1974) strongly supports this interpretation.

The rich ethnic and religious diversity of Indonesia has been reflected in migration flows to Surabaya. Since the 1950s, Javanese migrants have become more numerous than in the colonial era, but the overall stock of migrants has a disproportionately large number of Christians and Outer Islanders reflecting historical ties between Surabaya and East Indonesia.

In accordance with the low educational qualifications of the Indonesian population, 57 per cent of the female migrants and 34 per cent of the male migrants had no formal educational qualifications at the time of their move to Surabaya. Nevertheless, most migrants were better educated than the average Indonesian. Since independence in 1949, Indonesia has devoted a large share of its resources to the development of elementary education and as a result younger inmigrants (aged less than 40 in 1974) are more likely to be elementary school graduates than older migrants. Analysis of age and sex-specific levels of educational attainment, however, revealed that sex inequality in education has not decreased among younger inmigrants; female migrants being consistently disadvantaged relative to males at all ages. Since formal educational qualifications are essential if inmigrants are to get high status urban employment, this implies that female migrants will face greater difficulties than males in obtaining high status employment in Surabaya.

The religious and ethnic origins of inmigrants were closely associated with educational attainment; migrants from the Outer Islands, frequently Christians, tended to be better educated than Muslims from Java or ethnic Chinese migrants. Madurese were invariably the most educationally disadvantaged migrants. Educational differentials by ethnic and religious origin persisted among the older male migrants (aged 40 and over) and among all female migrants regardless of age, but were not significant among young male migrants. Regional contrasts in access to education dating from the colonial era have been effectively eliminated among younger male
migrants, but the differentials persist among older male and all female migrants.

Educational qualifications of inmigrants have not varied with period of migration, provided changes in the sex and age composition of migration flows are considered. The exceptional migration flow was comprised of males aged 40 and over in 1974, who arrived in Surabaya in the 1950s better educated than earlier or subsequent arrivals, suggesting that the administrative takeover following independence attracted an elite cohort of migrants.

Evaluation of the age-specific educational selectivity of male and female migrants from urban and rural areas of East Java showed that migrants were better educated than the populations in their source areas. Migrants from urban areas, however, were positively selected more consistently than rural migrants. When considered along with the superior educational qualifications of urban migrants, this implies that urban migrants will have greater access than rural migrants to high-status skilled occupations on arrival in Surabaya. Young female short-term migrants from rural areas in East Java were the most negatively selected inmigrants in terms of educational attainment, which implies they were more adversely affected by recent decreases in productive employment opportunities in rural Java than permanent female arrivals. The lack of educational qualifications suggests that short-term migrants will face more difficulties in obtaining skilled occupations on arrival in Surabaya than permanent female inmigrants.

The majority of inmigrants arrived in Surabaya without non-farm job experience. Only nine per cent of the adult inmigrants were employed in skilled occupations prior to migration, and the level of income earned in their previous place of residence by the small proportion of recent inmigrants with a paying occupation was comparable to that earned by the poor of Jakarta prior to their migration to the national capital. Most recent inmigrants were landless, and the majority of the small proportion which had rights to land possessed title to areas too small to support a family without supplementary off farm income.
Because of differences in socio-economic status prior to migration, immigrants who are male and from urban source areas will probably have the best chance of upward occupational mobility once they arrive in Surabaya. Female immigrants from urban locations will probably enjoy the second-best prospects, followed by male immigrants from rural areas. It would appear that female immigrants from rural locations in Madura or mainland East Java face the most severe problems in attempting post-arrival occupational mobility, though in compensation for these handicaps, few members of these two cohorts arrived in Surabaya without the prior safeguard of promised accommodation or a promised job.
CHAPTER V

OCCUPATIONAL STATUS AND SECTOR OF EMPLOYMENT
OF IMMIGRANTS BEFORE MIGRATION AND
ON FIRST ARRIVAL IN SURABAYA

5.1 INTRODUCTION

In previous chapters I have analysed the origins of inmigrants to Surabaya by examining their geographic origins, migration histories, demographic and socio-economic backgrounds prior to arrival in the city. In this chapter I begin the second and major part of this study, the part which focuses on the questions: has migration to Surabaya resulted in socio-economic or occupational mobility for the individual migrants, which migrants have experienced socio-economic and occupational mobility, and what factors have been responsible for these changes?

Occupational changes which result from migration may be considered in two stages. First, there is the necessary change in occupation which accompanies the physical act of migration, though this may not result in a change in occupational status or a change in the sector of employment. Second, there is the potential occupational change which may occur after an inmigrant has settled in Surabaya. In this chapter and the next I consider the first stage of occupational change, a stage almost completely ignored in migration research. Occupational change resulting from the first stage of migration may be measured by comparing an inmigrant's occupation soon after arrival in Surabaya with his or her occupation before migration. This 'longitudinal' or 'sequential' approach to occupational change is the approach adopted in this chapter and the next. Before occupational change may be assessed, however, it is necessary to determine the occupational characteristics of inmigrants just prior to departure for Surabaya, and on first arrival in the city, and this is the task of this chapter.

Throughout the remainder of this study occupational mobility is measured by changes in the sector or sub-sector of employment, and
by changes in occupational status (measured according to a detailed twelve-category classification on a generalised eight-category classification). Change in the sector of employment is referred to as intersectoral occupational change or intersectoral occupational mobility, when specific reference is required; change in occupational status is referred to as occupational status change or occupational status mobility.

The decision to assess occupational mobility in terms of change in the sector of employment is readily understandable in view of the theoretical significance of the urban dualism model to migration research and labour absorption in major cities of the LDCs, the East Java origins of part of this theory, and the absence of any empirical evaluation of the model in East Java. The use of occupational status to measure occupational mobility, however, requires an explanation. Several writers (such as Mazumdar, 1976) have indicated that the sectoral position of a particular enterprise does not necessarily conform to, or accurately indicate, the relative socio-economic status of the individual employed in that enterprise. Moreover, the four sectors and sub-sectors identified in this study provide only a coarse classification of occupation, and even then, all those outside the labour force at any stage of the migration process are excluded. Since this study wishes to identify the ways in which migration has affected occupational mobility and the relative socio-economic status of individual immigrants, it was necessary to create a second measure of occupational mobility, a variable which would reflect the relative socio-economic status of each major occupational group. The variable created was occupational status; and the remainder of this study will analyse changes in occupational status experienced by immigrants in relation to their socio-economic background, education, previous occupation, ethnicity and other personal attributes. This approach will complement the view of occupational mobility obtained from the intersectoral analysis and provide an indication of the value of Bremen's concept of a fragmented labour market in understanding occupational mobility.

Wherever possible the analyses of occupational mobility will be confined to specific migration flows in an effort to make them
time-specific. As shown by McGee (1971: 168) in Malaysia, the occupational mobility of migrants varies according to the conditions prevailing at the time of migration. Since national independence was achieved during the lifetime of some of the older inmigrants in Surabaya, there is a need to consider migration and the resulting occupational change in its historical context. I have shown that the sex composition and educational attainment of migrants in the major migration flows has changed dramatically since colonial days, and in recent years there is evidence that young females have been forced to leave rural areas in increased numbers because of a decline in productive employment opportunities in agriculture. The composition of migration flows has changed over the years, and so to have the opportunities available to migrants on arrival in Surabaya.

5.2 OCCUPATIONAL STATUS AND SECTOR OF EMPLOYMENT OF INMIGRANTS BEFORE MIGRATION TO SURABAYA

In this section I will provide an overview of the occupational status and sector of employment of inmigrants before migration to Surabaya. This overview serves as a benchmark for later comparative analyses designed to identify changes in the occupational status and sector of employment resulting from migration. The occupational status of inmigrants before their departure for Surabaya has been discussed in relation to migrant selectivity, a discussion which demonstrated the relatively low occupational status of female migrants and migrants from rural locations.

In this section I focus on the activities, industrial groupings, employer status and workforce size of enterprises in which migrants of a particular occupational status were employed prior to migration. I also look at the personal characteristics of inmigrants within the major occupational status categories and examine contrasts in the occupational status of migrants by period of migration. Finally, I describe the operational definitions adopted in this study to classify inmigrants according to their sector of employment, and briefly compare the inmigrants occupied in the various sectors prior to migration.
5.2.1 Occupational Status, Employment Conditions and Personal Characteristics of Inmigrants Before Departure for Surabaya

When inmigrants gainfully employed before migration are considered and their occupational status and employment conditions examined (major activities, industrial grouping, employer and workforce details - Table 5.1), it is apparent that just over half were farmers or farm labourers just before migration. This is not surprising since 69 per cent of the gainfully employed came to Surabaya from places of residence classified as rural. However, the large proportion of farmers or farm labourers is significant for this study, because most were landless labourers or underprivileged small farmers (1) without even an elementary level of formal education (Table 5.2). Indeed, the inmigrants who came to Surabaya from farming occupations were among the most socio-economically disadvantaged inmigrants to arrive in the city; and subsequent analysis indicates that this initial disadvantage affected post-arrival occupational status and mobility.

Sixty per cent of farmers and farm labourers were self-employed or employed by other family members seemingly in a peasant mode of production in which the individual entrepreneur (the family head) is committed to a full utilisation of his total labour supply (that is his family; see Franklin, 1965: 148). In this situation employment seems to have been secure, though three-quarters of the farmers who were self- or family-employed worked for other family members, frequently as unpaid help. In addition, 39 per cent of the migrants who were farmers before migration said they moved to Surabaya solely because of economic hardship or land problems (for example no land rights, available land too small) in their last place of residence, the highest incidence of such problems among any occupational status group (Table 5.2). Furthermore, unlike any other occupational status category, the immediate work experience of farmers and farm labourers was of no value in Surabaya's urban environment,

(1) Details of land rights possessed by inmigrants during the six months before migration were requested only from recent migrants (1969-74 arrivals), but of this cohort, 82 per cent of those engaged in farming or farm labouring had no land rights.
<table>
<thead>
<tr>
<th>Occupational status</th>
<th>N (%)</th>
<th>Major activities</th>
<th>Industrial grouping* (%)</th>
<th>Employer (%)</th>
<th>Workforce* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture</td>
<td>Manufacturing</td>
<td>Transport</td>
<td>Finance &amp; insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction</td>
<td>Retail</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electric &amp; gas</td>
<td>Public transport</td>
<td></td>
</tr>
<tr>
<td>Head govt. department</td>
<td>1 (-)</td>
<td>Head finance division govt. railways</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low-medium level clerical,</td>
<td>42 (18)</td>
<td>Teachers, nurses, office clerks, shop assistants, qualified mechanics, technical specialists, medium scale trader in spices, financier</td>
<td>5</td>
<td>3 33</td>
<td>5 3 31</td>
</tr>
<tr>
<td>technical employees/med.</td>
<td></td>
<td>scale entrepreneurs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary ranks and junior</td>
<td>14 (6)</td>
<td>Members of the army, navy air force and police on active service</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>officers armed forces and</td>
<td></td>
<td>police</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>police</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>15 (6)</td>
<td>Basket maker, bricklayers, tailors, locomotive machinists and firemen, truck driver, carpenter, musician</td>
<td>27 33</td>
<td>33 7</td>
<td>7</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>16 (7)</td>
<td>Domestic servants, building labourers, casual labourers, wood collector, gardener, sailor, restaurant labourer, ironing lady</td>
<td>7 - 27 7 13 - 47</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>25 (10)</td>
<td>Petty traders in the pazaar (market place) or at a wajang (stall) of: vegetables, fruit, fish, rice, cooked food, kitchen utensils, cloth, second hand clothing and a pawnbroker</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Factory labourers</td>
<td>7 (1)</td>
<td>Sugar mill planter, unskilled factory production workers</td>
<td>33 67</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Farmers, farm labourers</td>
<td>123 (52)</td>
<td>Farmers, farm labourers, and goat herders</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All adult immigrants</td>
<td>239</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * Each of the rows total 100 per cent except for errors due to rounding.
<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>Period of migration</th>
<th>Reasons for moving to Suriname</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex ratio (M/F, 1971)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory &amp; farm workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOT WORKING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place of birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place of birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data source</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Questionnaire survey.
which placed them at a disadvantage in the competition for employment. Immigrants who came to Surabaya from a farming background comprised one of the most socio-economically disadvantaged cohorts to arrive in the city.

The proportion of immigrants from relatively low socio-economic backgrounds was boosted by the intake of immigrants from unskilled occupations comprising pedlars and traders (10 per cent of the gainfully employed, Table 5.1), unskilled labourers (7 per cent) and factory labourers (1 per cent). Pedlars and traders were the only group of immigrants employed entirely within the informal sector in small self- or family-run enterprises, almost all of which were sited in the market-place (pasar) or along major thoroughfares of the immigrants' previous place of residence. Sales outlets usually consisted of small portable stands (warung). On the other hand, a sizeable proportion of the unskilled labourers were employees of large formal sector enterprises run by the government or private companies. Other unskilled labourers were employed in the family sector as domestic servants, and a significant proportion were engaged in small informal sector enterprises or were self-employed (Table 5.1). The few migrants who were factory labourers before migration were all employed in large formal sector enterprises involved in manufacturing or agriculture. The low educational attainment levels and the relatively high incidence of moves caused by economic problems among immigrants in unskilled occupations imply that they were also socio-economically disadvantaged at the time of their move. It is probable that, like immigrants from farming backgrounds, migrants from unskilled occupations were seriously handicapped when they attempted to improve their occupational status on arrival in Surabaya.

There were few migrants with semi-skilled jobs before migration (6 per cent), but even so the semi-skilled migrants comprised two contrasting groups. On the one hand, there was a group of self- or family-employed informal sector migrants engaged in self-taught artisan type activities such as bricklaying, bucketmaking, or tailoring; and on the other hand, there was a group of machinists, locomotive firemen and truckdrivers employed by large-scale formal sector enterprises and state-owned companies. The level of
educational attainment among semi-skilled artisans was generally higher than that of migrants in unskilled jobs (Table 5.2), but the high incidence of moves motivated by economic hardship among the self-employed artisans of the informal sector implies that this group was in a similar situation to the unskilled labourers, who were relatively disadvantaged socio-economically. The formal sector employees appear to have been more fortunate, however; some were transferred to Surabaya by their employer and were thereby guaranteed employment of a similar status on arrival in the city.

At the other end of the spectrum to the majority of migrants from low socio-economic backgrounds were inmigrants employed in high-status skilled occupations before migration (24 per cent, Table 5.1). Almost all of those in skilled occupations were government employees or employees of large state-owned or private companies. Most were employed in the burgeoning tertiary sector, especially in community, social and personal services, and defence. The general level of formal education attained by inmigrants in skilled occupations was well above that achieved by migrants in any other occupational status category, though some occupations required capital resources or personal contacts rather than formal educational qualifications in order to obtain entry. In contrast to other migrants, a large number of those in skilled high-status jobs moved to Surabaya because of job transfers, especially the defence personnel (Table 5.2). Individuals involved in job transfers were automatically guaranteed jobs of equivalent or higher status on arrival in Surabaya, and as a result occupational status mobility among skilled migrants on first arrival may be less than that experienced by other groups of inmigrants. Inmigrants from higher status occupations enjoy the advantages of superior formal education and more relevant job experience (that is more relevant to an urban job market) when they compete against other less advantaged inmigrants for employment on arriving in the city; but many do not have to compete for employment because an occupation of at least equivalent status to that held has been reserved before departure for Surabaya.

Some of the relationships between occupational status and the personal characteristics of migrants before migration have been noted,
particularly the under-representation of females in skilled occupations. The ethnic origin of individual migrants also is related to occupational status. Ethnic Chinese immigrants (foreign ethnic group, Table 5.2) are over-represented in the higher occupational categories, as are indigenous non-Javanese and non-Madurese ethnic groups. The latter group, which contains a high proportion of Christians from the Outer Islands, also is over-represented among the immigrants attending educational establishments before the move to Surabaya. Immigrants in the armed forces were ethnic Javanese or 'other indigenous Indonesians'; not one migrant in the armed forces was of Madurese ethnic origin. The Madurese, in fact, were the most under-represented ethnic group in the higher status occupations, and among student immigrants; this supports previous suggestions that socio-economically they were the most underprivileged ethnic group to migrate to Surabaya.

The lower status occupations, which accounted for the majority of gainfully employed immigrants, comprised migrants from most ethnic groups, though 98 percent of farmers (the most underprivileged occupational category) were either Javanese or Madurese. Pedlars and traders were predominantly Javanese, though the proportion of Chinese in petty peddling and trading probably has been underestimated because of a desire to conceal their Chinese ethnic origin. Religious affiliation indicates that 11 percent of the pedlars and traders were followers of Confucianism, and since only totok Chinese claim this religious affiliation, the proportion of ethnic Chinese (including totok and peranakan Chinese) was perhaps 13 or 15 percent (Table 5.2).

Although immigrants from each of the major ethnic groups were represented at almost all levels of occupational status in the previous place of residence, it is wrong to conclude that the ethnic origins of migrants have not affected their occupational status. To the contrary, the data suggest that migrants of foreign ethnic origin (predominantly Chinese) and indigenous non-Javanese and non-Madurese had greater employment opportunities in the high-status skilled occupations in their previous place of residence than did the Javanese or Madurese immigrants. The non-Javanese and non-Madurese indigenous
migrants also had greater opportunities to remain students until their departure for Surabaya. The Javanese appear to have had an advantage in obtaining employment in the armed forces or as skilled artisans prior to migration, but the Madurese had no such advantages in the skilled or semi-skilled occupations and were over-represented in low-status factory jobs and in farming. The ethnic origins of individual migrants, have, along with their sex, affected the occupational status of individual inmigrants at the time of departure for Surabaya.

Migrants who were not working just before migration were of almost average educational attainment which, together with a young mean age at migration (Table 5.2), indicates most were not unemployable because of poor educational qualifications, but simply young persons who had not yet entered the workforce. The overall distribution of educational attainment among immigrants implies that those in skilled occupations, or those who were students at the time of their migration, were educationally the best equipped to obtain a high-status occupation in Surabaya. Semi-skilled artisans were less favourably placed in terms of educational attainment, whereas immigrants who were pedlars and traders, factory labourers or unskilled labourers prior to migration, were largely precluded from occupations which demanded an elementary formal education. The educational attainments of farmers and farm labourers as a group were so low, that only approximately 10 per cent of them could realistically hope to obtain occupations above unskilled status.

The mean age at migration does not appear to be related systematically to the occupational status of migrants, except that those who were students, not working, or unskilled labourers in their previous place of residence, tended to migrate at a younger age (Table 5.2). Conversely, semi-skilled artisans, pedlars and traders, members of the armed forces, and the one senior government official migrated to Surabaya in their late twenties or early thirties.

There are several conclusions which may be drawn from this discussion and the earlier analysis of the occupational status of immigrants before migration (section 4.5). First, systematic relationships exist between the occupational status of immigrants
prior to migration and the sex, ethnic origins, and the educational attainment of immigrants. Since these three variables have affected the occupational status of immigrants before migration, it is reasonable to postulate they will also affect the post-arrival occupational status and occupational status mobility of individual immigrants. Second, since migrants in high-status jobs were more likely to move to Surabaya because of a job transfer than were immigrants in low-status occupations, and because some low-status occupations such as farming had no value as useful work experience in an urban labour market, it may be postulated that the occupational status of migrants before migration will affect the individual immigrant's post-arrival occupational status and occupational status mobility. With reference to the large majority of the gainfully employed migrants who were engaged in low-status occupations before migration, it may also be postulated that most of the immigrants gainfully employed before migration will not obtain entry to skilled jobs after their arrival in Surabaya. In contrast, due to superior formal educational qualifications, it may be expected immigrants engaged in skilled occupations before migration, and immigrants who were studying, will obtain skilled jobs on arrival in Surabaya.

5.2.2 Occupational Status of Migrants by Period of Migration

As already emphasised, (refer section 4.5), the young age at which most immigrants moved to Surabaya means that a majority were not gainfully employed before their departure. When the occupational status of male and female immigrants is examined by period of first entry, however, significant differences between migration flows are observed (Table 5.3). In particular, the male migration flows of the sixties and early seventies contained an exceptionally high proportion of migrants not gainfully employed, largely because of the development of educational facilities after independence, which gave recent immigrants the opportunity to remain at school until migration. The most recent flow of male immigrants contained the largest proportion of persons who were not working before migration, which may reflect a worsening of employment opportunities in the source area, or heightened job expectations among the better educated recent male arrivals.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gainfully employed</td>
<td></td>
<td></td>
<td>10%</td>
<td>21%</td>
<td>7%</td>
<td>13%</td>
<td>2%</td>
<td>3%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Head govt. department</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low-med level clerical, admin., technical</td>
<td></td>
<td></td>
<td>6%</td>
<td>12%</td>
<td>4%</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>entrepreneurs</td>
<td></td>
<td></td>
<td>10%</td>
<td>2%</td>
<td>5%</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces</td>
<td></td>
<td></td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>and police</td>
<td></td>
<td></td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7%</td>
<td>4%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Petty pedlars or traders</td>
<td></td>
<td></td>
<td>37%</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
<td>43%</td>
</tr>
<tr>
<td>Factory labourers</td>
<td></td>
<td></td>
<td>65%</td>
<td>62%</td>
<td>39%</td>
<td>37%</td>
<td>29%</td>
<td>27%</td>
<td>30%</td>
<td>59%</td>
</tr>
<tr>
<td>Farmers and farm labourers</td>
<td>Sub-total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not gainfully employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td></td>
<td></td>
<td>18%</td>
<td>16%</td>
<td>12%</td>
<td>25%</td>
<td>21%</td>
<td>18%</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Home duties</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td>16%</td>
<td>22%</td>
<td>49%</td>
<td>38%</td>
<td>9%</td>
<td>7%</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td></td>
<td>34%</td>
<td>38%</td>
<td>61%</td>
<td>63%</td>
<td>71%</td>
<td>72%</td>
<td>63%</td>
<td>41%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>N all migrants</td>
<td></td>
<td></td>
<td>49(1)</td>
<td>58(5)</td>
<td>40(8)</td>
<td>40(8)</td>
<td>44(2)</td>
<td>71(1)</td>
<td>99(8)</td>
<td>49(5)</td>
</tr>
<tr>
<td>(N) short-term migrants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * These two categories refer to the intended duration of residence in Surabaya after 1974 of recent (1970-74) female immigrants.

** Because a substantial number of lifetime immigrants failed to indicate their intended duration of residence the sum of the two preceding columns does not equal this column.

Source: Questionnaire survey.
An important finding is that male inmigrants who entered Surabaya in the immediate post-independence years of the 1950s, were more concentrated in high-status skilled occupations before migration than any other migration flow (Table 5.3): over one-third of this migration flow came to Surabaya from skilled occupations, compared to only 11 to 16 per cent of the other flows of male migrants. A significant proportion were members of the armed forces transferred to Surabaya, but the majority were white collar clerical workers and medium-scale entrepreneurs. The largest single group of clerical workers were public servants transferred to Surabaya to take up jobs vacated by Dutch colonial administrators or created by the new government of the Republic of Indonesia. Other immigrants were employees of private companies, or self-employed medium-scale traders and merchants, moving to Surabaya to obtain a foothold in the post-independence economic life of the city. The disproportionate concentration of clerical workers in the male migration flow of the 1950s is understandable in the context of the profound changes then occurring in Indonesia. During the early 1950s indigenous Indonesians began to manipulate absolute political power for the first time since the arrival of the Dutch over 300 years before. The new rulers seized the opportunity to exercise patronage, and during the first years of independence faithful supporters were frequently rewarded with new jobs in a burgeoning civil service. At the same time, vacancies were created in the service by the departure of Dutch administrators, and the dismissal of Dutch trained civil servants closely identified with the excesses of colonial rule. All of these changes necessitated the transfer of civil servants from provincial centres to Surabaya, and as a result, the 1950-59 male inmigrants were more concentrated in white-collar clerical occupations before migration than any other migrant cohort.

Changes in the occupational selectivity of female inmigrants by period of migration were more difficult to analyse than changes among males, because unlike the latter, a large proportion of the recent female inmigrants were short-term migrants, who in 1974 intended to move from Surabaya within the next five years (Table 5.3). If the analysis of temporal changes in the occupational selectivity of inmigrants is not to be confounded by short-term
migrants, who were from different occupations to permanent arrivals (Table 5.3), the only solution is to disaggregate short-term and permanent migrants in the most recent inflow of female migrants\(^{(1)}\). This approach has been adopted throughout the subsequent analysis.

If the permanent 1970-74 female inmigrants are compared to earlier female migration flows several differences are observed (Table 5.3). The proportion of the recent arrivals gainfully employed before migration was marginally smaller than in earlier periods, largely because of a decrease in the number of farmers and farm labourers in the most recent intake. Like the female migration flow of the 1960s, the most recent flow contained more inmigrants who were students or not working before migration than either of the pre-1960 migration flows. It also contained, again like the 1960-69 migration flow, a smaller proportion of women engaged in home duties than earlier migrant intakes. The increase in the number of students is readily understandable in view of the boost given to education by Indonesia since independence, though the proportion of females studying at the time of their migration remained below the proportion of males.

The decrease in the proportion of females engaged in home duties and the increase in the proportion not working before migration in the two most recent migration flows, are associated with changes in the demographic composition of female migration flows since the early 1960s. Before 1960 almost 60 per cent of the permanent female inmigrants were married at the time of migration, but since 1960 the proportion has decreased to 48 per cent in 1960-69 and 44 per cent in 1970-74, as a result of an increase in the proportion of never-married and widowed inmigrants. As most of the married female inmigrants were involved in home duties before migration and a large proportion of the single or widowed females were not working, demographic changes were related to these changes in occupational status. The increase in the proportion of widowed female migrants in recent migration flows is a function of their elderly age structure at time of migration and the relatively high survival rate of recent arrivals; but the increase

\(^{(1)}\) The disaggregation was confined to the recent female arrivals (1970-74) because of the insignificant number of short-term inmigrants in the other migration flows (Table 5.3).
over recent years in the proportion of young never-married permanent female inmigrants who were not working before migration, is not so readily explained.

An examination of the reasons for moving cited by the never-married not-working cohort revealed that moves solely for occupation related reasons were more prevalent among the recent 1970-74 arrivals (42 per cent) than among the earlier migration flows (1960-69, 14 per cent; 1950-59, 0 per cent; and pre-1950, 20 per cent). There are three probable explanations of this finding. First, as suggested earlier, the 1970s may have witnessed an expansion of job opportunities for young females in Surabaya: forty-two per cent of the 1970-74 single not-working permanent female inmigrants had jobs already promised before migration, compared to 12 per cent of the pre-1970 arrivals. Some of the increase in the proportion of inmigrants with jobs promised, however, may reflect an expansion in chain migration as Surabaya's inmigrant population continues to grow.

A second possible explanation for the increase in migration and job-related moves among never-married permanent female inmigrants is a decline in alternative productive employment opportunities, especially in agriculture, in the migrants' previous place of residence. This explanation is consistent with the research of White (1976) noted earlier, but other data from this study suggest employment opportunities in agriculture were not relevant to many young not-working female migrants. Forty-two per cent of the cohort had successfully completed at least elementary school before departure for Surabaya, compared to 8 per cent of their counterparts employed in agriculture, suggesting a significant proportion may have been educated out of agricultural work or were from families of sufficient wealth to afford to stay out of work, rather than accept farming occupations in their previous place of residence.

The existence of a sub-group of inmigrants who aspired to employment of higher status than agricultural work among the not-working female cohort, is supported by the finding that 40 per cent of the cohort claimed they were faced with no serious problem in their previous place of residence at the time when they decided to migrate,
an answer not expected from migrants desperately in need of immediate employment. Indeed, migrants without serious problems appear to be more numerous among recent (1970-74) female arrivals, and two-thirds of the recent permanent arrivals claimed no major problems at the time of migration. It appears that though a decline in productive employment opportunities in agriculture since the late 1960s may have induced some not-working and unmarried females into long-term (permanent) migration, a sizeable proportion of the cohort was unaffected. The unaffected migrants were socio-economically privileged and relatively well educated, and were attracted to Surabaya by perceived job opportunities and prior promises of employment.

The third explanation for the increase during recent years in the proportion of young never-married permanent female migrants not working before migration, is to view it as a symptom of a general increase in the geographical mobility and social independence of young unmarried females in Indonesia. This viewpoint regards the increased intensity of modernisation programmes since the late 1970s, and the general improvement in transport facilities and services, as the major causal mechanisms of these behavioral changes. There is little hard evidence to support this view.

The relative occupational status and socio-economic standing of short-term female migrants may be assessed if they are compared with recent (1970-74) permanent inmigrants (Table 5.3). Short-term migrants were more likely to be gainfully employed prior to migration than permanent inmigrants. In addition, the short-term arrivals were more concentrated in low-status occupations, especially farming and petty peddling and trading, than the permanent migrants. The permanent migrants were likely to be in skilled jobs or else studying at the time of their departure for Surabaya. The proportion of each cohort not working before migration was identical, but because of the relatively small proportion of married females within the short-term immigrant cohort (6 per cent compared to 44 per cent of the permanent female arrivals), very few of the short-term migrants were fully occupied in home duties before migration.
TABLE 5.4 The marital status of short-term and permanent* recent (1970-74) female migrants before departure for Surabaya

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Short-term migrants</th>
<th>Permanent migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never-married</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>Married</td>
<td>6%</td>
<td>44%</td>
</tr>
<tr>
<td>Widowed</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Divorced or separated</td>
<td>45%</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total (N)</strong></td>
<td><strong>100% (49)</strong></td>
<td><strong>100% (55)</strong></td>
</tr>
</tbody>
</table>

Note: * Short-term migrants were those who in 1974 intended to move from Surabaya within the next five years. Immigrants who intended to remain longer were classified as permanent migrants.

Source: Questionnaire survey.

The relatively high proportion of short-term female migrants gainfully employed before migration was to a large extent a result of their different demographic composition in comparison to permanent arrivals (Table 5.4). The majority of the short-term migrants were either unmarried or divorced or separated before migration, and as a result it is not surprising that 59 per cent were gainfully employed, compared to only 21 per cent of the permanent arrivals. Although stage in life cycle and marital breakdowns forced more short-term migrants than permanent migrants into gainful employment before migration, the former cohort was more clustered in occupations classified as low in status, such as farming, petty peddling and trading. This differential in occupational status persisted even when never-married members of each cohort were compared. Educational data cited earlier suggest farmers and farm labourers were particularly disadvantaged socio-economically, and other variables will now be examined to see if there is other evidence indicating that short-term immigrants were socio-economically disadvantaged in comparison to permanent female immigrants.

The educational attainment levels of the two cohorts differed to a statistically significant degree at the time of migration to Surabaya, to the advantage of the permanent arrivals. For example, 39 per cent of the permanent immigrants had completed junior high school at the time of migration, compared to 12 per cent of the short-term migrants. The educational differential was accentuated by the contrasting demographic composition of the two cohorts, because the
divorced or separated female immigrants confined to the short-term cohort were, except for the widows, the most poorly educated sub-group. However, a statistically significant educational differential in favour of the permanent migrants was found among the never-married recent female arrivals, evidence that the educational differential cannot be explained solely by contrasts in demographic composition.

In order to eliminate the possibility that the educational differential was caused by a disproportionate representation of rural or urban inmigrants in either cohort, the proportion of short-term and permanent inmigrants from rural and urban places of origin was examined. No statistically significant differences in composition were observed between cohorts. Therefore compositional contrasts were not confounding the educational differential between short-term and permanent female migrants. The differential was real and it implies significant socio-economic differences between the cohorts. This conclusion is supported by the respondents' own assessments of their relative standard of living within their place of origin prior to migration. In this assessment the short-term migrants rated themselves below the permanent migrants to a statistically significant degree. The difference persisted independently of marital status before migration, suggesting that it reflects an underlying socio-economic differential between the cohorts in favour of the permanent migrants.

The reasons for migration cited by respondents in the short-term and permanent cohorts, and the incidence and nature of problems faced in the place of origin when deciding to migrate, suggest differences in socio-economic status have affected the decision-making processes of the two cohorts. For example, 71 per cent of the short-term migrants reported being confronted with major problems of hardship or social dislocation when deciding to migrate, problems such as land shortages, marital breakdowns and desertion, economic deprivation and unemployment. In contrast, 53 per cent of the permanent female arrivals claimed there were no major problems in their place of origin, and of those with problems almost half were affected by conditions which did not entail hardship, such as marriage.
to a Surabaya resident, or aspirations to achieve a level of educational attainment not obtainable in the place of origin. However, the high incidence of reported hardship among divorced and separated short-term migrants accounted for most of the difference between cohorts, and among never-married immigrants there was no statistically significant difference between short-term and permanent arrivals in the incidence and character of major problems in place of origin.

Forty-nine per cent of the recent short-term female arrivals claimed job-related factors were the sole reason for their decision to migrate to Surabaya, compared to 16 per cent of the permanent immigrants. The permanent migrants were motivated predominantly by marriage, moves by husbands, education or family-related reasons. Although the marital status of the cohorts influenced the reasons for migration, more of the never-married short-term migrants moved solely for job-related reasons (70 per cent) than the permanent never-married migrants (31 per cent). Among never-married permanent migrants' education related moves were of almost equal importance (27 per cent) to job-related moves. Therefore the reasons for migration cited by respondents were consistent with other findings which implied short-term female migrants were socio-economically underprivileged and more in need of immediate employment than permanent migrants. On the other hand, the permanent arrivals were frequently from relatively prosperous socio-economic backgrounds which encouraged a significant proportion to move to Surabaya in search of educational facilities superior to those in their place of origin.

The comparative analysis of short-term and permanent recent female migrants has indicated that short-term migrants were in greater economic and social need than permanent arrivals before departure for Surabaya. However, the pre-migration educational qualifications and job experience of the short-term migrants suggest they will be at a relative disadvantage in the competition for urban employment once they migrate to Surabaya. The examination of the relative pre-arrival occupational status of migrants in each of the major migration flows revealed significant variations by period of migration, variations which could not be explained by changes in the proportion of
short-term and permanent immigrants. Most major variations reflected real changes in migrant selectivity over time. This reinforces the view that analyses of occupational mobility based solely on cross-sectional data (which except for minimal efforts at standardisation assume uniform selection of migrants regardless of the period of migration) must be treated with caution. As McGee (1971: 166-70) has illustrated in Kuala Lumpur, the time-specific nature of migrations must be considered, particularly in most Third World countries where major political changes involving national independence have frequently occurred within the lifetime of older migrants.

5.2.3 Sector of Employment of Immigrants Prior to Departure for Surabaya

Although Friedmann and Sullivan's (1974) tri-sectoral model was proposed originally as a structural model of urban employment in a developing economy, there is no reason why it should not be applied to rural employment. Indeed, Breman (1976: 1873) has recently complained that too many researchers have limited the dualism concept solely to urban employment systems. To permit some comparability with the urban nature of the original model, however, my structural classification of lifetime immigrants will distinguish between migrants from urban and rural previous places of residence. The major problem encountered in the application of the dualism model is definition. Since Franklin's (1965) concept of a peasant mode of production appears to be the most theoretically meaningful and consistent approach to this problem, data were gathered on the employment status of immigrants, and the size and nature of the workforce employed at the migrant's place of work. These two criteria were then utilised to define the sector in which individual immigrants were employed. The definitions used to identify the formal, family and informal sectors are:

1. The formal sector includes:

   a) respondents who were self- or family-employed, or employees of heads of household, small businessmen or
informal business groups, provided the total workforce in the enterprise concerned numbered more than 10 employees not related to the head or owner of the enterprise; and

b) persons employed by private or state-owned companies or the government, regardless of the size and composition of the workforce, though in almost all cases the workforce numbered well in excess of 10 persons unrelated to the chef d'entreprise (Table 5.5).

2. The family sector comprises:

a) self- or family-employed persons in enterprises with 1 to 10 employees who were not members of the owner's or manager's family;

b) persons employed by heads of household or owners of small businesses or informal business groupings with 1 to 10 employees not related to the owner of the enterprise;

c) persons employed by land or livestock owners who were not family members, regardless of size and composition of workforce; and

d) casually-employed persons, usually in enterprises with one or more employees not related to employer.

3. (i) The informal sector (working) comprised self-employed or family-employed persons in enterprises where the workforce consisted only of the owner-operator or the chef d'entreprise and other members of his family; whereas

(ii) the informal sector (not working) contained all those who were not working and were not students or engaged in home duties.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Employer</th>
<th>Rural Workforce (%)</th>
<th>Urban Workforce (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Resp./&lt;5 others</td>
<td>Owner's family</td>
</tr>
<tr>
<td></td>
<td></td>
<td>resp. 5-10 others</td>
<td>resp. 5-10 others</td>
</tr>
<tr>
<td>FORMAL</td>
<td>Family member</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Small businessman/informal business group</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Private company</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>State company</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(N = 19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAMILY</td>
<td>Family member</td>
<td>-</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Head of household</td>
<td>-</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Small businessman/informal business group</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Land/livestock owner</td>
<td>-</td>
<td>27.3</td>
</tr>
<tr>
<td></td>
<td>No permanent employer</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(N = 55**)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFORMAL</td>
<td>Self</td>
<td>47.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Family member</td>
<td>53.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(N = 83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N = 83**)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Corner percentages shown sum to 100% for each sector and source area, except for errors due to rounding.
** In each of these sectors one respondent did not provide workforce details and was excluded from this tabulation; since in each case the employer was a land or livestock owner these respondents are included in Table 5.6.

Source: Questionnaire survey.
In adopting these definitions I have modified the Friedmann and Sullivan (1974) model by broadening their definition of the family-enterprise sector, so that it includes small (up to 10 non-family employees) informally-organised business associations, whose employees are not 'protected' like formal sector employees, but who nevertheless are not individual entrepreneurs and work under conditions of employment organised by a chef d'entreprise. The definitions appear to be tighter and easier to apply than the 'omnibus definitions' used in other studies (for example Sethuraman, 1976b: 81). In common with other classifications used in the application of the dualism model and its derivatives, this approach uses more than one variable to categorise a given enterprise, a practice which is logically inconsistent without the aid of a multivariate analysis procedure. However, in the absence of more detailed quantitative measures of the mode of production utilised in a given enterprise, and in order to produce a classification comparable with others used in this field of research, the logical inconsistencies had to be overlooked.

The approach adopted also possesses several advantages. Since it views the informal sector as a sector dominated by Franklin's (1965) peasant mode of production, in which labour is not a commodity which can be hired and fired, the approach avoids a basic criticism of many informal sector studies in which the informal sector simply includes all activities not in the formal sector. In this study the only persons included in the informal sector of the labour market are those who were self- or family-employed in enterprises which employed family labour only. Another advantage is that the formal sector definitions do not exclude self- or family-employed persons in large enterprises (with 10 or more non-family employees), which means the large-scale entrepreneur or shop owner who operates an enterprise along capitalist lines is not falsely included in the informal sector. The inclusion of company and government employees in the formal sector ensures that employees who are apt to enjoy the security of contractual employment, or working conditions protected by some form of unionism, are included in the formal sector.
The family sector should be viewed as intermediate in character between the capitalist labour relations of the formal sector and the peasant mode of production of the informal sector. It is characterised by small-scale enterprises (1-10 employees). In some cases, such as domestic servants, there is a family type commitment to labour utilisation; in other cases this commitment may be weak and approach the level prevalent in the formal sector. All farm labourers employed by land or livestock owners who were not members of the owner's family are included in the family sector, a classification which implies some traditional commitment to labour utilisation by the employer. This is not a perfect solution to the classification of landless farm labourers. The 'Green Revolution' in rural Java has increasingly weakened the traditional obligation of land owners toward labour. Now, many landless labourers on large land holdings are the proletariat of a peripheral capitalist mode of production. In the absence of detailed data on labour relations, however, it is preferable to include such farm workers in the family, rather than the formal, sector.

The other grouping recognised in the classification comprises all those who were not working, whether they were actively seeking work or not, since open unemployment particularly among the young is grossly understated in most developing economies. In the Friedmann and Sullivan (1974: 388-92) tri-sectoral model the unemployed form a separate sub-sector of the informal sector and include first-time job seekers, recent migrants, and workers laid off from jobs in the family and informal sectors.

Table 5.5 indicates the workforce and employer category distributions in each sector which result from the application of these definitions to the employment structure of inmigrants prior to their departure for Surabaya. In the formal sector, the dominant role of the government as employer is striking. In the family sector in rural areas, land or livestock owners are the major employers, usually employing more than 5 labourers per farm. Heads of household are the major employers in the family sector of urban areas, though the small number of observations precludes a general conclusion about this cohort. On the other hand, as a function of the definitions adopted
for this study, the informal sector in both rural and urban previous places of residence, contains only the self- or family-employed who were working in family-sized enterprises (that is without any non-family employees).

Some important occupational and personal characteristics of inmigrants in each sector of employment in rural and urban source areas prior to migration are presented in Table 5.6. The greater relative importance of formal sector employment among urban inmigrants in comparison to their counterparts from rural areas is striking. It is primarily due to the concentration of government employment in higher order settlements (Table 5.5). The proportion of inmigrants who were not working prior to migration was approximately the same in both source areas, but in the rural areas the informal and family sectors were the dominant sources of gainful employment, largely because all farmers and farm labourers were defined as members of these sectors. In urban source areas the proportion of inmigrants employed in the family sector was relatively small, comprising domestic servants and a few farmers. The informal sector, working sub-sector, employed more urban migrants than the family sector, with wholesale and retail trading enterprises the most common type of activity; but the number of migrants within both sectors was small in comparison to the number in the formal sector (Table 5.6).

This application of the modified tri-sectoral model has also confirmed a degree of bi-polar dualism between inmigrants employed in the formal and non-formal sectors of the economy before departure for Surabaya. Formal sector workers were socio-economically advantaged in terms of skill of occupation and formal educational qualifications in comparison to all other gainfully employed migrants, regardless of the rural or urban nature of the place of origin (Table 5.6). This supports the contention that entry to the formal sector is more selective and more difficult than entry to other sectors of the labour force. Formal sector employees in urban source areas, however, were better educated than formal sector employees in rural areas.

The demographic structure of migrants in the formal and non-formal sectors was also very different. In both rural and urban
<table>
<thead>
<tr>
<th>Source areas and sector of employment</th>
<th>N (%)</th>
<th>Industrial grouping (%)</th>
<th>Occupation (%)</th>
<th>Ethnic origin (%)</th>
<th>Education (%)</th>
<th>Sex and marital status (%)</th>
<th>Age at move</th>
<th>Yrs in Sby.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture</td>
<td>Manufacturing/</td>
<td>Wholesale &amp; retail trade</td>
<td>Transport</td>
<td>Finance</td>
<td>Community &amp; personal services</td>
<td>Defence</td>
</tr>
<tr>
<td>RURAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>19</td>
<td>(8)</td>
<td>6 29 6 18 - 18 23 50 11 33 6 89 - 11 -</td>
<td>58 21 21 375</td>
<td>37 42 - - 5 5 11</td>
<td>26 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>56</td>
<td>(24)</td>
<td>82 - 12 - 6</td>
<td>2 - 5 93</td>
<td>82 18 - -</td>
<td>84 16 -</td>
<td>81</td>
<td>32 11 2 30 12 4 9</td>
</tr>
<tr>
<td>Informal-working</td>
<td>83</td>
<td>(36)</td>
<td>66 6 26 1</td>
<td>1 6 27 66 65 28 2 5</td>
<td>88 10 2 54</td>
<td>16 19 - 26 14 8 16</td>
<td>26 13</td>
<td></td>
</tr>
<tr>
<td>Informal-not working</td>
<td>75</td>
<td>(32)</td>
<td>- - - - - -</td>
<td>- -</td>
<td>77 19 1 3 68 27 5</td>
<td>29</td>
<td>20 3 - 49 17 8 3</td>
<td>21 10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>233</td>
<td>(100)</td>
<td>60 9 21 3 - 3 3</td>
<td>7 4 20 69</td>
<td>75 20 2 3 78 18 4 58</td>
<td>23 14 - 33 14 7 9</td>
<td>23 13</td>
<td></td>
</tr>
<tr>
<td>URBAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>49</td>
<td>(40)</td>
<td>5 5 10 15 2 37 27 88 7 5 -</td>
<td>74 4 10 12 12 27 61 277</td>
<td>35 37 2 12 12 - 2</td>
<td>26 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>9</td>
<td>(7)</td>
<td>14 - 14 - 72</td>
<td>11 - 56 33</td>
<td>89 - - 11</td>
<td>67 22 11 125</td>
<td>22 33 - 22 11 - 11</td>
<td>23 9</td>
</tr>
<tr>
<td>Informal-not working</td>
<td>44</td>
<td>(36)</td>
<td>- - - - - -</td>
<td>- -</td>
<td>70 2 14 14 41 36 23 69</td>
<td>41 - - 34 14 4 7</td>
<td>21 14</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>122</td>
<td>(100)</td>
<td>12 7 21 9 1 33 16 61 8 18 13</td>
<td>73 2 11 13 31 34 25 122</td>
<td>33 21 1 20 15 2 8</td>
<td>24 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent except for errors due to rounding.

Source: Questionnaire survey.
source areas the formal sector was almost the exclusive domain of male migrants (375 and 277 males per 100 females, respectively), most of whom were married at the time of migration. On the other hand, both sub-sectors of the informal sector in rural and urban source areas were dominated numerically by female immigrants, many of whom were unmarried, divorced, or separated. Mazumdar (1976: 660) comments on a similar concentration of females in the informal sector in Belo Horizonte (Brazil) and since a significant proportion were wives, he used it as evidence that many workers in the informal sector were secondary workers from families whose heads had jobs in the formal sector. The large proportion of married female migrants in the informal sector, working sub-sector, of urban source areas, suggests secondary workers may also be an important component of the informal sector workforce prior to migration to Surabaya (Table 5.6). The sex composition of immigrants in the family sector was more balanced than in the other sectors, though the overall demographic character of immigrants in the family sector was closer to that of migrants in the informal than the formal sectors.

The discovery of occupational, educational and demographic dualism among immigrants before migration confirms that the dualism concept can be successfully tested empirically, and a bi-polar dualism between formal and non-formal sectors identified. The results confirm also, that a degree of dualism may be recognised in both rural and urban labour markets. Thirdly, the results illustrate that the application of definitions derived from a mode of production paradigm reveal a hierarchy of employment sectors within the migrant labour force structurally consistent with the major tenets of the formal/informal concept. This analysis, however, was an attempt to test the tri-sectoral model, and the empirical results suggest the family sector, proposed by Friedmann and Sullivan as a sector intermediate between the formal and informal sectors, did not comprise migrants who were intermediate either occupationally, educationally or demographically (Table 5.6). Instead, the characteristics of immigrants in the family sector imply that, in this instance, the family sector may be more validly classified as a sub-sector of the informal sector rather than a separate sector of employment.
The hierarchical placement of all not-working inmigrants within the informal sector also appears as a fault in the tri-sectoral model, since it implies that inmigrants in this sub-sector comprise a relatively homogeneous group of socio-economically underprivileged persons who tend to drift into employment in the informal sector. Friedmann and Sullivan (1974: 390) recommend that only first-time job seekers, recent migrants to the city (not relevant in this instance), and workers laid off from jobs in any of the sectors, up to and including corporate (formal sector) production workers, should be included in the informal sector. They deliberately exclude white-collar unemployed from this sector. The possibility that my study may have included some white-collar unemployed within the not-working sub-sector may partly explain the relatively high level of education attained by some members of this sub-sector (Table 5.6). The low mean age at time of move, combined with the high proportion of never-marrieds, however, suggest that this cohort consists mainly of first-time job seekers who, because of their superior level of educational attainment in comparison to other informal sector workers in their previous place of residence, preferred to withhold their labour until migration, rather than drift into informal level occupations considered to be beneath their expected level of occupational status. The withholding of labour has been remarked on by others (Friedmann and Sullivan, 1974: 390; Richards 1972: 89). The likely role of this practice, along with the relatively high level of education of this group, implies that movement between the not-working and working sub-sectors of the informal sector is not as frequent as Friedmann and Sullivan (1974: 392) suggest. Indeed, the hierarchical placement of the not-working cohort as the lowest ranked sub-sector within the informal sector (Friedmann and Sullivan, 1974: 388) is simplistic, considering its diverse composition and the potential of its better educated members to obtain gainful employment in the formal sector.

In addition to the abovementioned doubts about the empirical relevance of the tri-sectoral model, this analysis suggests several reasons why the sectoral position of inmigrants before migration may not be a reliable guide to their occupational position and occupational mobility after migration. First, the tri-sectoral model
excludes migrants studying or engaged in home duties before migration, and yet significant proportions of each cohort subsequently entered the workforce after migration. Students in particular, should not be ignored, since in recent years they have comprised from one-third to one-half of the male immigrants to Surabaya (Table 5.3), and as we shall see shortly, they have been exceptionally successful in gaining formal sector employment on arrival in the city.

Another limitation to the predictive power of the tri-sectoral model is that it is a bivariate approach to an explanation of occupational behaviour after migration, in the sense that it attempts to interpret post-arrival occupational position and change solely in terms of the migrants' sector of employment before migration. Empirical data indicate at least two other variables are likely to affect the post-migration occupational behaviour of migrants. If rural and urban immigrants employed in the same sectors of the economy prior to migration are compared, it is clear that in terms of occupational skill and formal educational qualifications, urban migrants were relatively advantaged (Table 5.6) to a statistically significant degree within each sector. Since job experience and education are likely to be critical in determining the post-arrival occupational behaviour of immigrants, there is little doubt urban migrants were better equipped to obtain a high-status job in Surabaya than rural migrants. Therefore it is likely that the rural or urban background of immigrants has affected post-migration occupational behaviour independently of the sectoral position of migrants before migration. Other detailed analyses (not included in Table 5.6) revealed similar, but less consistent, statistical relationships between the ethnic origin of migrants and their occupational skills and formal educational qualifications before migration. This suggests that ethnic origin also may have affected post-migration occupational behaviour independently of the sectoral position of migrants before departure for Surabaya.

Finally, it is obvious from the distribution of occupational skills and educational qualifications among migrants that each sector contains migrants with a wide range of backgrounds. In this situation it is unlikely that a simple four-category classification of migrants
will be able to accurately predict post-arrival occupational behaviour. A finer, more detailed classification such as that used to measure occupational status may produce categories with less internal variation and hence greater predictive capacity than the tri-sectoral mode.

5.3 OCCUPATIONAL STATUS OF IMMIGRANTS ON FIRST ARRIVAL IN SURABAYA

In this section I will analyse and attempt to explain the occupational status of immigrants soon after arrival in Surabaya. I begin with a general discussion designed to isolate the activities and industrial sectors which have played key roles in the initial absorption of migrants into Surabaya's labour force. I look also at the interrelationships between occupational status and industry of employment, and attempt to explain the relative occupational status of the newly arrived migrants in terms of personal characteristics. Finally, changes in the occupational status of newly arrived immigrants are assessed according to period of migration, in order to clarify the role of time-specific factors in labour absorption.

Data utilised in this section were obtained from questionnaire surveys of recent and pre-1969 immigrants. Respondents were asked to provide detailed descriptions of their first occupation soon after arrival in Surabaya. 'Soon after arrival' was not defined, but this was not a significant problem as data from recent (1969-74) arrivals reveal that 91 per cent of the gainfully employed found their first job within two weeks of entering the city. Those who said they were not gainfully employed stated their occupation as: 'not working', 'household duties' or 'student'. Temple (1975: 78) discovered in Jakarta that newly arrived migrants quickly found a way of earning an income. Although the questionnaire survey elicited detailed job descriptions of immigrants' major, second and third occupation, only 2.5 per cent of those gainfully employed admitted to having more than one occupation soon after arrival and, as there are no other data on secondary occupations, the following discussion refers only to major occupations.
5.3.1 Occupational Status, Major Activities and Industry of Employment of Immigrants on First Arrival

One immediate result of migration was an increase by approximately one-third in the number of migrants gainfully employed, from 239 before migration to 325 soon after arrival (Table 5.7). Most of the new income earners came from the ranks of the not-working and the students, whose numbers fell by approximately 50 per cent as a result of migration. This implies that even newly arrived migrants to Surabaya encounter few difficulties in finding a way of earning an income. However, this study is based solely on sample surveys of the surviving lifetime immigrant stock of Surabaya, and it takes no account of return migration flows which may comprise a disproportionately large number of migrants unable to obtain employment in the city. This study, then, probably presents a more favourable view of the occupational effects of migration than studies which include both permanent immigrants and returnees. Also, the proportion of immigrants gainfully employed tells us nothing about the economic productivity of that employment. When the proportional distribution of immigrants between occupational status categories on first arrival is compared to the situation before migration (Table 5.7), it is clear that low-status and low-income occupations, such as unskilled labouring jobs, have absorbed the largest proportion of immigrants, especially females. A third qualification to the apparent ease with which newly arrived immigrants obtained gainful employment soon after arrival is suggested by the observation that 41 per cent of those who were successful had a job promised prior to departure. As 93 per cent of those with job promises said the job was ready for them when they arrived, 38 per cent of those who obtained gainful employment on arrival were never faced with the possibility that migration may result in unemployment. The importance of personal contacts and job promises to the migration process suggests potential immigrants without job promises may be deterred from migrating, or at least may defer migration until such promises are obtained. Despite these qualifications about ease of obtaining initial employment in Surabaya, most immigrants (even those without prior job promises) found a means of earning an income soon after arrival in the city. For example, if migrants who received a job promise are compared to
### TABLE 5.7 - Occupational status of immigrants before departure and on first arrival in Surabaya, by sex

<table>
<thead>
<tr>
<th>Occupational status</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Place of Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gainfully Employed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All gainfully employed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gainfully employed %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head govt. dept./salaried professional/large scale owner - entrepreneur</td>
<td>0.4</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>Low-medium level clerical, admin., technical employees/medium scale entrepreneurs</td>
<td>12.6</td>
<td>24.8</td>
<td>29</td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces and police</td>
<td>6.1</td>
<td>12.0</td>
<td>14</td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>5.2</td>
<td>10.3</td>
<td>12</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>3.5</td>
<td>6.8</td>
<td>8</td>
</tr>
<tr>
<td>Petty peddlars or traders</td>
<td>1.3</td>
<td>2.6</td>
<td>3</td>
</tr>
<tr>
<td>Factory labourers</td>
<td>0.4</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>Farmers and farm labourers</td>
<td>21.3</td>
<td>41.9</td>
<td>49</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>50.8</td>
<td>100.0</td>
<td>117</td>
</tr>
<tr>
<td>Not Gainfully Employed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>16.5</td>
<td>38</td>
<td>83</td>
</tr>
<tr>
<td>Home duties</td>
<td></td>
<td>28.9</td>
<td>104</td>
</tr>
<tr>
<td>Students</td>
<td>32.6</td>
<td>75</td>
<td>14.2</td>
</tr>
<tr>
<td>T O T A L</td>
<td>99.9</td>
<td>230</td>
<td>100.1</td>
</tr>
</tbody>
</table>

| On First Arrival                                 |      |        |       |
| Gainfully employed                               |      |        |       |
| All gainfully employed                           |      |        |       |
| Gainfully employed %                             |      |        |       |
| N                                                |      |        |       |
| Head govt. dept./salaried professional/large scale owner - entrepreneur | 1.3  | 1.7    | 3     |
| Low-medium level clerical, admin., technical employees/medium scale entrepreneurs | 18.9 | 24.7   | 44    |
| Ordinary ranks, junior officers armed forces and police | 13.7 | 18.0   | 32    |
| Semi-skilled artisans                            | 14.2 | 18.5   | 33    |
| Unskilled labourers                              | 15.9 | 20.8   | 37    |
| Petty peddlars or traders                        | 9.9  | 12.9   | 23    |
| Factory labourers                                | 2.6  | 3.4    | 6     |
| Farmers and farm labourers                       | -    | -      | -     |
| Sub-Total                                        | 76.5 | 100.0  | 178   |
| Not Gainfully Employed                           |      |        |       |
| Not working                                      | 7.3  | 17     | 20.5  |
| Home duties                                      | 0.4  | 41.2   | 104   |
| Students                                         | 15.9 | 37     | 51    |
| T O T A L                                        | 100.1| 233    | 360   |

Source: Questionnaire survey.
those who did not, in terms of the weeks spent looking for work after arrival, we find that all of those promised a job were gainfully employed within two weeks of arrival, compared to 83 per cent of those who were not promised a job. The difference between the proportions was not statistically significant.

The abovementioned qualifications are not meant to imply that most migrants did not benefit economically from the move to Surabaya. To the contrary, almost all available data indicate they benefited substantially, especially three groups of inmigrants. The first group who definitely benefited economically, comprised those employed as unpaid family labour (all as farm labourers) in their previous place of residence. For example, 89 per cent of the 1969-74 arrivals in this category prior to migration, obtained gainful employment on first arrival in Surabaya; and of the remainder, half stayed out of work while the other half assumed home duties.

Another group who benefited economically comprised inmigrants without employment prior to migration. Eighty-seven per cent of the males and 65 per cent of the females (excluding females who assumed home duties on first arrival) who were not working before migration, obtained gainful employment on first arrival in Surabaya.

Aside from these cohorts, other data indicate that inmigrants gainfully employed before migration also benefited economically from the move to Surabaya. A comparison of the usual monthly income of all gainfully employed recent migrants (1969-74) before migration and on first arrival in Surabaya (unpaid family workers excluded), indicates that as a group, the inmigrants gainfully employed on first arrival received a substantially larger average income (mean and median, Table 5.8), than the inmigrants gainfully employed prior to migration. However, this comparison is possibly confounded by inclusion in the 'first arrival' cohort of new entrants to the workforce not gainfully employed before migration (N=52 and N=115, Table 5.8). It could be argued that the inclusion of the new entrants may bias the post-arrival income distribution either upwards or downwards (the results in Table 5.8 suggest a downward bias), depending on their socio-economic background, and confound the comparison of income
levels. If new entrants are excluded, so that the comparison is confined to migrants gainfully employed both before migration, and soon after arrival in Surabaya, however, similar findings result, the inmigrants' income increasing by a statistically significant degree on arrival in Surabaya (Table 5.8).

TABLE 5.8 - A Comparison of the Usual Monthly Income of Recent Migrants (1969-74) Prior to Migration and on First Arrival in Surabaya

<table>
<thead>
<tr>
<th>Usual monthly income in rupiah(2)</th>
<th>Inmigrants gainfully employed either before migration or on arrival</th>
<th>Inmigrants gainfully employed before migration and on arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before migration</td>
<td>On first arrival</td>
</tr>
<tr>
<td>Median income per month</td>
<td>4,250</td>
<td>10,800</td>
</tr>
<tr>
<td>Mean income</td>
<td>6,427</td>
<td>13,726</td>
</tr>
<tr>
<td>N</td>
<td>52*</td>
<td>115*</td>
</tr>
</tbody>
</table>

Notes: (1) Includes income in the form of cash, goods or services from all jobs the respondent was engaged in at the particular location.

(2) In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp.485 = A$1.00. During the period 1969-73 the exchange rate with the Australian dollar varied, but during the period 1969-74 the exchange rate with the U.S. dollar remained constant at Rp.415 = US$1.00

* Unpaid family workers in the previous place of residence (N=18) and on first arrival in Surabaya (N=1) are excluded in order to facilitate comparability.

** A paired or correlated test revealed a statistically significant difference between these two means (t=5.5, 0.001).

Source: Questionnaire survey of recent inmigrants.

These data alone do not prove that recent inmigrants' standard of living improved as a result of migration. Most recent migrants (62 per cent) said the cost of living in Surabaya (assessed by asking migrants to compare the cost of keeping a wife and child in
Surabaya and in their previous place of residence) was higher than in their previous place of residence, and this deflates the income differential. Other data, however, strongly imply that despite the high costs of living in Surabaya most recent migrants think their standard of living has improved as a result of migration. For example, when asked the major advantage of life in Surabaya compared to life in the previous place of residence, almost 60 per cent of the migrants mentioned personal economic situations or related advantages. Therefore, though not all of the increased income resulting from migration was transferred into an improved standard of living because of high living costs in Surabaya, most immigrants gainfully employed in their previous place of residence and on first arrival, benefited economically from the move. Additional data from long-term immigrants support this conclusion. When asked to compare their level of income before and immediately after migration, 71 per cent of the gainfully employed pre-1969 arrivals stated their income was higher after migration; 27 per cent maintained it was the same, and 2 per cent said it had decreased. Although employment opportunities for immigrants on arrival in Surabaya appear to be of a relatively low status, the opportunities available are more remunerative than the alternative occupations in which migrants were engaged before migration.

What were the most common income-earning activities engaged in by newly arrived migrants, and which sectors of the city's economy exhibited the greatest capacity to absorb new arrivals? By far the largest proportion of gainfully employed migrants earned their first income on arrival as unskilled labourers: 42 per cent (see Table 5.7). Females were especially concentrated in labouring jobs (68 per cent) because of the dominant role of domestic service and prostitution, which absorbed 33 per cent and 29 per cent respectively, of all the gainfully employed female immigrants on first arrival. Male immigrants were not attracted to specific activities to the same degree as female arrivals, though 21 per cent of the males who obtained gainful employment on first arrival worked in unskilled labouring jobs. Considering earlier findings about the low
socio-economic status of most inmigrants prior to migration (section 5.2.1), the concentration in unskilled labouring jobs on first arrival is not surprising. Most newly arrived inmigrants engaged in these jobs were employed in farming or else not working before migration (47 per cent and 27 per cent, respectively), and farmers were one of the most socio-economically underprivileged groups to migrate to Surabaya. It appears likely that a lack of skills relevant to an urban labour market, a lack of formal educational qualifications and a lack of capital combined to concentrate many of the newly arrived migrants into unskilled labouring occupations. These factors were more critical to individual inmigrants' employment prospects if the new arrivals had no contacts in Surabaya or no prior promises of employment, and almost two-thirds of the inmigrants in unskilled labouring jobs on first arrival came to the city without such contacts or promises (Table 5.12).

Among male migrants, skilled white-collar occupations in low-medium level clerical activities, or as medium-scale entrepreneurs, were more common sources of initial post-arrival income than unskilled labouring jobs (Table 5.7). Government employment was particularly popular among migrants engaged in low-medium level clerical activities. A large proportion of the inmigrants employed in skilled white-collar jobs were in similar occupations prior to migration. The major reason for almost one-quarter of the male migrants successfully gaining entry to occupations of such high relative status and income on first arrival, is that 38 per cent of the successful males moved to Surabaya because of job transfers, compared to 10 per cent of all inmigrants gainfully employed on first arrival. Large numbers of male migrants were also employed in the armed forces on arrival, 45 per cent of whom were transferees. A similar large number of male migrants obtained employment as semi-skilled artisans on arrival in Surabaya. Some were job transferees employed by the government in the state railways prior to migration, others were not working or were farmers before migration and faced major problems of adjustment.

Petty peddling or trading activities absorbed significant numbers of newly arrived migrants (Table 5.7); unlike most other
occupations, petty peddling was equally popular among migrants of both sexes. Forty-one per cent of the inmigrants initially engaged in peddling on arrival said they moved to Surabaya because of economic or land problems in their previous place of residence. This proportion is well above the proportion for all inmigrants (14 per cent), which implies migrants engaged in small predominantly self-employed enterprises were relatively underprivileged. Factory labouring tasks employed very few inmigrants either because of a lack of job opportunities or because of the low income and long hours of labour required. Even fewer inmigrants entered occupations in the highest income and status category.

If the labour absorption of newly arrived migrants is looked at by industrial grouping (Table 5.9), community, social and personal service activities (for example, government civil service, domestic or gardening service activities, service industries such as car or radio repairing, and personal services such as hairdressing or prostitution) employed almost half of all inmigrants. An additional 11 per cent of the inmigrants were members of the defence forces, and as defence personnel are usually included as part of community, social and personal services grouping, 55 per cent of all inmigrants were initially employed in this one sector of the city's economy. Apart from defence personnel, female unskilled labourers were more concentrated in community, social and personal service activities than other gainfully employed migrants, reflecting the role of domestic service and prostitution in absorbing large numbers of female migrants. Migrants in the highest status occupations and those who were low-medium level clerical workers or medium-scale entrepreneurs were also predominantly involved in providing community, social and personal services (Table 5.9). Many of these migrants were government employees and their concentration in the higher status occupations and in the service industries emphasises the major role played by government in post-independence Indonesia; firstly as an employer of white-collar skilled workers, and secondly, as the major provider of community and social services.

Significant numbers of immigrants obtained employment in the wholesale and retail trade, restaurant and hotel sector. Most
<table>
<thead>
<tr>
<th>Occupational status</th>
<th>N</th>
<th>Activity</th>
<th>Agricultural</th>
<th>Manufacturing</th>
<th>Unskilled &amp; petty</th>
<th>Transport</th>
<th>Community &amp; personal services</th>
<th>Defence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head govt. department/members of professions/large scale owner-entrepreneurs</td>
<td>4</td>
<td>Head finance division govt, railways, owner transport business, owner printing company, university lecturer.</td>
<td>- 25</td>
<td>- 25</td>
<td>- 50</td>
<td>- 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-medium level clerical, admin., technical employees/medium scale entrepreneurs</td>
<td>63</td>
<td>Teachers, nurses, office clerks, bank cashiers, shop assistants, qualified mechanics, owners small shops, medium scale traders, employees trading companies, heads of section government departments, typists, civil employees of armed forces, formally trained technical specialists, white collar public servants.</td>
<td>- 2 2 2 25 12 7 48 2</td>
<td>- 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces and police.</td>
<td>33</td>
<td>Members of the armed forces and police on active duty.</td>
<td>- - - - - - - 100</td>
<td>- 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>35</td>
<td>Kerbside bucket maker, bookmaker, tailor, painter, box maker, welder, welder's assistant, bricklayer, mechanic, railway firemen and machinist, car and truck drivers, handbag maker, furniture maker, carpenter, plumber, footpath sided bicycle repairer, specialized cook.</td>
<td>- 26 29 - 31 - 14</td>
<td>- 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>137</td>
<td>Domestic servants (1952), prostitutes (111), dockyard coolies building labourers, messenger boys, beggars (pedicabs) drivers, market labourer, cook, assistant to truck driver, sailor, warehouse keeper, hotel servant, hairdresser's assistant, nightwatchmen, temporary labourers.</td>
<td>- 2 5 2 10 - 82</td>
<td>- 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>44</td>
<td>Trader or middleman (small scale), petty traders in warung or pasar of: vegetables, fruit, fish, leaves for wrapping (e.g., banana leaves), cigarettes, cooked and uncooked rice, soup, cooked peanuts, kitchen utensils, bread, cake, books, coffee, flowers, lollies, coconuts, rojak (fruit salad), jamu (herbal medicine), used clothing, general agricultural produce.</td>
<td>- - - - - 100</td>
<td>- 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory labourers</td>
<td>9</td>
<td>Unskilled factory workers.</td>
<td>- 100</td>
<td>- - - -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All adult immigrants gainfully employed</td>
<td>325</td>
<td></td>
<td>0 7 6 20 10 1 44 11</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gainfully employed population of Surabaya Municipality (including 5 kecamatan incorporated in 1969) according to 1971 sample census?

Notes: 1) Respondents employed in utilities have been included under community and personal services.
2) The total does not equal 100 because of rounding.
3) Computed by subtracting the unemployed from the economically active population and excluding completely respondents whose activities were inadequately defined. Defence personal have been included with community, social and personal services.

Sources: 1) Questionnaire survey. 2) Computed from sample census data, Indonesia, BPS, 1973: 225, 226.
migrants in this sector engaged in petty peddling or trading ventures in the market (pasar), or at a small portable stall (warung) on the street. Cooked and uncooked foodstuffs, agricultural produce, and commodities required domestically, often on a daily basis, such as cigarettes, jamu (herbal medicine), cooking utensils or used clothing, were the major goods traded. Another small group of migrants obtained employment in large retailing establishments as shop assistants, or became owners of small shops. Unlike the petty traders and pedlars, who could establish themselves in business with a small amount of capital and without formal educational qualifications, employment as a shop assistant required both formal education and personal contacts, and the purchase of a shop required a large amount of capital.

Ten per cent of the migrants gained employment in transport industries. The largest group were employed as semi-skilled artisans by the state-owned railways (PNKA); others worked at administrative jobs in government or private transport companies. Unskilled immigrants found employment as dockyard coolies, sailors, pedicab (becak) drivers, or assistant truck drivers, emphasising Surabaya's continuing role as the second port and railway centre in Indonesia after Jakarta (Table 5.9).

Significantly, only a small proportion of immigrants found initial employment in the manufacturing or construction industries of Surabaya. Indeed, 86 per cent of the immigrants found initial employment in the tertiary sector, compared to 13 per cent in the secondary sector and less than 1 per cent in the primary sector. These findings vindicate the view which suggests that, unlike the movement to the cities in Western Europe during the industrial revolution, the post-independence influx of immigrants to Third World cities has not been absorbed by expansion of the industrial sector, but by a burgeoning tertiary sector in which labour absorption has been aided by the shared poverty of 'urban involution'. A comparison of the workforce of Surabaya in 1971 and 1930 supports this view. It indicates a decline in the proportion employed in manufacturing and
construction from 23 per cent\(^{(1)}\) in 1930 to 18 per cent in 1971 (Table 5.9). What are the results, however, if immigrants are compared to the total gainfully employed population of Surabaya in 1971?

There are two major problems with such a comparison. Immigrants interviewed in this study arrived in Surabaya at any time over the last 50 years, whereas 1971 census data provide a portrait of the city's workforce valid for that year. Survey data refer to Old Surabaya, whereas 1971 census data apply to Old Surabaya, plus the five rural kecamatan incorporated in 1969. The five newly incorporated kecamatan contained several new industrial estates in 1971, and their exclusion from this survey may have deflated the proportion of immigrants employed in manufacturing on first arrival. Nevertheless, it appears immigrants were much more concentrated in community, social and personal services and defence than the city's 1971 gainfully employed population, and relatively fewer immigrants than Surabayan residents were employed in manufacturing, and in wholesale and retail trade (Table 5.9).

There are several specific explanations for the differences in employment between immigrants on first arrival, and the gainfully employed total resident population in 1971. It is possible that my survey included more circular or temporary residents than the more de jure 1971 census, and that many of these short-term migrants were concentrated in service activities on arrival in the city. Another possibility is that newly arrived immigrants do not readily enter the self-employed world of the petty pedlar, at least not until contacts are established and capital resources accumulated. Instead, immigrants with low educational qualifications or work experience irrelevant to the urban labour market obtain initial employment in unskilled labouring jobs, many of which involve service activities.

---

\(^{(1)}\) Construction activities were not identified as a separate industrial category in the 1930 census, but it appears from the other categories shown that construction workers were included under manufacturing (Table 2.3). Twenty-three per cent results from a recalculation of Table 2.3 with respondents whose occupations were inadequately described excluded from consideration. This was done to make the results comparable with data shown in Table 5.9.
Immigrants with relatively high formal educational qualifications or immigrants with white-collar job experience are also initially attracted to service activities, since government and the civil service is the major employer of educated labour in the service industries, and also because many migrants were transferees from similar jobs outside Surabaya. An additional possibility is that during recent years migrants have discovered that service industries are more remunerative than traditional trading or retailing activities, because of the increased wealth of the urban middle and upper classes which patronise the personal services provided. Another related possibility, is that construction by Surabaya Municipality of large complexes of small shops in which the individual entrepreneur has to pay rent for the floorspace provided (such as Pasar Turi), has resulted in displacement of petty traders by small entrepreneurs, frequently of Chinese ethnic origin, and a consequent decrease in employment opportunities for immigrants.

Viewed collectively, these findings suggest newly arrived migrants were relatively over-represented in industries protected from, or of little interest to, modern capital intensive - labour extensive firms. Most community, social and personal service activities came within this category: the government public service maintained a monopoly on the provision of public utilities, for example; while personal service activities such as domestic service, gardening and prostitution were unsuited to large-scale capitalist enterprises. On the other hand, large sections of the market for manufactured goods (for example processed foods and drinks, textiles and cigarettes) have been captured by a handful of large capital intensive companies registered locally, but with transnational backing. A similar but less dramatic trend has been observed within the retailing sector and at least partly as a result, both retailing and manufacturing enterprises failed to provide as much employment for newly arrived inmigrants as the service industries.

The ethnic composition of newly arrived immigrants gainfully employed in the major industrial sectors of Surabaya's economy indicates not all inmigrants seeking entry to a particular industry
had an equal chance of success (Table 5.10). Some ethnic groups appear to have fenced-off particular activities for their own members and, overall, the ethnic distribution of immigrants within industrial sectors varies considerably. For example, immigrants with a Javanese ethnic background were disproportionately concentrated in construction, community, social and personal services and in defence, whereas ethnically-foreign migrants (mostly Chinese) were relatively over-represented in finance and transport activities (Table 5.10).

A more complex picture of the selectivity of labour absorption is suggested when the occupational status of immigrants is considered in conjunction with sector of employment and ethnic origin (Table 5.11). Breman (1976: 1905) contends that the urban labour market should not be viewed simply as a structure differentiated by horizontal barriers, as implied by the dualism concept, but as an extremely fragmented structure characterised by horizontal and vertical differentiation. Breman maintains that within most Third World urban labour markets, scarcity of employment has encouraged groups of social (and ethnic) equals to defend their position by fencing-off a particular field of employment. The results of my analysis support Breman; they suggest ethnic groups within Surabaya have fenced off particular activities (defined both horizontally and vertically by occupational status and industrial sector), and consequently recruitment of newly arrived immigrants into the labour force has been selective ethnically.

Javanese migrants who accounted for 77 per cent of all immigrants gainfully employed on arrival (Table 5.10) appear to have been readily accepted into the construction industry, but employment was mostly in low-medium status occupations (Table 5.11). In the service industries Javanese migrants obtained a fair share of the white-collar occupations, but were over-represented in unskilled labouring jobs in comparison to other ethnic groups. The Javanese were also over-represented within the defence forces, but were grossly under-represented at all levels in wholesale and retail trading, especially in clerical and entrepreneurial occupations. When government was the employer, as was the case in the civil service or in the defence forces, Javanese migrants were proportionately
<table>
<thead>
<tr>
<th>Ethnic origin</th>
<th>N</th>
<th>%</th>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Wholesale &amp; retail</th>
<th>Transport</th>
<th>Finance</th>
<th>Community &amp; social services</th>
<th>Defence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Javanese</td>
<td>233</td>
<td>77</td>
<td>100</td>
<td>77</td>
<td>94</td>
<td>50</td>
<td>68</td>
<td>25</td>
<td>90</td>
<td>82</td>
</tr>
<tr>
<td>Madurese</td>
<td>30</td>
<td>10</td>
<td>-</td>
<td>5</td>
<td>6</td>
<td>28</td>
<td>13</td>
<td>25</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Other indigenous Indonesians</td>
<td>23</td>
<td>8</td>
<td>-</td>
<td>9</td>
<td>15</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Foreign (mostly Chinese)</td>
<td>16</td>
<td>5</td>
<td>-</td>
<td>9</td>
<td>7</td>
<td>16</td>
<td>50</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>302*</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: * The total does not correspond to the number gainfully employed in Table 5.9 because some migrants failed to provide enough details to enable identification of the industrial sector.

Source: Questionnaire survey.
### Table 5.11 - Ethnic composition of immigrants by industry and occupational status on first arrival in Surabaya

<table>
<thead>
<tr>
<th>Occupational status</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Industrial sector *</th>
<th>Transport, storage &amp; communications</th>
<th>Community, social &amp; personal services</th>
<th>Defence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head govt. dept./salaried professional/large scale entrepreneur</td>
<td>NA (1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low-medium level clerical, admin., employees/medium scale entrepreneurs</td>
<td>NA (1)</td>
<td>NA (1)</td>
<td>29 7 36 29</td>
<td>71 - 29</td>
<td>78 7 11 4</td>
<td>-</td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>82 18 (33)</td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>78 - 11 11</td>
<td>100 (9)</td>
<td>-</td>
<td>82 9 - 9</td>
<td>40 60 -</td>
<td>-</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>NA (2)</td>
<td>83 17 (6)</td>
<td>NA (2)</td>
<td>58 25 8 8</td>
<td>97 1 2 (99)</td>
<td>-</td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>-</td>
<td>-</td>
<td>55 36 9 (44)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Factory labourers</td>
<td>78 11 11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All migrants gainfully employed on first arrival</td>
<td>77 5 9 9</td>
<td>94 6 -</td>
<td>50 28 15 7</td>
<td>68 13 3 16</td>
<td>90 4 4 2 82 - 18 (8)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**
- The agricultural and financial sectors have been excluded because of the small number of observations in each sector (Table 5.10).
- Each row within an industrial sector totals 100 per cent, except for errors due to rounding.
- NA indicates that the relevant occupational status and industrial sector category contained less than five observations, and where this occurred it was decided that a detailed percentage distribution by ethnic origin was not applicable (NA). In each category the number of observations has been shown in brackets.

**Source:** Questionnaire survey.
represented in high-status occupations. When the Javanese had to rely on self-employment, or else seek opportunities from entrepreneurs of a different ethnic origin, they were either under-represented, or concentrated in low-status occupations.

Madurese migrants were relatively over-represented in the wholesale and retail trading and the transport sectors on first arrival. In contrast to the Javanese, they were not represented in the armed forces, and under-represented in the community, social and personal service, manufacturing and construction sectors (Table 5.10). Regardless of the industry in which they were employed Madurese were invariably concentrated in the lowest status occupations (Table 5.11). In a surplus labour market such as Surabaya, however, any opportunities for gainful employment are highly prized even if the occupations are not very remunerative. Accordingly, the disproportionately large number of newly arrived Madurese migrants employed as coolies on Surabaya's docks (unskilled labourers in the transport sector, Table 5.11) and as petty pedlars or traders in some specialised informal sector activities suggests that at least in terms of these activities, Madurese migrants found it easier to obtain employment than other ethnic groups. For example, all migrants interviewed who earned an income on first arrival from the sale of soup from a warung were Madurese who specialised in their popular and traditional product, soto Madura. Two-thirds of the petty traders of cigarettes were of Madurese extraction, and though this may be related to the siting of a large kretek (clove cigarettes) factory close to several Madurese kampung, it implies Madurese enjoyed relative ease of entry to this activity. Therefore, though the Madurese have not obtained a fair representation in the higher status more remunerative occupations because they lack the political influence and power of the Javanese, they have managed to close off several sectors of the labour market for Madurese immigrants, a practice completely in accord with Bremans' (1976: 1905) interpretation of the workings of the labour market in Third World cities.

Other indigenous Indonesian ethnic groups such as the Sundanese, or suku from the Outer Islands readily gained employment in the armed forces and in wholesale and retail trading soon after
arrival in Surabaya (Table 5.10). Employment in the construction, finance, transport and service sectors appears to have been less readily obtainable. The occupational status of the other indigenous Indonesian ethnic groups (Table 5.11) indicates they were slightly over-represented in white-collar service sector occupations (predominantly the public service) and in the armed forces; this can be explained by their educational advantage (Table 4.6). Non-Javanese and non-Madurese indigenous migrants were disproportionately concentrated in high-status high-income occupations in the wholesale and retail sector (Table 5.11). Some of these suku (such as persons from Banjarmasin or orang Banjar) are well known in Surabaya as wealthy traders and merchants, and may benefit from better access to capital than the Javanese or Madurese, and trading contacts in the Outer Islands. The 'other Indonesian' ethnic group is also well-represented among peddlars and petty traders. These immigrants were Sundanese who specialised in the sale of small kitchen utensils and tumblers. Thus once again a particular suku has fenced off a specialised trading sector for its own members.

Inmigrants from 'foreign' (mainly Chinese) ethnic groups had above-average success in obtaining entry to the transport and manufacturing sectors of Surabaya's economy soon after arrival. They were much less successful in the construction and service industries, however, and have been precluded from positions in the armed forces (Table 5.10). Foreign migrants were disproportionately concentrated in the higher status occupations where they were usually medium or large-scale entrepreneurs (Table 5.11). Some ethnic Chinese immigrants interviewed were the owners of medium-scale freight and printing companies; others described themselves as large-scale traders in agricultural produce, or small shop-owners. Like the Indonesian ethnic groups from the Outer Islands, the Chinese and other foreign ethnic groups have established themselves as the entrepreneurial class of Surabaya.

The influence of the foreign ethnic groups is much greater than that of the suku from the Outer Islands. Most economic observers agree that the Chinese community effectively controls almost all large-scale retailing and manufacturing enterprises not state-owned.
The medium-scale freight and transport businesses, (such as export-import companies and bemo (small mini-cab) companies) and almost all the individually-owned shops in Surabaya are in Chinese hands. The Arab community, many of whom are Surabaya born, are also an influential group in the city's economy, largely because of their substantial landholdings which date back to titles granted in Dutch colonial times. The Indian community, though not possessing the numbers of the ethnic Chinese, or the political influence of the Arabs, is also influential in some sectors of the city's economy, particularly in the textile trade.

The evidence presented accords with Breman's (1976: 1905) view that the labour market is an extremely fragmented structure, and that scarcity of work has resulted in some groups partitioning off parts of an industrial sector to exclude outsiders. Although many variables are associated with the process of compartmentalisation of the labour market (such as social class, political affiliation), ethnicity has played a most important role in determining the employment opportunities of newly arrived inmigrants to Surabaya.

5.3.2 Determinants of the Occupational Status of Inmigrants On First Arrival

The relative occupational status of inmigrants on their arrival in Surabaya is affected by a host of interrelated factors. Some, such as the range of occupational opportunities available in the city at the time of the migrants' entry, are beyond the control of the individual inmigrant, though they may be critical in determining his or her initial occupation in Surabaya. In this section I focus on how the personal attributes of migrants have influenced their occupational status on first arrival in Surabaya.

The occupation of inmigrants in their previous place of residence and their job experience prior to migration appear to be of critical importance to the initial occupational status of individual migrants on arrival in the city. Of the 592 lifetime inmigrants who provided adequate descriptions of their major occupation before and after migration, 195 gave identical descriptions for both
occupations. Thus, for a third of the migrants the move to Surabaya had no effect on occupational activity.

Some migrants whose job descriptions before and after migration were not identical, moved to very similar jobs in Surabaya. If occupational change is defined as a change in status according to the detailed occupational status classification, then 43 per cent of all migrants remained in occupations of identical status on first arrival in the city.\(^1\) Included in this total, however, are inmigrants not in the workforce before and after migration (such as students and housewives), whose presence may exaggerate the degree of occupational stability. Their exclusion reduces the proportion of inmigrants in identical occupational status categories before and after migration to 23 per cent. The exclusion of job transferees, who would also be expected to inflate occupational stability, reduces the proportion further to 18 per cent. Conversely, it may be assumed that the inclusion of farmers deflates the measure, since there was almost no opportunity for these migrants to continue farming in Surabaya. The exclusion of farmers leaves 72 inmigrants (27 per cent) of the residual group of 271, with jobs of the same status on first arrival, which although nothing like the 43 per cent initially suggested, indicates that occupational status before migration affected significantly the occupational status of newly arrived inmigrants. The important role of previous occupation is emphasised by the observation that according to the generalised occupational status classification 89 per cent, 69 per cent and 86 per cent of inmigrants gainfully employed in skilled, semi-skilled and unskilled occupations respectively, prior to migration, obtained initial employment in Surabaya in occupations within the same general category.\(^2\)

---

\(^1\) The detailed occupational status classification is the complete classification as presented in Table 5.7.

\(^2\) In the generalised occupational status classification the top seven categories in the detailed classification were grouped into 'skilled', 'semi-skilled' and 'unskilled' categories. Occupations included in the 'skilled' category were: head government department, salaried professions, large-scale owners or entrepreneurs, low-medium level clerical employees, medium-scale entrepreneurs and ordinary ranks and junior officers in the armed forces. Semi-skilled artisans comprised the 'semi-skilled' category, and the 'unskilled' occupations included unskilled labourers, petty pedlars or traders and factory labourers.
<table>
<thead>
<tr>
<th>Occupational status</th>
<th>Personal characteristics</th>
<th>Period of migration (1)</th>
<th>Origins of migrants (2)</th>
<th>% of multiple movers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Sex ratio M/F</td>
<td>% completed secondary education (1)</td>
<td>Rural (%)</td>
</tr>
<tr>
<td>Gainfully employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head govt. dept/salaried profession/large scale owner entrepreneur</td>
<td>4</td>
<td>300</td>
<td>35 - 75 - 25 - 100</td>
<td>100</td>
</tr>
<tr>
<td>Low-medium level clerical, admin., technical employees/medium scale entrepreneurs</td>
<td>63</td>
<td>231</td>
<td>48 - 22 - 8 - 86</td>
<td>16 26 37 21</td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces and police</td>
<td>33</td>
<td>3200</td>
<td>22 - 76 - 9 - 85</td>
<td>24 27 43 6</td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>35</td>
<td>1600</td>
<td>26 - 57 - 3 - 97</td>
<td>26 31 31 12</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>137</td>
<td>37</td>
<td>21 - 8 - 1 - 97</td>
<td>15 14 14 58</td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>44</td>
<td>109</td>
<td>23 - 27 - 0 - 100</td>
<td>18 29 32 20</td>
</tr>
<tr>
<td>Factory labourers</td>
<td>9</td>
<td>200</td>
<td>25 - 44 - 11 - 44</td>
<td>56 - 11 - 22</td>
</tr>
<tr>
<td>Not gainfully employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>57</td>
<td>42</td>
<td>24 - 28 - 12</td>
<td>16 14 50 20</td>
</tr>
<tr>
<td>Home duties</td>
<td>149</td>
<td>1</td>
<td>24 - 7 - 89 - 12 80</td>
<td>15 29 28 28</td>
</tr>
<tr>
<td>Students</td>
<td>61</td>
<td>154</td>
<td>19 - 59 - 39 - 75</td>
<td>10 13 40 37</td>
</tr>
<tr>
<td>All adult migrants</td>
<td>593</td>
<td>65</td>
<td>23 - 29 - 10</td>
<td>16 22 31 32</td>
</tr>
</tbody>
</table>

Notes:  
* Each row totals 100 except for errors due to rounding.  
@ Six respondents are excluded due to insufficient data.  
1. Educational status at time of migration.  
2. Refers to the rural or urban character of the migrant's last place of residence prior to migration to Surabaya.  
3. Seven migrants whose last place of residence was overseas are excluded from this tabulation. Five of the seven came to Surabaya from rural villages, and of these five, four were from China and came to Surabaya as wives of Chinese residents and immediately began household duties, whilst the other rural migrants did not work on first arrival. The two migrants from urban centres were also wives of migrants, and assumed domestic duties on arrival in Surabaya.  
Source: Questionnaire survey.
### TABLE 5.13 - Relationship between the occupational status of gainfully employed inmigrants on first arrival and the personal characteristics, source region, and migration history of migrants

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Variables (and their associated values) whose influence has been standardised</th>
<th>Using seven occupational status categories</th>
<th>Using three occupational status categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kendall's tau (τ)</td>
<td>Kendall's tau (τ)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td>0.368****</td>
<td>0.448****</td>
</tr>
<tr>
<td>Marital status at time of move</td>
<td></td>
<td>Male 3</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>NA</td>
</tr>
<tr>
<td>Ethnic origin</td>
<td></td>
<td>0.063*</td>
<td>0.106***</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Educational attainment at time of move</td>
<td></td>
<td>Rural or urban rural</td>
<td>0.218****</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rural or urban urban</td>
<td>0.464****</td>
</tr>
<tr>
<td>Educational attainment at time of move</td>
<td></td>
<td>Occupational skilled</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>semi-skilled</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>unskilled</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>farmers</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>not working minder</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>professional</td>
<td>NA</td>
</tr>
<tr>
<td>Rural or urban source area</td>
<td></td>
<td>Rural or urban rural</td>
<td>0.476****</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rural or urban urban</td>
<td>0.063p</td>
</tr>
<tr>
<td>Source region</td>
<td></td>
<td>failed to complete elem. level</td>
<td><strong>0.342</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>complete elem. level or above</td>
<td></td>
</tr>
<tr>
<td>Source region</td>
<td></td>
<td>Rural or urban rural</td>
<td>-0.109**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rural or urban urban</td>
<td>0.129*</td>
</tr>
<tr>
<td>Total moves prior to first entry to Surabaya</td>
<td></td>
<td>-0.208****</td>
<td>0.264****</td>
</tr>
<tr>
<td>% with jobs promised prior to migration</td>
<td></td>
<td>-0.219****</td>
<td>0.190****</td>
</tr>
</tbody>
</table>

Notes: NA - indicates either that χ² was not applicable because of the small number of observations in some cells, or that Kendall’s tau (τ) was not applicable because the independent variable was measured at a nominal level.

1. The three categories used were skilled (categories 1-3, Table 5.12), semi-skilled (fourth category, Table 5.12) and unskilled (categories 5-7, Table 5.12).
2. Male migrants were grouped into married and never married, the two divorcees being ignored.
3. Female migrants were grouped into skilled and semi-skilled or unskilled, and into divorced or separated and others.
4. Ethnic origins were ranked in subjective order according to the degree of similarity with the Javanese, the dominant cultural group in Surabaya. The ranking was: Javanese, Madurese, Other Indonesian and Foreign.
5. Educational attainment was measured at 6 levels: no education, some elementary classes, completed elementary classes, completed junior high school, completed senior high school, attending or completed tertiary level studies.
6. Source regions were ranked according to distance from Surabaya as follows: mainland East Java, Madura, other areas of Java, Outer Islands.

Levels of significance of χ² and τ:
- @P > 0.05 (i.e. not significant); *P < 0.05; **P < 0.01; ***P < 0.005; ****P < 0.0001.

Source: Questionnaire survey.
A profile of the personal characteristics, migration history, and origins of inmigrants in the major occupational status categories is shown in Table 5.12. If migrants gainfully employed on arrival are examined first, it appears those in high-status occupations were more likely than a typical migrant to be male, of foreign or other Indonesian ethnic origin, and members of a non-Islamic religion. Immigrants employed in high-status occupations on arrival were also better educated than most migrants. Low-status and low-income occupations contained an above average proportion of females, many of whom were divorced or separated from their spouse at migration, and a high proportion of migrants of Javanese or Madurese ethnic origin. Less than half of the immigrants in the unskilled or semi-skilled occupations had completed elementary school at the time of their migration. Rank correlation and chi-square tests confirm the statistical significance of these bivariate relationships (Table 5.13). The only exception was among male migrants where the small number of divorcees and the absence of widowers eliminated any possibility of a relationship between marital status and occupational status.

The level of formal education attained by immigrants at the time of migration is statistically associated with the initial occupational status of migrants on arrival in Surabaya (Table 5.13). The better educated migrants obtain the better jobs, and this relationship persists regardless of whether the migrant came to Surabaya from a village, or an urban centre. Clearly, formal educational qualifications are today a prerequisite for employment in a high-status occupation in Surabaya, but in the early post-independence period they were much less important.

It is difficult to disentangle the effects of previous occupation and education on an immigrants' initial occupational status, since educational attainment is closely associated with occupational status before migration (Table 5.2), and prior occupation is closely associated with occupational status on arrival. Statistical testing implies that for immigrants employed in skilled or semi-skilled occupations before migration, previous work experience was more important than formal educational qualifications (Table
5.13). For migrants who were in unskilled jobs, in farming, unemployed, or studying prior to migration, the level of educational attainment was closely associated with occupational status on first arrival in the city. For these migrants, a good education was the best guarantee of entry to a high-status occupation on first arrival in Surabaya.

Educational attainment, however, is a surrogate for other attributes, such as wealth and social status. By suggesting that the better educated got the better jobs, we are really saying that those with wealthy and socially influential parents had the best initial employment opportunities after migration. The poverty of most migrants to Surabaya was so acute, however, that only 22 per cent of those gainfully employed on first arrival completed junior high school prior to migration. Eighty-one per cent of the junior high school graduates were in skilled occupations or studying at the time of migration; 89 per cent and 69 per cent respectively, of the migrants in these cohorts obtained skilled jobs on first arrival, compared to less than 20 per cent of the migrants in any of the other cohorts.

In the preceding chapter it was suggested rural inmigrants were socio-economically disadvantaged in comparison with migrants from urban places of residence. Evidence from the relative occupational status of rural and urban migrants suggests the differential has continued after migration (Tables 5.12 and 5.13). The introduction of a two-category control for education (that is failed to complete elementary level, and completed elementary level or above, Table 5.13) results in the elimination of the differential among the less educated, and presumably poorer, migrants. It seems the poorly educated had great difficulty entering high-status employment on arrival in Surabaya, whether they came from rural or urban backgrounds (Table 5.14). In contrast, a majority of the relatively well-educated immigrants gained entry to skilled occupations on arrival. Within this cohort, inmigrants from urban places have been significantly more successful in obtaining high-status occupations than rural migrants (Tables 5.13 and 5.14).
TABLE 5.14 - Occupational status of rural and urban immigrants by educational attainment at time of migration

<table>
<thead>
<tr>
<th>Occupational status on arrival in Surabaya</th>
<th>Failed to complete elementary education</th>
<th>Completed elementary level or above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>Skilled</td>
<td>6.0</td>
<td>16.1</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>10.1</td>
<td>12.9</td>
</tr>
<tr>
<td>Unskilled</td>
<td>83.9</td>
<td>71.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

N 149 31 48 95

Source: Questionnaire survey.

It may be thought that some of the difference in occupational status between rural and urban migrants who had completed elementary school before migration reflects the coarseness of a two-category control for education. If the relationship is re-examined with immigrants of elementary education and above subdivided into those with elementary, junior high school, and senior high school or tertiary level qualifications, this doubt can be dismissed. At each educational level except junior high school, the urban migrants exhibited a statistically significant occupational status advantage over the rural migrants. Thus for some reason apart from education, migrants from urban previous places of residence are more readily accepted into high-status jobs on arrival in Surabaya.

The occupational status difference persisted regardless of sex and regardless of whether immigrants were promised a job before migration. Once occupational status prior to migration was introduced as a control variable, however, statistically significant differences in occupational status on first arrival between rural and urban migrants disappeared among all cohorts, except inmigrants unemployed or studying prior to migration (not included Table 5.13). Therefore except in the case of these cohorts, the greater ease with which urban migrants obtained high-status occupations on arrival in Surabaya in comparison to rural migrants, was caused by the relatively high occupational status of urban migrants prior to migration, and not by the higher incidence of job promises before migration, or the larger proportion of males among urban inmigrants. The higher pre-migration
occupational status of migrants in urban source areas compared to rural migrants, has continued on first arrival in the city.

A detailed examination of inmigrants who were unemployed and had completed elementary school before migration failed to explain why migrants from urban source areas obtained high-status occupations more readily than rural migrants, on arrival in Surabaya. Analysis of migrants who were studying and had completed elementary school before migration was more rewarding: urban migrants were significantly better educated than rural inmigrants, even among elementary school graduates. Furthermore, level of educational attainment was positively correlated with occupational status on arrival in Surabaya ($r=0.358, p<0.005$), indicating that in the case of this cohort the earlier two-category control for education was too coarse. When the effect of education is controlled more completely, and the elementary school graduates are divided into those who completed elementary school only, junior high school, senior high school, and tertiary level students, and the occupational status of newly arrived rural and urban inmigrants is compared again, then the former difference in favour of the urban migrants disappears. The greater occupational success of newly arrived urban migrants who were studying prior to migration, was due to their superior educational qualifications in comparison to rural migrants.

The location of the inmigrants' previous place of residence is also related to the occupational status of newly arrived migrants: migrants from more distant source areas obtained higher status jobs than short-distance movers (Table 5.13). The relationship is not as simple as this, however, because long-distance migrants tend to originate from large urban centres, whereas migrants from mainland East Java are likely to have arrived in Surabaya from a small desa (village). If rural and urban migrants are analysed individually, the predicted relationship is reversed among rural migrants (Table 5.13), implying that short-distance rural migrants obtain better jobs than long-distance rural migrants. The reason is that inmigrants from Madura comprise the one numerically significant group of rural migrants originating outside mainland East Java (Table 5.12). These migrants ranked lowest in occupational status before migration; and
on first arrival 89 per cent obtained unskilled jobs compared to 75 per cent of the rural migrants from mainland East Java. It appears that the rural Madurese continued in a disadvantaged position after migration to Surabaya.

Among urban inmigrants the relationship is in the predicted direction, the long-distance migrants consistently obtaining higher status occupations on arrival than their short-distance competitors (Table 5.13). Some of the relationship is explained by the relatively high educational qualifications of migrants from the Outer Islands and other areas of Java, but the long-distance migrants were also more positively selected and had a higher occupational status prior to migration than the local inmigrants.

The significantly higher proportion of multiple movers among migrants in skilled occupations suggests a large proportion of those in high-status employment on first arrival came from a select group of inmigrants who had experienced job transfers and migration prior to the move to Surabaya (Tables 5.12 and 5.13). This is not surprising since many were government employees. Since a large number of migrants in the skilled occupations had been promised a job prior to their departure for the city, many of the employment opportunities theoretically available in these occupations for newly arrived migrants were already committed, suggesting that migrants without prior business or personal contacts in Surabaya may have found it difficult to obtain a high-status occupation on first arrival.

Among inmigrants not in income earning occupations on first arrival, the unemployed and student groups were the most significant. Few male migrants remained out of work on arrival (7 per cent), but unemployment was more common among females (11 per cent), especially among the female migrants of the 1960s, some 20 per cent of whom said they were out of work on arrival. The unemployed cohort appears to contain two major groups: the disadvantaged who faced real problems in obtaining work, and first-time job-seekers. The disadvantaged group comprised disproportionate concentrations of ethnic Madurese, widowed females and inmigrants from rural source areas (Table 5.12), many of whom were unemployed before migration. First-time job-seekers
were socio-economically advantaged and in some cases withheld their labour until remunerative job opportunities eventuated. Many of the male first-time job-seekers were students before departure for Surabaya, and many were from other areas of Java, a source region which has traditionally supplied positively selected immigrants (Table 5.12) to Surabaya.

In contrast, the immigrants who remained as students on arrival were a relatively uniform group. All were young, single and socio-economically advantaged, and an above-average proportion were: male, non-Javanese and non-Madurese, from urban source areas, and multiple movers. Most came to Surabaya for further study (82 per cent), and many stated that educational facilities were inadequate in their previous place of residence. Other immigrants who remained as students on arrival moved for family-related reasons, usually accompanying family members to Surabaya at a young age.

The personal attributes of individual immigrants such as sex, marital status at time of move, ethnic origin, and level of educational attainment were closely associated with the relative occupational status achieved by migrants soon after arrival in the city. The rural or urban nature of the migrant's previous place of residence and the region of that place of residence were also associated with occupational status on arrival. Earlier analysis indicated the same variables were closely associated with the occupational status of individual immigrants prior to migration, but statistical evidence of association is not proof of a causal relationship. Indeed, the high degree of interrelationship revealed in the preceding analysis between ethnic origin, sex, and educational attainment suggests most variables were surrogates of more fundamental causal factors, such as relative wealth and social status. The major conclusion is that the wealthier and more socially influential immigrants, who also happened to be well-educated, non-Madurese, male, neither widowed-divorced nor separated at the time of migration, multiple movers, with a job usually promised before migration, obtained high-status occupations soon after arrival in Surabaya.
This conclusion implies that migration to Surabaya had little effect on the occupational status of newly arrived inmigrants. Most occupationally-successful newly arrived migrants, for example, were employed in high-status jobs or studying before migration. Most migrants to Surabaya were from socio-economically disadvantaged backgrounds, and 58 per cent of migrants gainfully employed on arrival were employed in low-status unskilled occupations. The few migrants from low income jobs before migration who possessed above average educational qualifications obtained high-status occupations on arrival.

It appears that migrants from urban source areas who were unemployed prior to migration obtained higher status occupations on arrival in Surabaya than rural migrants. The difference persisted when level of educational attainment was standardised; this suggests experience in an urban environment prior to migration was of value to newly arrived inmigrants. Similarly, though ethnic origin and socio-economic status prior to migration were closely interrelated among migrants, the process by which ethnic groups partitioned off certain activities within the labour market of Surabaya suggests subsequent analysis may indicate that the ethnic origin of inmigrants has affected their post-arrival occupational status.

5.3.3 Occupational Status of Migrants on Arrival in Surabaya by Period of Migration

In this section I will explore the contention that because of temporal changes in migrant selectivity and changes in employment opportunities for newly arrived migrants, the occupational status of migrants on arrival in Surabaya has varied with period of migration. Figure 5.1 portrays by period of migration the occupational status of male and female inmigrants at three stages in the migration process, just prior to departure, soon after arrival in Surabaya, and in 1974 at the time of the survey. Because the 1970-74 female migration flow contained a significant proportion of short-term migrants who intended to leave Surabaya before 1980, the 1970-74 female arrivals have been divided into short-term and permanent migrants. Ideally, the 1970-74 male migrants should be similarly divided, but only eight recent male arrivals indicated they were short-term migrants; so division and separate plotting of this sub-group was unnecessary.
Figure 5.1
Sequential changes in occupational status of in-migrants by sex and period of migration

Period of Migration: 1970-74

Male (N=39)

- Before departure
- On arrival

Female (Short term N=49; Permanent N=55)

- Before departure
- On arrival

Period of Migration: 1960-69

Male (N=83)

- Before departure
- On arrival

Female (N=99)

- Before departure
- On arrival

Occupation Status

Income recipients
- Skilled occupations
- Semi-skilled occupations
- Unskilled occupations
- Farmers
- Pensioners

Non-income recipients
- Not working
- Household duties
- Students

Source: Questionnaire survey
The most striking observation from Figure 5.1 is the contrast in occupational status between short-term and permanent 1970-74 female migrants. The 1970-74 permanent arrivals were identical to earlier female migrants in terms of occupational status before migration, on first arrival, and in 1974. The short-term 1970-74 female migrants were different at each stage in the migration process. Prior to migration most short-term female migrants were gainfully employed (59 per cent), particularly in farming and other low-income and low-status occupations. In comparison, the majority of the permanent migrants could afford to remain out of gainful employment (78 per cent) prior to migration, and as already noted (section 5.2.2), there is no doubt that the short-term arrivals were seriously disadvantaged occupationally and educationally in comparison to the permanent migrants. The short-term migrants, partly because of a large component of divorcees (45 per cent), were dominated by individuals moving to Surabaya because of acute social and economic needs, and 49 per cent of the cohort moved solely for job-related reasons. In contrast, the permanent migrants moved because of marriage, migration by respondents' spouse, education or family-related reasons.

Differences in motives and pre-migration socio-economic status were reflected in the occupational status on arrival of permanent and short-term female migrants. In keeping with a cohort moving because of acute economic need, 87 per cent of the temporary migrants entered gainful employment soon after arrival in Surabaya, compared to only 25 per cent of the permanent arrivals (Figure 5.1). Half of the permanent migrants were engaged in household duties on arrival and another 22 per cent were employed in unskilled occupations, whereas over 85 per cent of the short-term migrants entered unskilled jobs and only 2 per cent domestic duties. Only 2 per cent of the short-term migrants remained unemployed on arrival in Surabaya, but among permanent migrants 13 per cent could afford to remain at home out of work, rather than accept the employment currently available.

The desperate economic situation of newly arrived short-term migrants is emphasised further by the observation that 74 per cent of those gainfully employed on arrival entered prostitution to obtain a
livelihood, and another 24 per cent obtained work as domestic servants. Among permanent arrivals the comparable proportions employed in prostitution and domestic service were 7 per cent and 64 per cent, respectively. Available evidence indicates that the lower occupational status of short-term migrants in comparison to permanent female arrivals on first arrival in Surabaya was caused by differences in migrant selectivity.

Short-term and permanent inmigrants moved for different reasons and experienced different needs and aspirations. Because of their greater need, short-term migrants readily entered occupations on first arrival which most permanent migrants found unacceptable. Shorter intended duration of residence and a greater incidence of social dislocation (such as marital breakdowns and divorce) among the short-term migrants also aided acceptance of socially-undesirable occupations, at least for a limited period of time. Employment in prostitution also provided a relatively high income for short-term arrivals and this undoubtedly encouraged acceptance.

Partly because of the high income and nature of their occupation, most short-term migrants were able to circulate frequently between Surabaya and their place of origin. Seventy-one per cent usually visited their place of origin at least twice a year, compared to 26 per cent of permanent recent female arrivals. This practice enabled the short-term migrants to maintain strong social and economic ties with family resident in their place of origin and compensated for some of the disadvantages of a low-status urban occupation.

Aside from the contrasts in occupational status between short-term and permanent recent female migrants, the data presented in Figure 5.1 imply that the 1970-74 male inmigrants were more concentrated in unskilled occupations on first arrival than earlier male inmigrants, with the exception of the pre-1950 arrivals. In contrast to the recent female inmigrants, the permanent 1970-74 male arrivals were more concentrated in unskilled occupations on first arrival (53 per cent) than all earlier permanent male migrants (1960-69 and 1950-59, 25 per cent; and pre-1950, 43 per cent) and recent 1970-74 short-term male migrants (25 per cent). The small
number of short-term arrivals among the 1970-74 male inmigrants was not responsible for this cohort's relatively low occupational status on arrival in Surabaya. Recent male inmigrants appear to have been less successful than their predecessors in obtaining skilled or semi-skilled occupations on first arrival. Why?

Relative educational or socio-economic deprivation in comparison with earlier inmigrants may be eliminated as a possible explanation. The educational qualifications of recent male inmigrants were of similar or superior educational status to earlier male migration flows at the time of migration. The similar occupational status prior to migration of the 1970-74 and 1960-69 male migrants also implies that the recent male inmigrants were not socio-economically disadvantaged (Figure 5.1). The one qualification is that the 1970-74 migration flow contained almost twice the proportion of migrants not working prior to migration, and this may account for the large proportion of migrants engaged in unskilled occupations on first arrival in 1970-74. In the absence of other evidence suggesting 1970-74 male inmigrants were socio-economically disadvantaged relative to earlier male inmigrants prior to migration, it appears that in comparison with earlier decades, the first few years of the seventies saw a contraction of job opportunities in skilled or semi-skilled occupations for male migrants newly arrived in Surabaya.

The third major observation from Figure 5.1 is that the 1950-59 male inmigrants were more successful than any other cohort in obtaining entry to skilled occupations on arrival in Surabaya. Some of their success on first arrival can be explained by their initial concentration in high-status occupations prior to departure for Surabaya. Why was this migration flow more positively selected than other flows, and why were there so many employment opportunities in skilled occupations in Surabaya during the 1950s?

The Dutch did not formally transfer sovereignty to the Republic of Indonesia until 27 December 1949; as a result, there was a massive influx of males into Surabaya during the late 1940s and early 1950s. These immigrants were eager to claim the more prestigious positions denied them for so long under Dutch colonial
rule. The new rulers were now in a position to give patronage and fulfill some of these hopes, particularly in order to repay their supporters for assistance during the prolonged and arduous struggle for national independence. Government-sector employment was the most readily available favour which could be bestowed.

The immediate post-independence years saw a burgeoning of the public service. The transfer of sovereignty and the replacement of the Dutch administrative elite, however, also necessitated the transfer of trained civil servants from provincial centres to Surabaya. In this context, the disproportionate number of 1950-59 male migrants in skilled occupations prior to migration is understandable: sixty per cent were directly employed by government as members of the armed forces (35 per cent) or public servants (25 per cent). In addition, the early 1950s provided exceptionally good employment opportunities in skilled high status occupations in Surabaya, especially in government service, for newly arrived immigrants with the skills, the resources, or the contacts to obtain entry. Although there is no hard data to support this contention, personal accounts supplied to interviewers and the prevailing mood of the early years of independence, provide circumstantial evidence for this conclusion. Similar employment opportunities were not available to indigenous Indonesian male migrants to Surabaya during the restrictive atmosphere of colonial rule, or in the 1960s or early 1970s, when the public service and the armed forces were 'bloated' with manpower.

An analysis of temporal changes in the occupational status of immigrants indicates a substantial increase over recent years in the number of migrants studying, both prior to migration, and on arrival in Surabaya (Figure 5.1); an increase caused by the improved educational attainment levels of the Indonesian population since 1949, and an associated increase in the demand for education. The proportion of recent female migrants studying prior to migration or on first arrival in Surabaya was lower than the proportion of males, but even so approximately 20 per cent of recent permanent female immigrants were studying at an educational institution prior to departure for Surabaya. The comparable proportion of recent male
migrants was 40 per cent, half of whom continued their studies on arrival in the city. The increased proportion of migrants studying prior to migration means recent migration flows contain substantial proportions of individuals without work experience prior to arrival in the city. In these instances, then, it is impossible to assess the effect of migration on occupational mobility. Although these migrants lacked previous work experience, they were better educated than most of their predecessors, an attribute which should facilitate upward occupational mobility on arrival in Surabaya.

This analysis has shown that the occupational status of migrants on first arrival in Surabaya varied significantly by period of migration. In particular, recent (1970-74) male inmigrants were disproportionately over-represented in unskilled occupations on arrival, 1950-59 male inmigrants were exceptionally successful in obtaining entry to skilled occupations on first arrival, and recent migration flows contained proportionately more students than earlier flows. The relative inability of recent male inmigrants to enter skilled occupations appeared to be due to a decrease in employment opportunities within skilled occupations since the 1960s. The occupational success of the 1950-59 male migrants, however, was due to an abundance of employment opportunities in Surabaya during the first years of independence, and to the transfer of occupationally skilled government employees to fill civil service positions vacated by the Dutch. The increased numerical significance of students in recent migration flows reflected the increased availability of education in Indonesia since independence. These findings emphasise that migrant selectivity and employment opportunities are time-specific, and as a result migration and the occupational mobility resulting from migration must be analysed within their historical context.

The analysis has also demonstrated a dramatic difference in the occupational status of newly arrived short-term and permanent recent (1970-74) female migrants. Both before migration (section 5.2.2) and on arrival in Surabaya the short-term migrants were occupationally and socio-economically disadvantaged in comparison to recent permanent female migrants. Indeed, the short-term, largely circular, female inmigrants appear the most socio-economically
disadvantaged cohort to arrive in Surabaya. In contrast, recent permanent female migrants appear comparable with earlier female arrivals (Figure 5.1).

5.4 SUMMARY AND CONCLUSIONS

The analysis of the occupational status of inmigrants prior to migration and on first arrival in Surabaya has indicated that migrants who were male, of foreign ethnic origin (predominantly Chinese) or of indigenous but non-Javanese and non-Madurese ethnic origin, from urban places of origin, and well-educated were more likely to be in high-status occupations both before and immediately after migration. However, the majority of inmigrants came to Surabaya from low-status occupations or were not gainfully employed in their previous place of residence, and as a result most could not aspire to high-status white-collar occupations on first arrival.

On arrival in Surabaya almost all migrants who sought work obtained gainful employment within two weeks of arrival, the number of migrants gainfully employed on arrival increasing by a third over the pre-migration total. Despite a prevalence of low-status employment among newly arrived inmigrants, available data indicate inmigrants benefited economically from the move to Surabaya, even when the additional living costs in Surabaya compared to place of origin are taken into consideration. Inmigrants unemployed prior to migration or inmigrants who worked as unpaid family labour prior to migration benefited most from the move. Inmigrants gainfully employed before and after migration also benefited from an increase in real income as a result of migration.

Newly arrived inmigrants were over-represented in industries protected from or of little interest to, modern capital intensive - labour extensive firms. Newly arrived migrants were concentrated in service industries, such as the government public service, the armed forces, domestic service and prostitution. Close examination of the occupational characteristics of newly arrived inmigrants supported Breman's (1976: 1905) view that the labour market was extremely fragmented, and that scarcity of work resulted in some groups
partitioning off parts of an industrial sector to exclude outsiders. Although compartmentalisation was dependent on many factors, ethnicity alone played a major role in the compartmentalisation of newly arrived immigrants within specific activities or industrial sectors.

Other factors besides ethnic origin affected the occupational status of newly arrived immigrants, the most important of which was the occupational status of immigrants prior to migration. Other important correlates were sex, educational attainment, rural or urban origin and region of origin. The relationships were similar to those which existed in the immigrants previous place of residence; immigrants who were male, better educated, from urban places of origin and from more distant source regions obtained jobs of a higher occupational status than other immigrants. However, these variables exhibited a high degree of correlation with each other which suggests they were surrogates of more fundamental causal factors, such as relative wealth and social status. The wealthier and more socially influential immigrants prior to migration obtained the best jobs on arrival in Surabaya. This implies that migration had little effect on the relative socio-economic and occupational status of individual migrants.

Apart from analysing the occupational status of immigrants before and after migration, this chapter applied Friedmann and Sullivan's (1974) tri-sectoral model to the employment structure of immigrants prior to migration. The application revealed three major shortcomings in the tri-sectoral model. First, as an aid in analysing the occupational and personal characteristics of migrants prior to migration, the tri-sectoral model was not a significant advance over the dualism model. Although the tri-sectoral model did recognise a degree of bi-polar dualism between migrants in the formal and non-formal sectors prior to migration, migrants included in the family sector were not intermediate in occupational, educational or demographic characteristics, as envisaged by Friedmann and Sullivan. Instead, the characteristics of members of the family sector imply that it may be more validly classified as a sub-sector of the informal sector rather than a separate sector of employment.
The second problem with the tri-sectoral model was that all not working immigrants were classed as members of the informal sector. This implies that the unemployed comprise a relatively homogeneous group of socio-economically underprivileged persons who tend to drift into employment in the informal sector. Investigation of the unemployed immigrants revealed a heterogeneous sub-group, a significant proportion of whom were well-educated first-time job-seekers who preferred to withhold their labour until migration, rather than drift into informal level occupations considered beneath their expected level of occupational status.

Thirdly, my analysis suggested that the sectoral position of immigrants before migration may not be a reliable guide to their occupational position and occupational mobility after migration. There were several reasons for the lack of confidence in the potential predictive capacity of the tri-sectoral model. First, the model excludes immigrants studying or engaged in home duties prior to migration, and yet significant proportions of both cohorts entered the workforce after migration. Second, the model is essentially a bivariate approach to prediction, in the sense that all predictions are based solely on sector of employment prior to migration. Empirical analysis indicated that ethnic origin and the rural or urban nature of the migrant's previous place of residence affected post-arrival occupational behaviour independently of sector of employment. Finally, it is obvious from the distribution of occupational skills and educational qualifications among migrants that each sector contains migrants with a wide range of backgrounds. It is unlikely that a simple four-category classification will succeed in predicting the post-arrival occupational behaviour of migrants to Surabaya.

In this chapter I also assessed the occupational characteristics of immigrants before and immediately after migration by period of migration, in order to isolate temporal changes in migrant selectivity and labour absorption. Analysis of the occupational status of immigrants prior to migration by period of migration, revealed that the 1950-59 intake of male immigrants contained more males in skilled occupations before migration than any other migration flow owing to the extraordinary need for indigenous
civil servants and other white-collar employees to replace departing colonial officials in the early years of independence. The development of educational facilities since independence has also resulted in a high proportion of students among recent male and female immigrants.

Analysis of female immigrants revealed sharp differences in the occupational status prior to migration of short-term and permanent recent female arrivals (1970-74). According to occupational status, educational attainment and the reasons for migration, recent short-term female immigrants were grossly underprivileged in comparison with recent female permanent immigrants prior to migration. Among the permanent female immigrants, there has been an increase since 1960 in the proportion of young never-married arrivals who were not working prior to migration. There appear to be three possible reasons for this increase. First, there are indications that since the late 1960s there have been more employment opportunities in Surabaya than in previous years. Second, as suggested by White (1976), there may also have been a decrease in productive employment opportunities in agriculture in many migrant source areas. However, many of the recent permanent female arrivals who were not working prior to migration were relatively well-educated and not likely to be interested in agricultural work. These immigrants were from socio-economically privileged backgrounds and were attracted to Surabaya by perceived job opportunities and prior promises of employment. Third, it is likely that the real increase of young never-married permanent female migrants over recent years is symptomatic of a general increase in the geographical mobility and social independence of young unmarried females in Indonesia.

The contrasts in migrant selectivity between migration flows prior to migration were carried over into the relative occupational status of migrants on first arrival in Surabaya. In particular, the short-term female arrivals were occupationally disadvantaged in comparison to permanent female migrants on arrival in Surabaya. Because of their greater economic need, short-term female migrants readily entered occupations on first arrival (such as prostitution) which most permanent female migrants found unacceptable. Similarly,
the positively selected male immigrants of the 1950s continued their relatively high occupational status on arrival and they were more successful than any other cohort in obtaining entry to skilled occupations. These findings emphasise that many of the major contrasts in the occupational status of newly arrived migrants by period of migration were the result of changes in the selectivity of immigrants. In addition, they emphasise that migrant selectivity and employment opportunities are time-specific, consequently migration and the occupational mobility which results from it must be analysed within the relevant historical context.
CHAPTER VI

OCCUPATIONAL MOBILITY AND THE MOVE TO SURABAYA

Having examined the occupational status and sector of employment of inmigrants before migration and having analysed their occupational status on arrival in Surabaya, I am in a position to assess the occupational mobility experienced by inmigrants as a result of their move to Surabaya. In accord with the two approaches used in Chapter Five, occupational mobility is assessed from the viewpoints of occupational status change and intersectoral mobility. The occupational status approach offers a more detailed classification of occupations than the sectoral approach and as a result it is more sensitive to occupational mobility. Because of this advantage, changes in occupational status of inmigrants as they move from their previous place of residence to Surabaya have been used to test Breman's (1976: 1907) prediction that because of surplus labour in most urban labour markets in LDCs, occupational stability or lateral movements between jobs of the same status is more common than occupational mobility among urban inmigrants. On the other hand, the sectoral approach is utilised to evaluate the urban dualism model as an aid to understanding the intersectoral labour mobility resulting from migration.

6.1 MIGRATION AND OCCUPATIONAL STATUS CHANGE AMONG INMIGRANTS

In this section I will determine the degree and direction of occupational status change experienced by inmigrants on first arrival in Surabaya. Occupational status change is measured by comparing an inmigrant's occupational status on first arrival with his or her occupational status prior to migration.

6.1.1 Measurement of Occupational Status Change

Occupational change is difficult to measure and is dependent on the classifications and definitions used. Here, an attempt is made to measure changes in occupational status when inmigrants moved from
their previous place of residence to Surabaya. Three major problems arise in this attempt:

i) There is the problem of how to rank rural occupations which have no counterpart in the city. As McGee (1971: 167) has noted, most classifications downgrade rural occupations relative to urban occupations, and as a result some studies have exaggerated the upward occupational mobility associated with rural-urban migration.

ii) Because of the young age at which most migrants moved to Surabaya, large numbers of immigrants were without gainful employment prior to migration (Figure 5.1). In these cases it was impossible to rank the previous occupation in terms of occupational status and impossible to measure occupational status change.

iii) An immigrant's initial position on the occupational status scale affects potential mobility. For example, someone at the top of the scale cannot move up on arrival in the city.

There appeared to be several ways of eliminating or minimising these problems. One approach which avoided the first problem, was to confine measures of occupational mobility indicative of the direction of occupational change to immigrants gainfully employed in non-farm occupations prior to migration. Farmers were excluded from consideration in this context, since they were the only occupational group unable to continue their occupation after migration. This enabled valid comparisons between the relative occupational status of immigrants immediately prior to and after migration. The only immigrants within this grouping who could not be included in a directional classification of occupational status change were the migrants gainfully employed in non-farm occupations prior to migration, who, on arrival, joined the 'not working' or 'home duties' categories. The number of migrants in this sub-group, however, was not large enough to invalidate the general findings (Table 6.1).
<table>
<thead>
<tr>
<th>Occupational status before departure</th>
<th>Male</th>
<th>Female</th>
<th>All migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gainfully employed in non-farm occupations before departure*</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Upward</td>
<td>305</td>
<td>6.9</td>
<td>14</td>
</tr>
<tr>
<td>Stable</td>
<td>7</td>
<td>87</td>
<td>11</td>
</tr>
<tr>
<td>Downward</td>
<td>13</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Movement into not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Movement into home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
<td>100</td>
<td>18</td>
</tr>
<tr>
<td>Farmers prior to departure**</td>
<td>1</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unskilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Student</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>99</td>
<td>14</td>
</tr>
<tr>
<td>Home duties prior to departure**</td>
<td>10</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unskilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Student</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>100</td>
<td>27</td>
</tr>
<tr>
<td>Students prior to departure**</td>
<td>3</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unskilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Student</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>99</td>
<td>60</td>
</tr>
</tbody>
</table>

Notes:
* Occupational mobility among those gainfully employed in non-farm occupations before departure has been assessed in relation to the seven detailed non-farm occupational status categories utilised in Table 3.1.
** In the case of these migrants, the occupational status categories of the immigrants gainfully employed on arrival, have been generalised into three major groupings: skilled, semi-skilled, and unskilled, as portrayed in Figure 5.1. The major groupings contain the following detailed occupational status categories:
  i) head government department/salaried professional/large scale owner-entrepreneur;
  ii) skilled; semi-skilled; and unskilled; as portrayed in Figure 5.1. The major groupings contain the following detailed occupational status categories:
  i) head government department/salaried professional/large scale owner-entrepreneur;
  ii) low-medium level clerical, administrative, technical employees, medium scale entrepreneur;
  iii) ordinary ranks, junior officers of armed forces and police;
  iv) skilled; semi-skilled; and unskilled; as portrayed in Figure 5.1. The major groupings contain the following detailed occupational status categories:
  v) semi-skilled artisans;
  vi) unskilled labourers;
  vii) peddlers and petty traders;
  viii) factory labourers.

Source: Questionnaire survey.
The ranking used to determine the direction of occupational status mobility was the ranking used in the classification of occupational status, except that only the first seven categories were used (refer Appendix 6.1). The ranking of the seven categories was derived predominantly from the relative median monthly incomes (cash plus the value of all goods) of the occupational status categories in Surabaya in 1974. This approach left unresolved what should be done about inmigrants not gainfully employed, or employed in farming activities prior to migration. As it was impossible to assess their direction (that is 'upward', 'stable' or 'downward') of occupational status change, it was decided inmigrants in the four remaining occupational status categories prior to migration (farmers, not working, home duties and students) would be considered in turn, and their occupational status on arrival in Surabaya examined.

The effects of the third problem, potential bias caused by an inmigrant's relative position prior to migration, could not be eliminated. However, potential bias was reduced to an insignificant amount by measuring the direction of occupational status change with a three-category classification (upward, stable and downward) combined with the detailed seven-category occupational status classification (first seven categories, Appendix 6.1). This approach resulted in the inclusion of only one migrant in the top occupational status category (head government department or large-scale entrepreneur) and three in the bottom or seventh category (factory labourers), prior to migration. The maximum possible effect of bias was thereby reduced to an insignificant amount; it could only affect the directional classification of 3.5 per cent of the 114 inmigrants (Table 6.1).

The use of the most detailed classification to determine occupational status mobility has the important advantage of detecting minor changes in occupational status. Indeed, it may be thought some of the changes detected are insignificant. For example, if an inmigrant changed his occupation from small-scale peddling prior to migration, to unskilled labouring on arrival in Surabaya, this classification would define the change as an upward move in occupational status, simply because the median monthly income of unskilled labourers in 1974 was higher than the income of petty traders. Earlier analysis, however, has led us to expect a reasonably
high degree of occupational status stability among inmigrants (section 5.3.1). Moreover, when the concept of urban dualism (McGee, 1972; 1976) and the concept of a fragmented labour market (Breman, 1976: 1905-8) are applied to migration, both models predict widespread occupational stability among inmigrants. Since a major aim of this study is to test the empirical relevance of these models, the adoption of a classification designed to detect minor changes in occupational status provides the maximum opportunity to validate the models. If the models' predictions of occupational stability persist under these unfavourable conditions, then their significance and reliability is enhanced.

6.1.2 Occupational Status Mobility of Inmigrants Gainfully Employed in Non-farm Occupations Prior to Migration

If the degree of occupational status mobility and its direction is now measured among inmigrants gainfully employed in non-farm occupations before migration (Table 6.1), earlier suggestions of occupational status stability (section 5.3.1) between previous place of residence and first arrival in Surabaya are supported. Two-thirds of the migrants on arrival in Surabaya entered jobs of the same occupational status as their previous job before migration.\(^{(1)}\)

It may be argued that the inclusion of transferees (N=29) has been responsible for the high degree of occupational status stability among inmigrants. If transferees are excluded from consideration, inmigrants whose occupational status did not change as a result of migration remained a majority (55 per cent). For 18 per cent of the non-transferees, migration resulted in an 'upward' change in occupational status on first arrival, whereas 12 per cent accepted a job of 'lower' occupational status.\(^{(2)}\) Another 6 per cent and 9 per

---

(1) A detailed breakdown of changes in occupational status between occupation in previous place of residence and occupation on first arrival in Surabaya is available in Appendix 6.1.

(2) The terms 'upward' and 'downward' refer to the directions of occupational status mobility experienced by inmigrants relative to the hierarchy of occupations used in this study. The terms are subjective and are not meant to imply that individual migrants view their change in occupational status in the same way. A discussion of the sense in which the terms are used is provided in Appendix 6.2.
cent respectively of the non-transferees became unemployed or entered home duties on first arrival in Surabaya. Clearly, even when transferees are excluded, migration appears to have had little effect in inducing occupational status mobility.

Male inmigrants gainfully employed in non-farm occupations before migration were less occupationally mobile than females, to a statistically significant degree. The major reason for the difference between the sexes was that all except one of the job transferees were male. If job transferees are excluded, 66 per cent of the male migrants and 47 per cent of the females remained in the same occupational status category immediately after migration, a difference which was statistically significant.

The general pattern of occupational status stability persisted when inmigrants were examined by period of migration (Table 6.1). Female inmigrants exhibited more variability by period of migration than male migrants, but only in the most recent migrant flow (1970-74) were occupationally stable inmigrants outnumbered by the occupationally mobile. Even the male inmigrants who entered Surabaya in the period 1950-59 experienced little change in occupational status on arrival, despite the unusually large range of employment opportunities available in these years. Most of the employment opportunities in skilled occupations appear to have been taken by inmigrants already employed in skilled occupations before migration. What were the reasons for such a high degree of occupational status stability?

Since at least the 1930s when the Great Depression destroyed Java's sugar industry and created economic hardship for much of the population (Paauw in McVey, 1963: 163), the labour market of Surabaya and most major Javanese cities has been characterised by job scarcity. Newly arrived inmigrants have had few opportunities to obtain gainful employment. Those already in gainful employment before migration have had few opportunities to obtain a job of higher status on arrival. The change of job necessitated by migration has usually not resulted in occupational status mobility. Indeed, if the occupational changes of the small number of inmigrants who obtained
higher status occupations on arrival are examined, half moved only one step up the occupational status hierarchy (refer Appendix 6.1).

In a labour market dominated by job scarcity it may be expected that downward occupational status change should be more common than upward mobility. When speaking of such a situation Breman (1976: 1907) says: 'although the road upwards is often blocked, the road downwards is all too easy to traverse'. In Surabaya this was not the case, even if immigrants who moved into unemployment on arrival, are included in the 'downward' total (Table 6.1). This apparent conflict with Breman, does not invalidate the hypothesis that job scarcity was the major factor responsible for occupational status stability among immigrants to Surabaya. One reason for the relatively small proportion of downwardly mobile migrants is that less successful migrants were probably disproportionately represented among returnees, who have been excluded from this study. Also, it is likely that a condition of job scarcity created caution in the minds of potential immigrants, particularly among those with something to lose. The group of immigrants under discussion were already gainfully employed in non-farm occupations prior to migration, and had jobs to lose by an incautious act of migration. Job scarcity in Surabaya meant that only those confident of obtaining employment of similar or higher status in Surabaya would migrate. Job scarcity, then, biased migrant selectivity away from those likely to experience a decline in occupational status. Among unemployed immigrants it is likely these considerations would be unimportant; they had little to lose from a move. These considerations partly account for the fact that half of the migrants gainfully employed prior to migration had a job promised before migrating. The proportion of farmers with job promised was 31 per cent. Among students and the unemployed the percentages were 33 per cent and 32 per cent, respectively.

Although the incidence of job promises among migrants is partly a function of job scarcity in Surabaya, these promises appear to have reduced vertical occupation mobility. Seventeen per cent of the gainfully employed migrants with job promises were occupationally mobile, compared to 43 per cent of the migrants without promises prior to migration ($X^2 =8.7; p< 0.005$). Most job offers came from companies
or friends of the migrant resident in Surabaya. The former usually involved job transfers which virtually guaranteed there was no change in the occupational status of the migrant on arrival in Surabaya. Promises from friends whose socio-economic backgrounds were probably not unlike the migrants', were likely to be for jobs of similar occupational status to those occupied by inmigrants before migration.

Migration to Surabaya, at least until the stage of first arrival in the city, has not resulted in occupational status mobility for most migrants. As predicted by the dualism and fragmented labour market models, the occupational status of most inmigrants has been unaltered by migration. An investigation of the causes of occupational status stability indicates job scarcity in Surabaya has played the major role, as Breman (1976: 1907) predicted. But job scarcity in Surabaya appears to have influenced occupational status mobility not only through its direct and obvious effect on job opportunities, but also through its side effects on migrant selectivity, return migration and the incidence of job promises among migrants.

6.1.3 Occupational Status on Arrival of Inmigrants Previously Engaged in Farming or Not Gainfully Employed

Newly arrived inmigrants previously engaged in farming activities or not gainfully employed before migration were not included in the analysis of the directions of occupational status mobility because their occupations immediately before and after migration were incomparable. However, their generalised occupational status on arrival in Surabaya is described in Table 6.1.

The vast majority of inmigrants engaged in farming prior to migration found unskilled jobs on arrival in Surabaya; very few obtained skilled or semi-skilled occupations (Table 6.1). Statistical analysis revealed a significant positive correlation between educational attainment and occupational status on arrival among migrant farm workers. Although lack of work experience relevant to urban employment undoubtedly hindered migrant farm workers in their search for high-status employment in Surabaya, the small minority of
elementary school graduates (15 per cent) had a better chance of getting a skilled or semi-skilled occupation than those who had not completed elementary school. Indeed, lack of formal educational qualifications among migrant farm workers (46 per cent had never been to school) appears the major reason for their over-representation in low-status employment on first arrival. This interpretation is reinforced by the finding that though job promises prior to migration were as common among migrant farm workers as among migrants previously studying or unemployed, farm workers with prior job promises did not get higher status occupations on arrival than those without job promises. In contrast, among better educated immigrant cohorts, comprised of the unemployed or migrants studying prior to migration, migrants with job promises before migration got better jobs on arrival than migrants without promises.

The large concentration of male and female former farm workers in low-status unskilled occupations on arrival remained constant by period of migration, though the most recent female arrivals (1970-74) were more concentrated in unskilled jobs and less represented in home duties than any other female cohort. This reflected the large proportion of young unmarried short-term migrants among this cohort (Table 6.1 and Figure 5.1). A detailed breakdown of the occupations of newly arrived farm workers who entered the labour force, emphasises the low status of their employment and their desperate economic plight on arrival in Surabaya (Table 6.2). The largest proportion of male migrants entered unskilled labouring jobs where they worked as building labourers, dockyard coolies, temporary labourers (hired on a daily basis) or becak drivers. Most males not employed as labourers gained an income from small scale peddling of foodstuffs, cigarettes, second-hand goods and flowers from small warung in marketplaces, or on footpaths. Other male migrants who were previously farmers got work in semi-skilled occupations. Most worked as self-taught tradesmen (such as welder's assistants, bricklayers, painters, carpenters, furniture makers) or as roadside artisans (such as bootmakers).

Female migrants from farming backgrounds, many of whom were unpaid family farm labourers prior to migration, usually took up
TABLE 6.2 - Occupational status* on arrival of immigrants farming, not working or studying before migration by sex and intended duration of residence of female immigrants

<table>
<thead>
<tr>
<th>Occupational status on arrival</th>
<th>Farming before Migration</th>
<th></th>
<th>Not working before Migration</th>
<th></th>
<th>Studying before migration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Short-term 1970-74 arrivals</td>
<td>All permanent arrivals</td>
<td>Total</td>
<td>Short-term 1970-74 arrivals</td>
<td>All permanent arrivals</td>
</tr>
<tr>
<td>Head govt. dept/salaried profession/large scale entrepreneur</td>
<td>N 2</td>
<td>N 2</td>
<td>N 2</td>
<td>N 2</td>
<td>N 2</td>
<td>N 2</td>
</tr>
<tr>
<td>Low-medium level clerical, admin. or technical employees/medium scale entrepreneurs</td>
<td>3</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ordinary ranks, junior officers armed forces and police</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>10</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>21</td>
<td>43</td>
<td>20</td>
<td>100</td>
<td>24</td>
<td>62</td>
</tr>
<tr>
<td>Domestic Servants</td>
<td>(-)</td>
<td>(-)</td>
<td>(2)</td>
<td>(4)</td>
<td>(3)</td>
<td>(15)</td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>12</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Factory labourers</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not working</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: * Excludes immigrants engaged in home duties or studying on arrival.
** There were no short-term 1970-74 arrivals among the female immigrants studying before migration.

Source: Questionnaire survey.
unskilled labouring jobs on first arrival. In keeping with the generally low socio-economic status of short-term female migrants prior to migration (section 5.2.2), short-term female arrivals from farming backgrounds were concentrated in low-status unskilled occupations on arrival: 85 per cent entered prostitution and the remainder found employment as domestic servants (Table 6.2). Neither occupation, especially prostitution, ranked highly in terms of social acceptability, but prostitution in particular, was very remunerative (median monthly income of Rp16,500) and this made short-term migration practicable.

Permanent female migrants were not so dependent on a limited number of occupations for employment as the short-term migrants (Table 6.2). The majority (62 per cent) took up unskilled labouring jobs of which domestic service was the most popular, followed closely by prostitution. Another 20 per cent took up petty peddling of cooked foodstuffs, cigarettes, fish, leaves (used for cooking or wrapping), coconuts, vegetables and jamu (herbal medicine). A significant proportion of the permanent female migrants remained out of gainful employment on arrival, a choice not available to the short-term female migrants (Table 6.2).

When inmigrants not in the workforce on arrival (that is studying or engaged in household duties) are excluded to facilitate comparison, significantly more male migrants than females were found in skilled or semi-skilled occupations on arrival (Table 6.2). Although the difference was increased by the presence of a sizeable group of short-term inmigrants among recent (1970-74) female arrivals, when this group was set aside, a significant difference remained (Table 6.2). Formal educational qualifications were essential for farm workers seeking a skilled occupation on arrival in Surabaya (all previous farm workers in skilled jobs had completed elementary school), but the marginally superior educational qualifications of male migrants did not explain the difference in occupational status of male and female inmigrants. For example, among migrants who failed to complete elementary school, males found more ready access to semi-skilled employment than females. The activities of the semi-skilled artisans explain the sex imbalance. Most semi-skilled
workers were kerbside artisans (bucket makers, bootmakers, box makers) or self-taught tradesmen involved in physically demanding construction work (carpenters, plumbers, bricklayers - Table 5.9) not attractive to women (Table 5.12).

Although inmigrants from farming backgrounds had difficulty finding skilled or semi-skilled occupations on arrival, migrants who were unemployed or studying prior to migration entered these higher status occupations much more easily, particularly the males (Table 6.1). Both the unemployed and student immigrants were better educated than migrating farm workers when they first arrived in the city (Table 5.2) which undoubtedly aided entry to higher status occupations. Of those migrants who were not working in their previous place of residence, the better educated obtained better jobs than those with lower educational qualifications. Previously unemployed migrants, like migrant farm workers, lacked relevant work experience to facilitate entry to urban employment. Approximately one-third of each cohort of migrants had jobs promised to them prior to migration. Despite these similarities and common handicaps, however, previously unemployed migrants who entered the labour force on arrival in Surabaya were more successful in obtaining higher status occupations than migrant farm workers (Tables 6.1 and 6.2). It appears superior educational qualifications account for their occupational success.

Previously unemployed female migrants who arrived in 1970-74 were more heavily represented in unskilled occupations on arrival than their predecessors (Table 6.1). The reason is that the most recent cohort of previously unemployed female migrants included a substantial proportion of short-term migrants employed exclusively in unskilled labouring jobs on arrival (prostitution 62 per cent and domestic service 38 per cent, Table 6.2). In contrast, only 2 per cent of the permanent female migrants not working before migration, entered prostitution on arrival in Surabaya. Instead, 34 per cent took up domestic service and 43 per cent remained out of work, an option which could not be afforded by so many permanent female migrants from farming backgrounds.

A comparison of the occupational status on arrival of male and female immigrants unemployed prior to migration indicates that
male migrants consistently took better jobs than females, and this difference persisted when short-term female migrants were excluded from the comparison (Table 6.2). The number of females in high-status occupations was too small to allow a meaningful comparison with educational attainment standardised, but it is clear that females were effectively excluded from jobs with the armed forces and from artisan occupations in which the nature of the work favoured male employees.

The relatively large proportion of previously unemployed permanent female inmigrants who remained unemployed on arrival in Surabaya also requires explanation (Table 6.2). The educational qualifications of this cohort were better than those possessed by their counterparts employed in unskilled or even skilled occupations, indicating they were a positively selected migrant cohort who on arrival chose to remain out of work until marriage or the appearance of a high-status job opportunity. On the other hand, previously unemployed male migrants who were unemployed on arrival were not as well-educated as their colleagues employed in unskilled, semi-skilled or skilled occupations; this suggests few of this group were unemployed by choice.

Of the inmigrants studying before migration approximately half continued their studies on arrival in Surabaya (Table 6.1). The 'student inmigrants' who entered or tried to enter the workforce found high-status employment, particularly in clerical jobs, more readily than migrants previously unemployed, probably because of their superior educational qualifications (Tables 6.2 and 5.12). Despite the general educational advantage of the student inmigrants the presence or absence of urban contacts and a previous job promise played a large role in determining who obtained gainful employment on arrival. Forty-nine per cent of the student inmigrants without a job promise prior to migration were unemployed on first arrival, whereas all student migrants with a job promise obtained gainful employment, and 84 per cent took up skilled jobs. Approximately one-quarter of the student inmigrants unemployed on arrival were better educated than other student migrants who had obtained employment in semi-skilled or unskilled jobs on arrival; which suggests a significant proportion of this group preferred unemployment to a job 'below' their educational
qualifications. A detailed breakdown of the occupational status of newly arrived immigrants who were studying prior to migration indicates that females were slightly more concentrated in the highest occupational status categories than males, but were underrepresented in the medium level occupations (Table 6.2). Very few male or female student immigrants entered unskilled labouring jobs or petty trading on first arrival.

Recent student arrivals have been more successful than their predecessors in obtaining jobs commensurate with their formal educational qualifications (Table 6.1). This applies particularly to male migrants, who appear to have enjoyed an increase in employment opportunities in high status occupations since independence at the end of 1949.

The one group of immigrants not yet considered are the females engaged in home duties prior to migration. The majority of these migrants continued domestic duties after their arrival in Surabaya, regardless of the period of migration (Table 6.1). The remainder took unskilled jobs. Half of those who found it necessary to enter the workforce were divorced or separated from their husbands prior to departure for Surabaya. The resulting personal and economic problems left them little choice but to migrate and seek employment.

6.1.4 An Overview of Occupational Status Before and After Migration

The relative proportion of each occupational status category occupied by newly arrived immigrants engaged in occupations of a specific status prior to migration is portrayed in Figure 6.1. The major finding is that the higher the occupational status of immigrants gainfully employed on arrival, the larger the proportion of migrants in occupations of the same status prior to migration. This relationship was particularly noticeable among male migrants and among the 1960-69 female arrivals. From 25 to 70 per cent of the high-status skilled or semi-skilled job opportunities available to male migrants on arrival in Surabaya, were taken by migrants who held jobs of equivalent status before migration. Job transfers explain some of the occupational status stability, but the advantages of similar job
Explanatory Key to Figure 6.1

% in occupational status categories of:
- Skilled (Sk)
- Semi-skilled (Ssk)
- Unskilled (Usk)
- Farming (F)

Not working (NW)
Household duties (HD)
Student (S)

Notes:
(i) At first glance this figure may appear complicated. In fact it is simple, as the following example shows.
Example:
Looking at the males (N=39) who migrated during the period 1970-74 (top left diagram) and reading vertically we learn that 74% of those immigrants obtained gainful employment on arrival: 26% skilled, 10% semi-skilled, and 38% unskilled. Non-income recipients comprised 26% of the inmigrants on arrival: 21% students and 5% unemployed. Reading the figure from left to right and looking at immigrants in skilled occupations on arrival, we learn that 50% were in skilled occupations prior to migration (unshaded because occupational status prior to migration same as on arrival), 10% were farmers, 10% were unemployed and 30% were studying. By way of comparison, most of the immigrants in unskilled occupations on arrival were either not working (53%) or farming (33%) prior to migration, only 7% were in unskilled jobs (unshaded) and another 7% were in skilled occupations.

(ii) As an additional aid to interpretation note that in the case of the first three occupational status categories on first arrival (skilled, semi-skilled and unskilled), shaded sections to the left of the unshaded area represent immigrants whose occupational status prior to migration was 'higher' than that on arrival. Occupational status categories to the right of the shaded area represent immigrants not gainfully employed before migration whose occupational status prior to migration was 'lower' than that on arrival.

Source: Questionnaire survey
Figure 6.1
Occupational status on arrival by occupational status prior to migration, by sex and period of migration

Period of Migration: 1970-74

- Male (N=39)
  - Sk
  - Ssk
  - Usk
  - NW
  - S

Period of Migration: 1960-69

- Male (N=83)
  - Sk
  - Ssk
  - Usk
  - NW
  - S

Period of Migration: 1950-59

- Male (N=58)
  - Sk
  - Ssk
  - Usk
  - NW
  - S

Period of Migration: Pre-1950

- Male (N=51)
  - Sk
  - Ssk
  - Usk
  - NW
  - S

Source: Questionnaire survey
experience before migration also weigh against changes in occupational status. The extent of occupational status stability is clearly evident among the 1950-59 inflow of male migrants. According to earlier comments this cohort arrived in a city freed from colonial rule and with an abundance of job opportunities, but job opportunities notwithstanding, some 70 per cent of the skilled jobs available to newly arrived male migrants were taken by immigrants who already occupied skilled positions prior to migration. Not one of these skilled occupations was successfully claimed by a migrant from a semi-skilled or unskilled occupation. The general picture then, especially at the upper end of the occupational hierarchy, is of a job-scarce labour market in which most of the jobs available to new arrivals go to those in occupations of a similar status.

The major exception to the general pattern of occupational status stability between previous occupation and occupation on arrival, was the student immigrants, who since 1960 have been very successful in claiming high-status occupations on arrival in Surabaya (Figure 6.1). Some of the students' success in recent years is a reflection of their increased proportional representation in post-1960 migration flows (Figure 5.1), itself a result of a nationwide increase in the time spent at school. Nevertheless, the large proportion of student immigrants in skilled occupations since 1960 seems to suggest a real increase in demand for formally qualified employees in white-collar occupations over the last two decades. Some immigrants unemployed prior to migration, particularly the male arrivals of the 1960s, were also successful in claiming high-status employment on arrival. However, most of the 'success stories' were confined to the minority of previously unemployed migrants who had completed elementary schooling or better, whereas the majority without elementary schooling took unskilled jobs on first arrival (Figure 6.1). Migrant farm workers, like the poorly educated previously unemployed migrants found it difficult to get skilled occupations on first arrival.

Between 25 and 60 per cent of the male, and up to 25 per cent of the female immigrants not working on first arrival, were studying prior to migration, which implies that some of those not working on
arrival were socio-economically advantaged and chose to stay out of work rather than accept a low-status occupation. Predictably, most females engaged in domestic duties on arrival were involved in household duties in their previous place of residence; and almost all migrants who continued studying on arrival were students at the time of their departure for Surabaya (Figure 6.1).

In summary, occupational status mobility among migrants gainfully employed prior to migration was uncommon, particularly among those in skilled occupations on arrival. However, though job scarcity at the high-status end of the labour market prevented upward mobility by inmigrants from semi-skilled and unskilled occupations, newly arrived migrants who were students prior to migration, and to a lesser extent some of the inmigrants previously unemployed, were relatively successful in obtaining entry to skilled occupations. Migrant farm workers, like uneducated migrants previously unemployed, made up the majority of those in unskilled and semi-skilled jobs on arrival.

6.2 INTERSECTORAL MOBILITY OF RECENT INMIGRANTS (1969-74)

I will now attempt to interpret the relative occupational position of recent inmigrants on first arrival in Surabaya in terms of Friedmann and Sullivans' tri-sectoral model (1974). The attempt is necessarily confined to recent inmigrants (1969-74) because questions about employer status and size of workforce on arrival, the two variables used to identify the inmigrants' sector of employment, were not included in the questionnaire administered to pre-1969 inmigrants. These questions were omitted because it was thought earlier migrants, some of whom entered Surabaya for the first time 30 or 40 years before this study, may have had difficulty accurately recalling employer-status and size of workforce in their first occupation on arrival, particularly if they remained in that job for a relatively short time. Only 111 of the 207 recent inmigrants interviewed can be included in the analysis of intersectoral mobility, because 96 inmigrants were outside the labour force either before or after migration. As the model identifies three major sectors of the labour force (formal, family and informal) and two sub-sectors within the informal sector (working and not-working), the number of
observations per sector and sub-sector is small. The small number of observations constrains analysis and cautions against application of the results outside Surabaya.

6.2.1 Employment Structure of Recent Immigrants Before Departure for Surabaya

The essential first step in evaluating the tri-sectoral model as an aid to understanding the effects of migration on occupational mobility is to apply the model to recent immigrants in their previous place of residence. This identifies an immigrant's initial sector of employment which serves as a benchmark for the measurement of subsequent occupational change. In order to increase comparability with Friedmann and Sullivan's (1974) original concept which confined the model to the urban labour force, recent immigrants from rural and urban source areas are considered separately (Table 6.3).

Formal sector employment was of greater relative importance in the urban than in the rural source areas, because of the concentration of government employment in these centres. All formal sector employees from urban areas were in high-status skilled occupations which demanded at least a primary school education. A majority of the urban formal sector employees were male, and two-fifths were non-Javanese. The small number of formal sector employees from rural areas were predominantly female, in unskilled occupations, poorly educated, and less well-paid than their urban counterparts.

The proportion of recent migrants not working prior to migration was similar in rural and urban source areas. The sex imbalance was greater among rural migrants, and their level of educational attainment was lower than their urban counterparts (Table 6.3). These observations suggest the flow of urban unemployed immigrants contained a higher proportion of persons withholding their labour until the right job opportunity appeared, than the unemployed inflow from rural villages.

In the urban source areas the family sector was small and comprised only a few domestic servants (Table 6.3). The family sector
<table>
<thead>
<tr>
<th>Sector of employment in rural and urban source areas</th>
<th>N (%)</th>
<th>Sex ratio (M/100)</th>
<th>Sex &amp; marital status (%) Male</th>
<th>Ethnic origin (%)</th>
<th>General occupational status (%)</th>
<th>Major activity</th>
<th>Median income per month (Rp)**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RURAL</strong></td>
<td></td>
<td></td>
<td>Never married</td>
<td>Never married</td>
<td>Completed elementary school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>4 (4)</td>
<td>33</td>
<td>25 - - 25 50</td>
<td>100 - - - 25 25</td>
<td>7000</td>
<td>Planter for sugar factory, factory labourer, member of armed forces</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>21 (23)</td>
<td>23</td>
<td>5 14 52 5 5 19</td>
<td>91 9 - - 14</td>
<td>3000</td>
<td>Farm labourers (81%), farmers, unskilled restaurant labourers</td>
<td></td>
</tr>
<tr>
<td>Informal-working</td>
<td>31 (34)</td>
<td>15</td>
<td>3 10 42 10 16 19</td>
<td>84 16 - - 10</td>
<td>166</td>
<td>Farmers, farm labourers, petty traders in the pasar &amp; semi-skilled artisans</td>
<td></td>
</tr>
<tr>
<td>Informal-not working</td>
<td>35 (39)</td>
<td>21</td>
<td>14 3 57 9 11 6</td>
<td>86 11 3 - 34</td>
<td>11250</td>
<td>Farmers, rice sellers in pasar, tailor, formally qualified mechanic, domestic labourer</td>
<td></td>
</tr>
<tr>
<td>All rural migrants</td>
<td>91 (100)</td>
<td>20</td>
<td>9 8 48 8 12 15</td>
<td>87 12 1 - 21</td>
<td>5000</td>
<td>Domestic servants</td>
<td></td>
</tr>
<tr>
<td><strong>URBAN</strong></td>
<td></td>
<td></td>
<td>Family</td>
<td></td>
<td></td>
<td>Office clerks, teachers, specialised technician</td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>10 (28)</td>
<td>150</td>
<td>30 30 10 20 - 10</td>
<td>60 20 20 - 100</td>
<td>8250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>3 (9)</td>
<td>50</td>
<td>- 33 67 - -</td>
<td>100 - - 33 -</td>
<td>5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal-working</td>
<td>9 (26)</td>
<td>29</td>
<td>11 11 - 22 22 - 56</td>
<td>89 11 67 - -</td>
<td>11250</td>
<td>Farmers, rice sellers in pasar, tailor, formally qualified mechanic, domestic labourer</td>
<td></td>
</tr>
<tr>
<td>Informal-not working</td>
<td>13 (37)</td>
<td>62</td>
<td>38 - 31 - 8 23</td>
<td>77 15 8 - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All urban migrants</td>
<td>35 (100)</td>
<td>67</td>
<td>26 14 20 11 5 26</td>
<td>77 6 14 3 80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent.
** In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp 485 = A$1.00. During the period 1969-73 the exchange rate with the Australian dollar varied, but during the whole period 1969-74 the exchange rate with the U.S. dollar remained at Rp 415 - U.S.$1.00.

Source: Questionnaire survey of recent immigrants.
was more important in rural areas, however, where it consisted of farm labourers employed by land-owners not members of the employee's family, or farmers who employed non-family labour. Family sector employees in rural areas were disadvantaged in terms of educational attainment and income in comparison with employees in urban places. The informal sector immigrants from rural areas who were working prior to migration, appeared to be of similar socio-economic status to family sector employees from rural areas. Like family sector employees, a majority of immigrants in the informal (working) sub-sector were engaged in farming activities, though by definition they were either self-employed or employed by other members of their family. Because many of those who worked for other members of their family were unpaid, the median income of informal (working) sub-sector employees in rural areas was below that of family sector employees in rural areas (Table 6.3). In contrast, members of the informal (working) who were to migrate to Surabaya from urban areas were mostly self-employed petty traders or artisans, whose median income was higher than salaried formal sector employees in urban source areas. This observation is contrary to most views of the hierarchical position of informal sector employees (refer Sethuraman, 1976: 75), though other empirical research (Mazumdar, 1976: 663-5; Bienefeld, 1975: 66) has also suggested that a significant proportion of the self-employed in urban areas receive higher incomes than many formal sector employees.

Since recent immigrants account for 35 per cent of the total immigrant population analysed earlier (section 5.2.3), this discussion has reiterated some of the empirical findings already noted. For example, it has confirmed that at least in rural source areas, a bi-polar dualism (between formal and non-formal sector employees) may be recognised in the socio-economic status of immigrants prior to migration (Table 6.3). It also supported the earlier assertion that the family sector appears to be a sub-sector of the informal sector, rather than a truly intermediate sector between the formal and the informal, though once again this finding was confined to rural immigrants. Thirdly, the discussion re-emphasised earlier doubts about the hierarchical placement of not-working individuals on the lower rung of the informal sector in Friedmann and Sullivan's (1974) model.
Apart from these findings, this discussion has emphasised two major features of the sectoral structure of recent migrants prior to migration. First, 89 per cent of all recent immigrants were members of either the family, informal (working) or informal (not-working) sectors and sub-sectors of the labour force, before they moved to Surabaya. The vast majority of the migrants in these three sectors and sub-sectors were female, of low educational attainment levels, from rural areas, and poor. Their working backgrounds prior to migration (such as farming or unemployment) generally failed to provide them with job experience relevant in their search for employment on arrival in Surabaya. As a result of this pre-migration occupational structure, it may be hypothesised that if the tri-sectoral model has power to predict the post-arrival sectoral status of immigrants, then most recent migrants will obtain employment in the family or informal sectors of Surabaya's labour force on arrival.

The second feature was the existence of a large difference in socio-economic status between recent migrants from rural and urban areas. In almost every instance immigrants from urban areas were socio-economically advantaged in comparison with rural migrants employed in the same sector of the labour market prior to migration. Contrasts in sex composition and occupation between the two groups of immigrants, however, complicate the comparison.

6.2.2 Intersectoral Mobility of Recent Immigrants (1969-74)

The intersectoral labour mobility of recent immigrants from sector of employment prior to migration to sector of employment on first arrival in Surabaya is portrayed in Figure 6.2 for both rural and urban immigrants. The absolute number of immigrants involved in specific intersectoral moves, termed 'intersectoral mobility streams', has been shown in preference to a proportional representation, so as not to misrepresent the small number of observations involved and to emphasise the need for caution in the interpretation of the results.

From Figure 6.2 it is apparent that the vast majority of recent immigrants gainfully employed or unemployed before and after
Figure 6.2
Intersectoral labour mobility between employment prior to migration and employment on first arrival in Surabaya of recent (1969-74) in-migrants from rural and urban source areas

Sectors of the labour market
- Formal
- Family
- (i) Working
- (ii) Not working

Intersectoral mobility streams
- Number of persons
  - Formal: 4
  - Family: 8
  - (i) Working: 16
  - (ii) Not working: 32

Source: Questionnaire survey
migration, entered the non-formal sectors of the city's labour force on first arrival. This finding was predicted above (section 6.2.1) and is consistent with McGee's (1976: 18-20) 'second scenario'. Three-quarters of the recent inmigrants moved to Surabaya from rural places. On first arrival in the city these migrants were more concentrated in the non-formal sectors of the city's economy than were the urban migrants. Family sector employment absorbed the largest proportion of the arrivals, this sector alone employed 64 per cent of all recent inmigrants who were in the labour force before and after migration. In comparison, less than one-quarter of the rural and urban inmigrants were employed in the family sector before migration (Figure 6.2).

Friedmann and Sullivan (1974) did not attempt to apply their tri-sectoral model of urban employment either to migration, or to the effect of migration on occupational mobility. McGee (1972: 108-22; 1976) applied the urban dualism model to migration research and more recently added a dynamic dimension to the structural approach. I see value in applying the Friedmann and Sullivan (1974) tri-sectoral model to explain the occupational mobility experienced by inmigrants to Surabaya; particularly in view of the inherent advantages which this model appears to possess in comparison to the more simplistic concept of urban dualism (refer sections 1.2.2 and 5.2.3). This attempt has some implied justification from Friedmann and Sullivan's (1974) own work which not only emphasises the labour absorption aspects of the model, but also outlines some of the implications of such a model for occupational mobility within the urban labour force.

A tenet of McGee's application of the urban dualism model to labour mobility is that inmigrants who enter the same sector of employment which they left in their previous place of residence, will face fewer problems in obtaining work than those who seek work in a new sector (McGee, 1976: 16-7). For example, migrants from the informal sector of the rural economy will find it easier to obtain employment in the informal sector of the urban economy where a peasant mode of production predominates, than in the formal sector, dominated by a capitalist mode of production where formal educational qualifications, contacts and or capital are usually required to obtain
entry. Similarly, movement from the capitalist or formal sector of the rural economy to the formal sector of the urban labour force, is also relatively common and easy, involving a large proportion of transfer movements (McGee, 1976: 16). If this tenet is carried over into our application of the tri-sectoral model to explain labour mobility, we would expect a majority of the immigrants employed in the formal, family and informal sectors prior to migration to obtain initial employment in Surabaya within these same sectors. Friedmann and Sullivan (1974: 403) when commenting on post-arrival occupational mobility of migrants suggest the family-informal sector boundary does not significantly hinder mobility: 'top occupations are generally reached only from 'superior' subsectors [from other sub-sectors of the formal sector]. The rise to the F-sector [family sector], however, can be accomplished with roughly equal probabilities from any of the subsectors below it'. The extension of their model to explain labour mobility, should not emphasise the boundary between the family and the informal sectors, or the boundary between the working and not-working sub-sectors of the informal sector.

It is possible to test the predictive capacity and explanatory value of the tri-sectoral model in Surabaya by hypothesising that:

1. A majority of immigrants employed in the formal sector prior to migration will be employed in the formal sector of the urban economy on arrival in Surabaya.

2. Although a majority of the immigrants employed in the family and informal sectors before migration may obtain initial employment in these same sectors on first arrival in Surabaya, intersectoral mobility between these two sectors will be unrestricted. The model suggests, however, that a minority of immigrants previously employed in the family or informal sectors, will be employed in the formal sector on arrival in Surabaya.

The extremely small number of recent immigrants employed in the formal sector before migration seriously handicapped our testing
of the first hypothesis (Figure 6.2 and Table 6.4), but some tentative findings are presented. Overall, a majority (67 per cent) of the extremely small number of immigrants previously employed in the formal sector obtained jobs in that sector on arrival in Surabaya. However, support for the hypothesis was confined to male immigrants most of whom came to Surabaya from urban areas (Table 6.4). Considering the low occupational and educational level of rural immigrants previously employed in the formal sector (Table 6.3), it is not surprising that they were less successful than their urban counterparts in obtaining formal sector employment in Surabaya (Figure 6.2). Most of the rural immigrants previously employed in the formal sector were in unskilled occupations which did not offer the prospect of job transfers to Surabaya. In contrast, four of the six male immigrants from urban settlements were transferred to Surabaya by their employers.

The second hypothesis may be tested with more confidence than the first because of the larger number of respondents employed in the family and informal sectors prior to migration (Figure 6.2 and Tables 6.3, 6.4). The majority of immigrants employed in the family sector before migration were employed within the same sector on first arrival in Surabaya (Table 6.4). The exception was the male immigrants, 40 per cent of whom entered the formal sector on arrival. This finding implies that family sector arrivals remained within the same sector of employment, and that because intersectoral movement is more difficult than intrasectoral movement, an immigrant's sector of employment prior to migration is a reliable predictor of his sector of employment on first arrival in Surabaya. But if immigrants from the sub-sectors of the informal sector are examined, it is clear that the vast majority of the informal (working) and informal (not-working) immigrants also obtained gainful employment in Surabaya's family sector on arrival (Table 6.4). It appears that employment opportunities within this sector have been more plentiful or more attractive than alternatives in the informal sector, at least as far as immigrants from non-formal sector employment were concerned. The relative employment opportunities available to occupationally unskilled immigrants in each of the non-formal sectors of the city's economy may be a more important predictor of the immigrant's sector of employment on arrival, than the sectoral location of that person's employment before
### Table 6.4

The sectoral distribution of recent (1969–74) inmigrants on first arrival in Surabaya, by sector of employment before migration, source area, occupation before migration, sex and intended duration of residence.

<table>
<thead>
<tr>
<th>Sector of employment before migration</th>
<th>Sector of employment on first arrival</th>
<th>All migrants</th>
<th>Source area</th>
<th>Occupation</th>
<th>Sex</th>
<th>Male*</th>
<th>Female*</th>
<th>Short-term Permanent migrants</th>
<th>Short-term Permanent migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Farmer</td>
<td>Non-farmer</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>FORMAL</td>
<td></td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
<td>N % N % N %</td>
</tr>
<tr>
<td>Formal</td>
<td></td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
<td>8 67 1 25 7 87</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
<td>3 25 2 50 1 13</td>
</tr>
<tr>
<td>Informal-working</td>
<td></td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
</tr>
<tr>
<td>Informal-not working</td>
<td></td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
<td>1 8 1 25 - -</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>12 100 4 100 8 100</td>
<td>1 100 11 100</td>
<td>7 100 5 100</td>
<td>2 100 2 100</td>
<td>2 100 1 100</td>
<td>2 100 1 100</td>
<td>2 100 1 100</td>
<td>2 100 1 100</td>
</tr>
<tr>
<td>FAMILY</td>
<td></td>
<td>2 8 2 10 - -</td>
<td>2 10 - -</td>
<td>2 10 - -</td>
<td>40 - -</td>
<td>- -</td>
<td>1 50</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Formal</td>
<td></td>
<td>21 88 17 85 3 100</td>
<td>17 85 4 100</td>
<td>4 100</td>
<td>19 100</td>
<td>1 50</td>
<td>- -</td>
<td>1 100 2 100</td>
<td>1 100 2 100</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td>1 4 1 5 - -</td>
<td>1 5 - -</td>
<td>1 5 - -</td>
<td>20 - -</td>
<td>- -</td>
<td>1 50</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Informal-working</td>
<td></td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Informal-not working</td>
<td></td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>24 100 20 100 3 100</td>
<td>20 100 4 100</td>
<td>5 100 19 100</td>
<td>- - 2 100</td>
<td>8 100 2 100</td>
<td>16 89 2 40</td>
<td>1 5 - -</td>
<td>1 5 - -</td>
</tr>
<tr>
<td>INFORMAL (Working)</td>
<td></td>
<td>3 9 2 7 1 17</td>
<td>3 14 -</td>
<td>3 60 -</td>
<td>- -</td>
<td>2 67</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>(Working)</td>
<td></td>
<td>22 65 17 61 5 83</td>
<td>15 68 7 58</td>
<td>- - 22 76</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>16 89 2 40</td>
<td>16 89 2 40</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td>4 12 4 14 - -</td>
<td>2 9 2 17</td>
<td>2 40 2 7</td>
<td>- -</td>
<td>1 33</td>
<td>1 5</td>
<td>- -</td>
<td>1 5</td>
</tr>
<tr>
<td>Informal-working</td>
<td></td>
<td>5 14 5 18 - -</td>
<td>2 9 3 25</td>
<td>- - 5 17</td>
<td>- -</td>
<td>- -</td>
<td>1 5 3 60</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Informal-not working</td>
<td></td>
<td>34 100 28 100 6 100</td>
<td>22 100 12 100</td>
<td>5 100 29 100</td>
<td>- - 3 100</td>
<td>18 99 5 100</td>
<td>13 93 7 58</td>
<td>13 93 7 58</td>
<td>13 93 7 58</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>42 100 31 99 11 99</td>
<td>- - 42 100</td>
<td>11 100 31 100</td>
<td>2 100 8 99</td>
<td>14 100 12 99</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
</tbody>
</table>

**Note:** * The total of short-term and permanent migrants does not always correspond to the total number of male and female inmigrants shown in preceding columns because some migrants failed to indicate intended duration of residence in Surabaya.

**Source:** Questionnaire survey of recent inmigrants.
migration. This finding is emphasised if the sectoral distributions of newly arrived inmigrants previously employed in the informal (working) and informal (not-working) sub-sectors are examined in more detail.

A majority of inmigrants employed in the informal (working) sub-sector prior to migration entered the family enterprise sector of the city's economy on first arrival (Table 6.4). The family sector was the most common employer of inmigrants regardless of rural or urban origins and whether they had been farmers or non-farmers. Male inmigrants and permanent female inmigrants, however, were not as attracted to family sector employment on arrival as short-term female inmigrants. Indeed, a majority of male migrants obtained formal sector employment and most permanent female arrivals previously in the informal (working) sub-sector were unemployed on arrival in Surabaya. A similar pattern occurred among inmigrants in the informal not (working) sub-sector prior to migration. An overall majority of this cohort was employed in the family sector on arrival, but male inmigrants were more frequently unemployed or working in the formal sector on arrival than in the family sector. However, the family sector of Surabaya's economy employed a majority of female inmigrants unemployed prior to migration, regardless of whether they were short-term or permanent arrivals. Clearly, employment opportunities in the family sector of the workforce were selective of female inmigrants, especially short-term arrivals. This conclusion is emphasised in Table 6.4 which revealed that:

1. A majority of female inmigrants from each sector of employment in the previous place of residence entered family sector enterprises on arrival in Surabaya.

2. Male inmigrants showed no uniform preference for the family sector on arrival. Instead, substantial proportions of males from all sectors, except the informal (not-working) sub-sector moved laterally into the same sector in which they were employed before migration. Other large proportions moved upward and obtained employment in the formal sector. Males who were unemployed prior to migration usually remained
unemployed on arrival or gained employment in the formal sector.

These findings raise queries. For example: which occupations were so readily available and attractive to females but not to males in the family enterprise sector of Surabaya's economy, and why did male immigrants find it easier to enter the city's formal sector than females? Both questions may be answered from an examination of the personal and occupational characteristics of recent immigrants employed in the three major sectors on arrival (Tables 6.5, 6.6 and 6.7).

6.2.2.1 Personal and Occupational Characteristics of Recent Migrants Employed in the Formal Sector of Surabaya's Economy on First Arrival

The formal sector consisted mostly of never-married male migrants in their early twenties at the time of migration (Table 6.5). An above average proportion of the newly arrived migrants in the formal sector were non-Javanese and therefore long-distance migrants, most of whom came to Surabaya from urban areas. The level of education of most immigrants employed in the formal sector on arrival was exceptionally high. Most moved to Surabaya solely for occupation related reasons: 56 per cent received a job promise before migration.

On arrival, most formal sector employees obtained work with private companies in skilled high-status employment, but a minority worked for large formal sector companies in unskilled labouring jobs (Table 6.6). Although most immigrants absorbed into formal sector employment on arrival were in skilled jobs or were students prior to migration, sizeable numbers had been either farmers or unemployed (Table 6.7). The median income of formal sector employees was not above that of family sector workers, but it was about twice that of the self- or family-employed newly arrived immigrants in the informal sector. A comparison of median monthly incomes before and after migration suggests that formal sector employees received a boost in their gross income per month of just over 50 per cent, as a result of
<table>
<thead>
<tr>
<th>Sector of Employment</th>
<th>N</th>
<th>Sex Ratio (M/100F)</th>
<th>Sex and Marital status (%)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ethnic origin (%)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Region of previous residence (%)&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Educational level at time of migration (%)&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Mean and median age at migration</th>
<th>Reasons for moving to Surabaya (%)&lt;sup&gt;e&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Widowed/Separated</td>
<td>Japanese</td>
</tr>
<tr>
<td>Formal</td>
<td>27</td>
<td>440</td>
<td>56</td>
<td>26</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Family</td>
<td>78</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>54</td>
<td>3</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Informal a) working</td>
<td>11</td>
<td>450</td>
<td>46</td>
<td>36</td>
<td>9</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b) not working</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>-</td>
<td>40</td>
<td>-</td>
<td>40</td>
<td>7</td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent except for rounding errors.

Source: Questionnaire survey of recent immigrants.
<table>
<thead>
<tr>
<th>Sector of employment on first arrival</th>
<th>Workforce in place of employment on arrival</th>
<th>Employer on first arrival</th>
<th>Occupational Status on first arrival</th>
<th>Major activity on arrival</th>
<th>Median income per month on arrival (Rp)**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Respondent's or respondent's</td>
<td>Owner's family + responders</td>
<td>Owner's family + 5-10 others</td>
<td>Over 10 non-family members</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---</td>
<td>-------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Formal</td>
<td>27</td>
<td>7 11 82</td>
<td>4</td>
<td>70</td>
<td>19</td>
</tr>
<tr>
<td>Family</td>
<td>78</td>
<td>21 5 36 38</td>
<td>4</td>
<td>38</td>
<td>55</td>
</tr>
<tr>
<td>Informal</td>
<td></td>
<td>a)working</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b)not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent except for errors caused by rounding.
** In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp 485 = A$1.00. During the period 1969-73 the exchange rate with the Australian dollar varied, but during the whole period 1969-74 the exchange rate with the U.S. dollar remained constant at Rp 415 = U.S.$1.00.

Source: Questionnaire survey of recent immigrants.
### TABLE 6.7 - Occupational characteristics of recent (1969-74) immigrants prior to migration by sector of employment on first arrival in Surabaya

<table>
<thead>
<tr>
<th>Sector of employment on first arrival</th>
<th>Occupational status before migration</th>
<th>Major activity in previous place of residence</th>
<th>Median income per month before migration (Rp)**</th>
<th>% with job promised before migration</th>
<th>Intended duration of residence in Surabaya after date of survey in 1974*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>32 8 12 20 - 28</td>
<td>Students (26%), farm labourers (75), not working (18%); shop assistant, elementary school teacher, member of armed forces, mechanic, lift installer, bank clerk, clerk with state railways, government public servant, civilian employee armed forces.</td>
<td>7250</td>
<td>56</td>
<td>1 year 1-5 years 5 years</td>
</tr>
<tr>
<td>Family</td>
<td>4 28 29 34 4 1</td>
<td>Farmers (22%), farm labourers (22%), not working (33%); domestic duties, domestic servant, student, planter for sugar factory, tailor, petty trader, market sellers of vegetables, rice, cooked foods, and coconuts; restaurant labourer, assistant officer worker in village office.</td>
<td>3000</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Informal</td>
<td></td>
<td>Not working (46%), farmers (27%), student, tailor, egg seller in pasar.</td>
<td>2667</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>a) working</td>
<td>- 9 36 45 - 9</td>
<td>Not working (46%), farmers (27%), student, tailor, egg seller in pasar.</td>
<td>2667</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>b) not working</td>
<td>7 - 33 40 - 20</td>
<td>Not working (46%), student (27%), farmers (27%), factory worker, fireman in state railways, pawnbroker, market seller of cooked foodstuffs.</td>
<td>4000</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**  
* Each row totals 100 per cent except for errors caused by rounding.  
** In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp 483 = A$1.00. During the period 1969-73 the exchange rate with the Australian dollar varied, but during the whole period 1969-74 the exchange rate with the U.S. dollar remained constant at Rp 415 = U.S.$1.00.  
Source: Questionnaire survey of recent immigrants.
the move to Surabaya (Tables 6.7 and 6.6). The gain in real incomes was much less than this due to higher living costs in Surabaya than in the immigrants' previous place of residence. Sixty-two per cent of the recent immigrants claimed it was cheaper to support a wife and child in their previous place of residence than in Surabaya.

Recent immigrants who gained employment in Surabaya's formal sector on arrival comprised a socio-economic elite. As a group they were positively selected, over 60 per cent possessed junior or senior high school certificates at the time of their migration. Most recent female immigrants were excluded from entry into the formal sector because of significantly lower educational qualifications than recent male arrivals. The importance of educational qualifications is emphasised by the observation that each of the female immigrants who gained employment in the formal sector on arrival had completed junior or senior high school; one of the 75 females employed in the family sector had this qualification. Other similarly qualified recent female immigrants were in the informal (not-working) sub-sector awaiting suitable job opportunities. Despite the relatively high income received by female immigrants in the family sector on first arrival in Surabaya, those with the requisite educational qualifications apparently preferred to work in the formal sector or chose to stay out of employment rather than accept work in the family or informal sectors. It was not competition from family sector employment which kept female immigrants underrepresented in the formal sector on arrival, but a lower level of education than the male migrants.

6.2.2.2 Recent Immigrants Within the Family Sector: Prostitutes and Domestic Servants

There were dramatic contrasts in demographic composition and socio-economic status between immigrants in the formal and family sectors of Surabaya's economy (Tables 6.5 and 6.6). The family sector consisted almost entirely of female immigrants who on arrival in Surabaya were divorced, separated or never-married. Almost all were of Javanese ethnic origin and most had migrated from nearby. Most were young at the time of their migration and their level of
educational attainment was low. Most came to Surabaya for occupation-related reasons, though one quarter said they migrated because of personal problems associated with marital breakdown.

Ninety-five per cent of the recent inmigrants who entered the family sector of Surabaya's economy on arriving in the city found employment as prostitutes or domestic servants (Table 6.6). Both activities fall within a 'problem group' of intermediate enterprises which cannot be included satisfactorily within the traditional dualism model. It was hoped the tri-sectoral model with its intermediate family sector would overcome problems of definition.

All prostitutes interviewed were organised into brothels which contained up to 10 girls and a brothel manager germa who was the chef d'enterprise. Since the girls did not receive a wage, they were strictly speaking self-employed. Each member of a brothel, however, was required to pay a set commission or rental charge for the use of facilities. If this condition was not complied with the offender was excluded from the brothel. In return, each girl received the physical and legal protection of the germa, and profited from his organisational abilities. While the girls remained within their semi-formal organisation, they were not independent entrepreneurs. Their inclusion within the intermediate family sector and the description of their employer as an 'informal business group' appeared the best solution to the problem of classification (Table 6.6). Domestic servants were employees of the head of the household, but their 'family-type' relationship with their employer placed them in an intermediate position between the capitalist and peasant modes of production. It was decided to include domestic servants within the family sector.

The significance of prostitution and domestic service in the provision of employment for newly arrived inmigrants should not be generalised to pre-1969 inmigrants because these appear to be
occupations particularly common among short-term migrants.\(^{(1)}\) Since most short-term immigrants who arrived in Surabaya before 1969 had left the city by the time of my survey in 1974, it would be expected that prostitution and domestic service would be more common occupations among recent immigrants than among pre-1969 female arrivals. Empirical data support this viewpoint. Two-thirds of all the domestic servants enumerated arrived in Surabaya in the five years 1969-74; three-quarters of all the prostitutes enumerated arrived in Surabaya for the first time in 1974. Most immigrants engaged in these occupations on arrival intended only a relatively short stay in Surabaya (Table 6.7).

The median income per month of newly arrived immigrants within the family sector was equivalent to that received by formal sector employees (Table 6.6), though the income from prostitution was three times as great as the income from domestic service. Considering the low educational qualifications of the young females in the family sector and their low occupational status and low level of income prior to migration, the economic attractions of employment in this sector are apparent. These were the only occupations which offered unskilled female immigrants the chance to quadruple their previous monthly earnings on arrival in the city.

\(^{(1)}\) It may seem that I have exaggerated the role played by prostitution and domestic service in the employment of recent female immigrants to Surabaya. Sample bias caused by cluster sampling and exaggerated by a policy of geographic localisation pursued by the city government has probably over-represented prostitutes in the enumeration survey (refer Appendix 1.6 for details); nevertheless, Surabaya and most major port cities of Southeast Asia, have had a long history of prostitution and over the years it has provided an important means of livelihood for many poor female residents and immigrants. Prostitution was so common in Surabaya by the middle of last century that in 1852 the colonial government deemed it necessary to regulate the practice by law. In 1869 Surabaya had at least 42 registered brothels with approximately 15-20 women in each (von Faber, 1931a: 242-6). Enumeration survey results suggest that in 1974 there were at least 10,000 prostitutes formally organised into brothels within Old Surabaya. In one R.T. (neighbourhood) located in the midst of an area of prostitution deliberately localised by the municipal government, this survey enumerated 194 prostitutes. In the R.W. (district) of which this R.T. forms a part, there were approximately 2,000 prostitutes, and there were at least four other similar R.W.s in Old Surabaya.
Entrants to prostitution and domestic service were predominantly from rural places of origin, though urban migrants were more common among prostitutes than among domestic servants. All entrants to both activities were Javanese, and both groups of entrants contained a higher proportion of individuals without educational qualifications than any other sector of the labour force (Table 6.5). There was no significant difference in education between immigrants who entered prostitution and those who became domestic servants on arrival in Surabaya.

Prior to migration almost half of those who were later to enter domestic service were unemployed and an additional one-quarter classed themselves as farmers or farm labourers. In comparison, two-thirds of those who were to become prostitutes stated they were either farmers or farm labourers prior to departure, and another one-fifth gave their previous occupation as not working. These differences were reflected in the attitudes and reasons for migration of each group. For example, when asked why they migrated, a significant proportion of the prostitutes-to-be said they were dissatisfied with their jobs as farm labourers before migration. When asked if they experienced any serious problems prior to departure for Surabaya, 61 per cent of the future domestic servants answered 'no' compared with 9 per cent of the females who were later to enter prostitution. One reason for the higher level of dissatisfaction among the prostitutes-to-be was that 43 per cent worked as unpaid family workers prior to migration, compared with 15 per cent of the females who were later to enter domestic service. Another, was a high incidence of marital dissolution and accompanying economic tensions caused by the loss of the breadwinner among recent female migrants who entered prostitution. Forty-one per cent of the prostitutes cited marital problems and associated economic difficulties as the major reasons for moving to Surabaya.

These findings imply recent female immigrants who entered prostitution on arrival comprised a large proportion of migrants socially and economically disadvantaged in their place of origin. In comparison, the females who were to become domestic servants on arrival, appeared more satisfied prior to migration. Admittedly, 48
per cent were not working, but two-thirds of these spent less than a week looking for work prior to migration, which, combined with their young age at migration and the fact that 77 per cent were unmarried, suggests most were fully occupied in home duties and not actively seeking work prior to migration.

Temple (1975: 79) has suggested that a lack of contacts in Jakarta was a major factor responsible for recent immigrants entering prostitution in the Indonesian capital. There was no evidence of this in Surabaya. Almost half of the recent female immigrants who entered prostitution on arrival in Surabaya had received job promises (mostly from prostitutes) prior to migration. Job promises prior to migration were as common among prostitutes as they were among domestic servants and formal sector employees. Contrary to Temple's (1975: 79) findings in Jakarta, it appears chain migration has encouraged certain disadvantaged females to enter prostitution in Surabaya. Indeed, owing to chain migration a number of the prostitutes have come to Surabaya from the same villages in East Java.

Many inmigrants who were to enter prostitution in Surabaya were under severe social pressure to leave their previous place of residence and the promise of a high income, even from prostitution, was appealing. Prior to migration the median monthly income of the prostitute-to-be was Rp2,075 per month. After entering prostitution in Surabaya it increased almost eight times to Rp16,500. Domestic servants-to-be were better off than prostitutes-to-be prior to migration with a median monthly income of Rp4,000; after entering domestic service in Surabaya their median income increased to Rp6,500. These income estimates should include the value of all goods and services, but it is likely the domestic servants grossly underestimated the value of non-monetary benefits such as free board and meals.

The chef d'entreprise of the brothel, the germo, like the punggawa (entrepreneur) who owns and controls the becak (Forbes, 1978: 4) operated by individual riders, profits most from prostitution. Prostitutes in poor kampung brothels are required to pay 20 to 40 per cent of their gross takings to the germo for the rent
of the room and protection. Prostitutes who conducted their activities within high class houses paid up to 50 per cent in room rentals. To establish a brothel, the germo must obtain police permission, which is usually forthcoming after payment of Rp30,000 to Rp35,000. The germo must also pay an annual tax to the municipal government. The relationship between the germo and a prostitute is exploitative: the superior position of the germo is reinforced by being the official go-between with police and municipal officials which gives the germo power to dismiss the prostitutes in his brothel. Many germo are retired members of the armed forces; this increases their bargaining power with the girls and government officials. Despite their exploitation by the germo, the median net income per month of the prostitutes was Rp16,500 soon after arrival in the city a level of income far in excess of that received by better educated or skilled members of the workforce (Table 6.6). This was recognised by a local Kepala Lingkungan (head of a city ward) who remarked, in conversation, that the 'red-light' districts of Surabaya were characterised by a higher level of disposable income than most other areas of kampung housing.

Prostitution is frowned on formally in Surabaya. Public demonstrations of disapproval, however, have usually been instigated by religious groups and confined to demands for the closure of nightclubs and massage parlours. There have been no recent attempts actively to discourage small-scale enterprises based on prostitution within kampung areas. Female immigrants who enter into prostitution are subject to various forms of social disapproval, but there are ways of avoiding or minimising unpleasantness. One method frequently adopted is for the girls involved to lie about the nature of their occupation to their parents or other family members. Such deception is not difficult because 98 per cent of the girls had no other members of their nuclear family resident in Surabaya at the time of their migration. Although many girls were recruited into prostitution by friends in their home village (and in one instance by an uncle) most of the girls interviewed claimed their parents were unaware of their activities.

Moral reservations about entry into prostitution and the chances of detection by family members in the village also can be
minimised by limiting the duration of stay in the city. If girls who entered prostitution on first arrival are compared with those who entered domestic service in terms of their intended duration of residence after 1974, the prostitutes, almost without exception, intended much shorter stays: for example, 63 per cent of the prostitutes stated they would remain in Surabaya for less than a year from the date of the survey, compared with 15 per cent of the domestic servants. These figures may contain an element of deliberate understatement by girls engaged in prostitution, but the difference between prostitutes and domestic servants is too great to be explained in this way. It was the relatively high income received from prostitution which allowed prostitutes to engage in short-term target migrations; a stay of less than a year allowed many to accumulate significant savings. Twenty-two per cent of the prostitutes stated they would remain in Surabaya only until they found a husband and some said they moved to Surabaya to find a husband; this suggests they thought a period of time in prostitution in Surabaya improved their marital prospects.

For many unpaid agricultural labourers who assisted on their parents' sawah or to women suffering from the social and economic pressures of marital failure in a small desa, migration to Surabaya and the promise of a large income from prostitution was often the one alternative to grinding poverty and social disgrace. Provided the nature of the occupation was disguised from close family members, the large income allowed savings which were usually remitted to the family in the desa, with a consequent rise in prestige for the migrant on her return.

6.2.2.3 Recent Immigrants Within the Informal Sector

The few entrants into each subsector of the informal sector precludes detailed analysis, though general conclusions may be made about the sub-sector from data shown in Tables 6.5, 6.6 and 6.7. The informal (working) sub-sector included, by definition, those recent immigrants who were self-employed or employed by family members in small enterprises which did not employ non-family labour. In other words, it comprised those engaged in a peasant mode of production, in
which labour was not treated as a commodity. The subsector was dominated by young unmarried male migrants almost entirely from rural areas (Table 6.5). Although the level of educational attainment of those in the subsector was low, it was above that of the immigrants employed in the family sector. Most entrants to the informal (working) sub-sector came to Surabaya solely for occupation-related reasons and, on arrival, began work in unskilled occupations such as petty peddling, or in artisan type activities which have been classed as semi-skilled (Table 6.6).

Many entrants to informal sector occupations on arrival had been unemployed, or were engaged in farming, or involved in small-scale informal sector activities (Table 6.7). Monthly income increased significantly as a result of migration, though higher living costs in Surabaya compared to the desa must reduce the increase. Given the self- or family-employed nature of their activities, it is not surprising that only 18 per cent had received a job promise prior to migration, an incidence of job promises well below that of immigrants who entered the family or formal sectors of Surabaya's labour force. Those entering the informal (working) sub-sector on arrival, appear to have faced greater risks and higher occupational uncertainty on migration than immigrants who entered the family or formal sectors. Ease of entry to the informal sector proper by newly arrived immigrants may not be as common as some researchers suggest. In comparison with migrants employed in the family sector on arrival, the immigrants who entered the informal sector were more likely to be permanent long-term residents of Surabaya (Table 6.7). This finding differs from the views of researchers who have emphasised the importance of the informal sector to circular migrants in Indonesia (Hugo, 1977: 62), though most other researchers have applied the two sector model of urban dualism which includes family sector enterprises in the informal sector.

Recent immigrants who were unemployed on arrival were mostly female: either young never-married females who were relatively well-educated and frequently long-distance migrants; or older widows from nearby locations with no formal educational qualifications. Older widows moved to Surabaya to join family members resident in the city,
but young never-married females moved for a combination of family and occupation-related reasons. Prior to migration almost all the young never-marrieds were unemployed or studying, whereas the majority of the widows were engaged in low-status informal sector enterprises such as peddling or trading or farming. The lack of job promises for the never-married females must have increased the difficulty of obtaining work. Most of the older widows moved to Surabaya to obtain support from their family during retirement. However, the incidence of job promises among those employed in the informal sector on arrival was not significantly higher than for those not working, which suggests informal sector employment was uncertain for all entrants to the sector (Table 6.7).

6.3 SUMMARY AND CONCLUSIONS

I had two specific aims in this chapter. The first was to determine the occupational status mobility of inmigrants during the first stage of the migration process, by comparing their occupational status prior to migration with their occupational status on first arrival in Surabaya. Occupational status mobility of inmigrants was difficult to measure; nevertheless, it is clear that as predicted by the dualism and fragmented labour market models, the occupational status of most inmigrants has been unaltered by migration. Job scarcity in Surabaya appeared to be the major factor responsible for the small amount of occupational mobility, not only through its direct and obvious effect on job opportunities, but also through its indirect effects on migrant selectivity, return migration and the incidence of job promises among migrants.

Most inmigrants who were farmers prior to migration, entered low-status occupations on arrival in Surabaya because of their low level of educational attainment and lack of work experience relevant to the urban labour market. The small minority of farmers who had completed elementary school took better jobs on arrival than other migrant farm workers. Inmigrants who were unemployed or studying prior to migration entered higher status occupations more easily than farmers, largely because of their superior educational qualifications.
My second aim in this chapter was to identify the amount of intersectoral mobility among immigrants as they moved to Surabaya, and to determine the relevance of the tri-sectoral model to our understanding of occupational mobility. Analysis of the intersectoral mobility and sectoral structure of recent immigrants (1969-74) indicated the following:

1) The employment structure of recent immigrants at the time of their arrival in Surabaya was dominated by a 'bloated' family sector of enterprises. This sector absorbed the majority of recent female arrivals in Surabaya in two activities: prostitution and domestic service. A relatively high income was the major attraction of these activities, especially prostitution, an income commensurate with that of formal sector employees without the need for formal educational qualifications and particular occupational skills (Tables 6.5, 6.6 and 6.7). Entry into this sector was frequently guaranteed by job promises before migration. This had a distinct advantage over other non-formal sector employment (Table 6.7).

(ii) The attractions of family sector occupations for recent female arrivals meant that the pattern of intersectoral labour mobility among recent immigrants to Surabaya is different from the pattern predicted by the tri-sectoral model when it is applied to labour mobility (Figure 6.2). Female immigrants in each sector of the labour force prior to migration were affected by the attractions of this sector. The high income of females within the family sector enabled many immigrants to engage in short-term migration to Surabaya, and some of these short-term arrivals circulated between their place of origin and Surabaya (Table 6.7). The 'distortions' caused by the 'bloated' family sector may apply only to recent migration flows which included a higher proportion of short-term migrants than earlier flows.

(iii) Most of the migrant intake into the city's formal sector comprised immigrants who moved laterally from formal sector
employment in their previous place of residence, or
inmigrants still studying (at age 15 or over) who were from
wealthier families (Table 6.7). Most of the 'lateral movers'
into the formal sector came from urban source areas (Figure
6.2).

iv) Most inmigrants who entered the informal sector on first
arrival were previously employed in the informal sector prior
to migration, though only in the case of those not working on
arrival did the largest share of inmigrants originate from
the same sub-sector (Table 6.7).

v) In comparison with migrants employed in the family sector on
arrival, the migrants who entered the informal (working) sub-
sector were more likely to be long-term residents of Surabaya.

vi) Although the tri-sectoral model had some success in
explaining the predominance of lateral movers into Surabaya's
formal and informal sectors, it did not explain the dominant
role played by the family sector in absorbing female
inmigrants from all non-formal sectors. It also made no
allowance for the attractions of certain family sector
activities to female short-term inmigrants. Nevertheless,
the tri-sectoral model assisted our understanding of
Surabaya's inmigrant labour market, particularly in the
formal sector, though it did little to elucidate
intersectoral mobility flows outside the formal sector. The
simple dualist model of formal and informal sectors, the
latter including both the family and informal sectors of the
tri-sectoral model, may have greater explanatory value than
the tri-sectoral approach, though the resulting level of
generalisation appears excessively high.
CHAPTER VII

POST-ARRIVAL OCCUPATIONAL CHANGE AMONG INMIGRANTS TO SURABAYA

In this chapter I examine the post-arrival occupational mobility of inmigrants to Surabaya and thereby complete the sequential analysis of occupational change begun in Chapter Six. The aims of the chapter are: to assess the incidence and direction of post-arrival changes in occupational status, and explain the distribution of occupational status change among the inmigrant population. The chapter begins with an analysis of the occupational status of inmigrants in Surabaya in 1974. Changes in the occupational status of inmigrants are then analysed; initially with a cross-sectional approach, and later with a longitudinal approach, in which changes of occupational status are assessed from a comparison of an inmigrant's occupational status on first arrival in Surabaya with his occupational status in 1974.

7.1 OCCUPATIONAL STATUS OF INMIGRANTS IN 1974

Of the lifetime inmigrants interviewed, 325 were gainfully employed on arrival in Surabaya; by 1974 the number had increased to 354, of whom 21 were pension recipients. The proportion of male inmigrants gainfully employed increased between first arrival and 1974 regardless of the period of migration, though the 1960-69 arrivals experienced the largest increase (Figure 5.1). Within most migration flows the post-arrival increase in the proportion of migrants gainfully employed was accompanied by a commensurate decrease in the proportion of migrants studying. By 1974, the 1960-69 male arrivals had spent 5-14 years in Surabaya, which was ample time for most to complete their studies and take employment. In contrast, most of the recent male migrants (1970-74) who were studying on arrival, remained studying in 1974, and as a result these recent arrivals showed only a minor post-arrival increase in the proportion gainfully employed (Figure 5.1). The 1950-59 and particularly the pre-1950 male arrivals were more likely to be unemployed in 1974 than the more recent male migrants. This suggests that by 1974 some of the older male migrants
had been forced to retire from active employment and that a significant proportion had retired without the security of a pension. Thirty per cent of the pre-1950 male migrants were more fortunate, however, and received a pension on retirement.

The proportion of female inmigrants gainfully employed remained the same in 1974 as on arrival, regardless of the period of migration (Figure 5.1). The 1950-59 arrivals were the exceptions. Within this migration flow there was a small post-arrival decrease in the proportion of migrants gainfully employed, as some who were working on first arrival married and withdrew from the workforce to begin household duties. The proportion of recent (1970-74) short-term and permanent female migrants gainfully employed also remained constant after arrival, not surprisingly, given their short time in the city. The different occupational characteristics of short-term and permanent recent female arrivals on arrival, have already been noted. The differences, however, persisted until 1974 when 90 per cent of the short-term female inmigrants were gainfully employed compared to less than a quarter of the permanent arrivals, most of whom were engaged in household duties. Of the recent female inmigrants gainfully employed in 1974, the short-term arrivals were more concentrated in unskilled jobs (over 97 per cent) than the permanent arrivals who had some success in getting skilled occupations (24 per cent). Differences in migrant selectivity explained the contrasting occupational status distributions of short-term and permanent recent female inmigrants on arrival in Surabaya (section 5.3.3), and since almost all these migrants remained in the same occupations in 1974, differences in migrant selectivity also explained the 1974 contrasts.

Occupational details, personal characteristics and migration histories of inmigrants within each occupational status category in 1974 are presented in Tables 7.1 and 7.2. The resulting distributions indicate relationships between the occupational status of inmigrants in 1974 and their personal attributes and migration histories similar to those identified in the analysis of the inmigrant's occupational status on arrival in Surabaya (sections 5.3.1 and 5.3.2). Male inmigrants from rural and urban areas were better represented in high
### TABLE 7.1 - Occupational status of income earning immigrants in 1974 by activity, industrial grouping, employer, workforce and income per month

<table>
<thead>
<tr>
<th>Occupational Status</th>
<th>Activity</th>
<th>Industrial grouping</th>
<th>Employer</th>
<th>Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners large private companies/members of professions</td>
<td>Owners of freight companies, printing company, importing company, university lecturer, doctors</td>
<td>-17 -50 -33 -67 -33 -67</td>
<td>30310 (44210)</td>
<td></td>
</tr>
<tr>
<td>Low-medium level clerical, admin., technical employees/med. scale entrepreneurs</td>
<td>Teachers, ministers of religion, nurses, general office clerks, qualified mechanics, technical specialists, head medium scale trading agency, low-medium rank public servants in white-collar jobs, bank clerks, shop assistants, house dealer, boarding house, receptionist hotel, civilian members armed forces, manager of hotel</td>
<td>-6 1 14 7 54 138 37 -9 3 7 37 78</td>
<td>15000 (22138)</td>
<td></td>
</tr>
<tr>
<td>Junior officers and ordinary ranks armed forces</td>
<td>Members of the army, navy, air force and police on active service</td>
<td>-8 -8 -100 -8 -100 -100</td>
<td>16000 (21125)</td>
<td></td>
</tr>
<tr>
<td>Semi-skilled artisans</td>
<td>Welders, bricklayers, unqualified mechanics and technicians, tailors, painters, carpenters, locomotive machinists &amp; firemen, car &amp; truck drivers, handling &amp; furniture makers, electricians, aesthetists, launderers</td>
<td>-4 26 33 -26 -11 -41 37 18 -41 -109</td>
<td>11440 (11535)</td>
<td></td>
</tr>
<tr>
<td>Unskilled labourers</td>
<td>Prostitutes (422), domestic servants (525), casual labourers, building labourers, unskilled labourers in the market, security guards, unskilled civil employees, armed forces, cooks, waiters, canteen staff, washing lady</td>
<td>-2 3 6 -88 5 79 7 5 4 17 29 19 14</td>
<td>8375 (13282)</td>
<td></td>
</tr>
<tr>
<td>Petty peddlers or traders</td>
<td>Petty traders or peddlers in the pasar (market) or at a warung (stall) of: vegetables, fish, leaves, rice, spices, peanuts, eggs &amp; chick peas, sugar, flowers, spectacles, car parts, bread, coffee, jam (herbal medicine), mosquito nets and cooked foods and drinks; second hand dealer and small scale traders.</td>
<td>-100 -100 -100 -100 -9 91</td>
<td>4000 (13715)</td>
<td></td>
</tr>
<tr>
<td>Factory labourers</td>
<td>Unskilled factory labourers</td>
<td>-100 -100 -100 -100 -9 91</td>
<td>4000 (13715)</td>
<td></td>
</tr>
<tr>
<td>Farmers</td>
<td>Farmer and a farm labourer</td>
<td>100 -100 -100 -100 -100</td>
<td>4000 (4200)</td>
<td></td>
</tr>
<tr>
<td>Pensioners</td>
<td>Retired members of the navy, police; army, state railways, post office, state oil company (Pertamina)</td>
<td>6 -29 -6 59 -37 63 -100</td>
<td>7650 (9728)</td>
<td></td>
</tr>
<tr>
<td>All income recipients in 1974</td>
<td>1 8 4 20 10 2 43 12 25 27 21 26 1 25 2 11 12</td>
<td>11550 (16190)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent except for errors due to rounding.  
** In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp 485 = AUD 1.00. 

Source: Questionnaire survey.
### Table 7.2 - Occupational status of adult immigrants in 1976 by personal characteristics 1976, personal characteristics at time of migration and migration history

<table>
<thead>
<tr>
<th>Occupational Status</th>
<th>N</th>
<th>Sex ratio M/F*</th>
<th>Age (in years)</th>
<th>N</th>
<th>Sex &amp; marital status (%)</th>
<th>Ethnic origin</th>
<th>Education (%)</th>
<th>N</th>
<th>Sex &amp; marital status at migration (%)</th>
<th>Education at migration (%)</th>
<th>Region of origin (%)</th>
<th>% of multi-ple movers</th>
<th>% with job promised before arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Recipients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Large entrepreneurs/professionals</td>
<td>80</td>
<td>270 100</td>
<td>36 10  12  9  2  4</td>
<td>73 8 11 8</td>
<td>18 18 64</td>
<td>22</td>
<td>58 15  18  7  2</td>
<td>14</td>
<td>18 21 61</td>
<td>25 2 3</td>
<td>31 5</td>
<td>24 8</td>
<td>38 34</td>
</tr>
<tr>
<td>2. Low-level clerical/sales personnel</td>
<td>29</td>
<td>1350</td>
<td>37 10 83  1  3  3</td>
<td>79 21  10 35 55</td>
<td>22</td>
<td>72 21  7  2</td>
<td>15</td>
<td>10 35 55</td>
<td>10 3 7 3</td>
<td>24 38 14</td>
<td>45 32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Junior officials &amp; business people</td>
<td>27</td>
<td>1350</td>
<td>38 7 85  1  7  2</td>
<td>78 18  4</td>
<td>44 37 19</td>
<td>24</td>
<td>63 30  7  2</td>
<td>14</td>
<td>44 37 19</td>
<td>41 18 7</td>
<td>30 4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4. Semi-skilled workers</td>
<td>109</td>
<td>27 26</td>
<td>4 16  1  40  5  8  26</td>
<td>87 11  2</td>
<td>79 17 4</td>
<td>21</td>
<td>12 8 1 46 2 7 24</td>
<td>5</td>
<td>79 18</td>
<td>64 11 1</td>
<td>18 1 4 1</td>
<td>10 41</td>
<td></td>
</tr>
<tr>
<td>5. Unskilled labourers</td>
<td>49</td>
<td>88 40</td>
<td>2 41  1  31 10 12</td>
<td>59 31  8 2</td>
<td>82 18</td>
<td>24</td>
<td>31 14 2 4 33 4 12</td>
<td>16</td>
<td>82 18</td>
<td>49 27 8</td>
<td>2 4 8 2</td>
<td>10 16</td>
<td></td>
</tr>
<tr>
<td>6. Petty traders or shopkeepers</td>
<td>11</td>
<td>175</td>
<td>30 26  2  27  9</td>
<td>87 9  9</td>
<td>36 46 18</td>
<td>21</td>
<td>55 9 9 18 9</td>
<td>10</td>
<td>36 46 18</td>
<td>64 9</td>
<td>9 9 9</td>
<td>9 27</td>
<td></td>
</tr>
<tr>
<td>7. Factory workers</td>
<td>3</td>
<td>2</td>
<td>28 100 100 100</td>
<td>100 100 100</td>
<td>23</td>
<td>100 100 100</td>
<td>6</td>
<td>100 100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>8. Farm workers</td>
<td>21</td>
<td>All</td>
<td>57 100</td>
<td>52 29 19</td>
<td>27</td>
<td>62 38</td>
<td>30</td>
<td>52 33</td>
<td>25 5 5 5</td>
<td>30 20 10</td>
<td>7 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-income Recipients</td>
<td>33</td>
<td>65</td>
<td>53 12 18  9  12 3 39 6</td>
<td>64 24 3 9</td>
<td>70 21 9</td>
<td>34</td>
<td>27 12 15 15 24 6</td>
<td>19</td>
<td>70 21 9</td>
<td>46 24 3</td>
<td>3 6</td>
<td>15 3</td>
<td>2 3</td>
</tr>
<tr>
<td>10. Home duties</td>
<td>177</td>
<td>All</td>
<td>36</td>
<td>95 4 1</td>
<td>69 10 9 12</td>
<td>47 23 30</td>
<td>23</td>
<td>95 6 2 1</td>
<td>14</td>
<td>47 23 30</td>
<td>39 10 7</td>
<td>2 1</td>
<td>21 14 5</td>
</tr>
<tr>
<td>12. Students</td>
<td>31</td>
<td>94</td>
<td>22 39 10  1  48 3</td>
<td>64 13 13 10</td>
<td>3 97</td>
<td>18</td>
<td>45 3 48 3</td>
<td>4</td>
<td>3 3 94</td>
<td>17 3 10</td>
<td>43 10 7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>All migrants</td>
<td>595</td>
<td>64</td>
<td>36 7 31 1 1 13 35 6 7</td>
<td>73 12 8 7</td>
<td>48 21 31</td>
<td>23</td>
<td>29 10 25 26 4 6</td>
<td>13</td>
<td>48 22 30</td>
<td>40 10 5 1</td>
<td>22 2</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** *Each row totals 100 per cent except for rounding errors.*

**Source:** Questionnaire survey.
status occupations in 1974 than females. Immigrants from urban areas, whether male or female were also occupationally advantaged relative to immigrants from rural source areas. Male immigrants and immigrants from urban areas, however, were positively selected and socio-economically advantaged in comparison to rural and female immigrants; this socio-economic difference was reflected in their relative levels of educational attainment prior to migration. It could be argued that educational attainment, both as a surrogate for relative socio-economic status and as a necessary qualification for higher status jobs, was the major factor responsible for the relative occupational advantage of male immigrants and immigrants from urban areas. If the educational qualifications of immigrants in 1974 are compared statistically with the immigrants' occupational status, a significant positive relationship is observed. This relationship persists when male and female, and rural and urban immigrants are examined separately.

The strong relationship between formal educational qualifications and occupational status in 1974 suggests relationships between occupational status and the immigrants' sex, and relationships between occupational status and the nature of the immigrants' previous place of residence, may be reflecting sex and rural-urban educational differentials. To test this possibility the relationships were re-examined, with the effects of education standardised by a simple three-category control (Table 7.3). The introduction of the control for education weakens the relationship between place of origin of immigrants and occupational status and when a further control for sex is introduced the occupational advantage of urban immigrants relative to immigrants from rural areas is effectively eliminated (Table 7.3). The only exceptions are the well educated male migrants and the poorly educated females who obtained higher status occupations if they were from urban rather than rural source areas. The relationship between sex and occupational status remains significant among all except well educated immigrants, and it persists when urban and rural immigrants are analysed separately. Entry to skilled or semi-skilled occupations appears much more difficult for females without secondary school education than for males of similar educational status. The reasons are suggested in Tables 7.1 and 7.2. The only higher status
TABLE 7.3  - Relationship between occupational status\(^b\) of gainfully employed immigrants in 1974 and sex and rural or urban origins of migrants by level of educational attainment in 1974

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Variables (and their associated values) whose influence has been standardised</th>
<th>Level of educational attainment in 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Less than elementary level</td>
</tr>
<tr>
<td>Rural or urban source area</td>
<td>-</td>
<td>Kendall's tau ((\tau))</td>
</tr>
<tr>
<td>Rural or urban source area</td>
<td>Sex male female</td>
<td>Kendall's tau ((\tau))</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Rural or urban source area rural urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: NA indicates it was not applicable to calculate Kendall's tau because of the small number of well educated females from rural source areas.

Levels of significance of \(\tau\): \(@ p>0.05\) (i.e. not significant); \(* p<0.01\); \(** p<0.005\); \(**** p<0.0001\).

\(^\#\) In order to increase the number of observations in some cells the major occupational status categories of: skilled (categories 1–3, Table 7.2), semi-skilled (category 4, Table 7.2), unskilled (categories 5–7, Table 7.2) were utilised to measure occupational status in 1974. Because of the uncertain relative occupational status of pension recipients, they were excluded from this analysis, as were the two respondents who gave their major occupation in 1974 as farming.

Source: Questionnaire survey.
occupations open to migrants with poor educational qualifications were in the armed forces or in semi-skilled artisan activities, but most of these occupations were effectively closed to female entrants because of the physically demanding nature of the work (for example, soldiers, sailors, welders, bricklayers, or truck drivers). Among immigrants who had completed at least junior high school, there was no difference between the sexes with regard to entry to skilled occupations (Table 7.3). Better educated female migrants found white collar occupations in the low-medium level clerical category as readily as males, especially as shop assistants or hotel receptionists, where females were usually preferred to males.

The level of formal education of the few immigrants in the highest occupational status category in 1974 was generally inferior to that of immigrants employed in low-medium level clerical occupations (Table 7.2). Two-thirds of this small group were large-scale entrepreneurs of Chinese ethnic origin; this suggests access to capital was, perhaps, the major entry requirement for immigrants wishing to become successful large scale entrepreneurs, and not formal education, which was necessary for immigrants entering the professions or low-medium level clerical occupations.

The occupational status of individual immigrants in 1974 was also related to the ethnic origin of the immigrants. If immigrants' occupations are grouped into two categories: skilled and unskilled (including semi-skilled), the distribution of occupations varies significantly between the four major ethnic groups (Javanese, Madurese, other indigenous Indonesians, and foreign, mostly Chinese). The foreign ethnic group, consisting predominantly of ethnic Chinese immigrants, was concentrated in skilled occupations (86 per cent), though excluded from the armed forces due to government policy (Table 7.2). Ethnic Chinese have excelled as medium- to large-scale entrepreneurs within the economy of Surabaya. Today, almost all of the shops, restaurants, and large or medium scale businesses which are not government owned, are owned by Chinese businessmen. A major reason for their success has been easier access to capital in comparison with indigenous entrepreneurs. The strong bonds within the local and overseas Chinese community have assisted their access to
capital, but the Chinese also had a favoured position in colonial days as middle-level entrepreneurs. The exit of the Europeans at the end of colonial rule left the Chinese as the one non-government group with the resources necessary to run the large-scale business houses.

Inmigrants classified within the 'other Indonesians' category were mostly Sundanese or Indonesians from the Outer Islands. These ethnic groups were also disproportionately represented in skilled occupations in 1974 (Table 7.2). Some groups, like the Sundanese traders, have a long entrepreneurial tradition similar to the Chinese, but most were employed in the public sector and many were members of the armed forces. Only a quarter of the Madurese immigrants gainfully employed in 1974, were in skilled occupations. The Madurese also have a strong entrepreneurial tradition, but unlike the Chinese or some of the ethnic groups from the Outer Islands their access to capital is limited. As a result, entrepreneurs among the Madurese immigrants were concentrated in small-scale peddling and trading enterprises in the market or on the footpath. The few Madurese with marketable skills became semi-skilled artisans, but those without skills and without capital resources entered unskilled labouring jobs as coolies or builder's labourers.

The Javanese majority had an average representation in the skilled occupations in 1974. But lacking the strong entrepreneurial traditions of other ethnic groups and without their access to capital (despite recent attempts by the government to make capital resources more readily available to indigenous Indonesians), the Javanese have relied on public sector employment or employment created by the more entrepreneurial ethnic groups. The great dependence of Javanese inmigrants on public sector employment is evident in Table 7.4; however, this avenue of employment was restricted to male inmigrants. Female Javanese inmigrants found entry to government sector employment as difficult as non-Javanese female arrivals. The lack of well-paid job opportunities was to a large extent responsible for the entry of many young, poorly educated females into the socially undesirable but economically lucrative activity of prostitution (Tables 7.1 and 7.2).
<table>
<thead>
<tr>
<th>Employer</th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Javanese</td>
<td>Non-Javanese</td>
<td>Javanese</td>
<td>Non-Javanese</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Government</td>
<td>62</td>
<td>49.6</td>
<td>17</td>
<td>29.3</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>63</td>
<td>50.4</td>
<td>41</td>
<td>70.7</td>
<td>115</td>
</tr>
<tr>
<td>TOTAL</td>
<td>125</td>
<td>100.0</td>
<td>58</td>
<td>100.0</td>
<td>124</td>
</tr>
</tbody>
</table>

Note: * Includes immigrants employed in state owned companies, the public service or in the armed forces.

Source: Questionnaire survey.

If gainfully employed immigrants are classed in three occupational status categories: skilled, semi-skilled and unskilled, the higher status occupations contain proportionately more long distance migrants from the Outer Islands or other provinces of Java (that is, outside East Java) than the lower status occupations (Table 7.2). There are two major reasons for the association: the long distance source regions were more likely to be urban than those nearby; and the long distance immigrants were more positively selected and better educated than the vast majority of short distance migrants. The difference in educational qualifications has more explanatory power than the rural urban contrasts, however, and if the level of educational attainment of the immigrants is standardised, the tendency for long distance immigrants to get better jobs than short distance migrants disappears among migrants without elementary schooling and among those with junior high school education or above. An association persists among immigrants with elementary level education; this may reflect the significant proportion of immigrants in the armed forces transferred to Surabaya from other areas of Java and the Outer Islands (62 per cent, Table 7.2), since ordinary ranks in the army and the navy required only an elementary school pass. The importance of the armed forces as an employer has been reinforced in Surabaya which functions as the major centre for naval operations, and is a major base of the Indonesian marines. The navy has, from
colonial times, contained a large number of non-Javanese from East Indonesia, and this element has probably inflated the proportion of Outer Islanders in skilled occupations. Many of the massive 40 per cent of all immigrants who originated in rural areas of East Java, had to take employment as unskilled labourers, petty pedlars or traders, semi-skilled artisans or factory labourers (Table 7.2). Their low level of formal education combined with a lack of capital to exclude most from entry into skilled occupations, even after a considerable period of time in the city.

Some general observations about the industrial sector of employment and relative income levels of immigrants in individual occupational status categories in 1974 can readily be made from Tables 7.1 and 7.2. The overall picture is similar to the situation on first arrival (Table 5.9). In particular, the proportion of immigrants within the city's tertiary sector has remained constant at 87 per cent since the immigrants first arrived in Surabaya (Tables 5.9 and 7.1), indicating that the tertiary sector has continued as the major employer of immigrants, a role begun when the sector absorbed the vast majority of new arrivals. Workforce and employer details were not available for all migrants on first arrival, but these details were available in 1974. As was the case prior to migration, most immigrants in high status well paid occupations in 1974 were government employees, whereas immigrants in low-status poorly paid jobs tended to be either self- or family-employed, or organised into small informal business groupings (Table 7.1). Exceptions were the self-employed large-scale entrepreneurs in the highest status category, and the immigrants employed as factory labourers by large companies in the formal sector, who received an income below that of petty pedlars or traders in the market place.

Non-income earners among the immigrants were predominantly housewives, but significant proportions were students or were not working in 1974. The not-working group consisted of two distinct sub-groups: a few young immigrants, relatively well educated who were waiting for suitable employment opportunities; and a large group of middle-aged or elderly immigrants, usually widows, who moved to Surabaya to live with their families. Immigrants attending
educational institutions in 1974 were the youngest group of migrants, the best educated, and comprised a disproportionately large share of non-Javanese or non-Madurese migrants. Migrants employed in the armed forces comprised the only other group with a similar proportion of Outer Islanders (Table 7.2).

7.2 CHANGES IN OCCUPATIONAL STATUS AMONG IMMIGRANTS SINCE ARRIVAL IN SURABAYA

Occupational changes among immigrants to urban areas are usually analysed in two ways, either with a cross-sectional or a longitudinal approach. The cross-sectional approach involves the comparison of occupational characteristics or, in this case, the occupational status of immigrants with different durations of residence in Surabaya. In other words, different cohorts of immigrants are compared with the assumption that occupational differences between immigrants with contrasting durations of residence are due to occupational change among the longer term residents since their arrival in the city. This assumption is invalidated by changes in the selectivity of immigrants by period of migration, changes in employment opportunities for new arrivals, and selective out-migration of lifetime immigrants. The first problem can be minimised by limiting comparisons to cohorts with similar attributes (for example, educational qualifications), but there is no way around the other problems.

The longitudinal approach follows the same group of immigrants through the stages of migration and compares their occupational status at time of arrival with their occupational status in 1974. This approach has the advantage that it makes no assumptions about constant selectivity, and changes in employment opportunities may be considered by standardising immigrants according to period of migration (that is duration of residence). The major disadvantage of the longitudinal approach is that it relies on retrospective data and the recall of individual immigrants. However, there was no evidence of deliberate bias or faulty recall in the occupational details provided by immigrants, and the placement of questions about a particular time period together in one part of the questionnaire as
well as the limitation of occupational questions to straightforward
details, appear to have increased the accuracy of recall and minimised
inaccuracies (refer Appendix 1.4).

7.2.1 Cross-sectional Analysis of the Occupational Mobility of
Inmigrants Since Arrival in Surabaya

McCutcheon (1978: 86) utilised the cross-sectional approach
in her study of migrant adjustment in Surabaya. A particular part of
her work relevant to this study is the comparison of the occupational
skills of recent (1970-75) and senior (pre-1970) inmigrants. Since
McCutcheon's definition of occupational skills conforms to my
generalised occupational status categories of skilled, semi-skilled
and unskilled, her results are presented and compared with my findings
in Table 7.5. McCutcheon recognised that educational levels have
improved dramatically in Indonesia during recent years, and also that
the more recent migrant flows have been more positively selected and
more dominated by migrants from urban places than earlier flows. In
order to minimise the chances that changes in selectivity may confound
the cross-sectional approach, McCutcheon introduced into the analysis
a simple two-category control for education. This study does not
support the contention that recent migrant inflows were more
positively selected than earlier inflows. Indeed, if the rising
standards of educational attainment are taken into consideration,
recent flows of female arrivals from rural places appear less
positively selected than their predecessors. However, McCutcheon
confined her analysis to male inmigrants; in order to facilitate an
accurate comparison, I have applied McCutcheon's two-category control
for education to my data (Table 7.5).

The poorly educated senior male migrants included in
McCutcheon's study were not significantly different from recent
arrivals in terms of occupational skills (Table 7.5). This implies
they have not been able to move into more skilled jobs with more time
in the city. On the other hand, the senior male inmigrants with
junior secondary school qualifications or above, were significantly
more concentrated in skilled jobs than similarly educated recent
migrants. This implies that with more time in Surabaya, better
TABLE 7.5 - Relationship between occupational status of immigrants in 1974 and duration of residence in Surabaya, by sex and educational attainment

<table>
<thead>
<tr>
<th>Occupational status and level of educational attainment in 1974*</th>
<th>Male Years in Surabaya</th>
<th>Female Years in Surabaya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-4 5-14 15-24 25 &amp; +</td>
<td>0-4 5-14 15-24 25 &amp; +</td>
</tr>
<tr>
<td>1) QUESTIONNAIRE SURVEY(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or less (T males = 0.251, P &lt;0.005; T females = 0.133, P&lt;0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>16.7 28.6 48.5 50.0</td>
<td>2.6 21.7 7.1 23.1</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>5.5 31.4 9.1 22.7</td>
<td>4.4 7.1</td>
</tr>
<tr>
<td>Unskilled</td>
<td>77.8 40.0 42.4 27.3</td>
<td>97.4 73.9 85.8 76.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 100.0 100.0</td>
<td>100.0 100.0 100.0 100.0</td>
</tr>
<tr>
<td>N</td>
<td>18 35 33 22</td>
<td>78 23 14 13</td>
</tr>
<tr>
<td>Junior secondary school or above (T males = 0.164, P&lt;0.005; T females =-0.055, p&gt;0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>61.5 89.7 93.3 100.0</td>
<td>100.0 90.0 NA NA</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>15.4 7.7 - -</td>
<td>- - NA NA</td>
</tr>
<tr>
<td>Unskilled</td>
<td>33.1 2.6 6.7 -</td>
<td>- 10.0 NA NA</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 100.0 100.0</td>
<td>100.0 100.0 NA NA</td>
</tr>
<tr>
<td>N</td>
<td>13 39 15 8</td>
<td>7 10 1 1</td>
</tr>
<tr>
<td>2) MCCUTCHEON'S STUDY(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or less</td>
<td>Recent migrants (0-5 years) Senior migrants (over 5 years)</td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>9.2 15.4</td>
<td></td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>27.7 26.0</td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>63.1 58.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>57 92</td>
<td></td>
</tr>
<tr>
<td>Junior secondary school or above (p&lt;0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>57.1 81.8</td>
<td></td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>28.6 14.6</td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>14.3 3.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>82 48</td>
<td></td>
</tr>
</tbody>
</table>

Notes: NA because of the small number of observations the calculation of percentages was inapplicable.

* McCutcheon's survey was conducted in 1975, so the occupational status information utilised by McCutcheon applied to that year.

Sources: (a) Questionnaire survey.
(b) McCutcheon 1978: Table 2.
educated inmigrants have been able to move into jobs of greater skill than those they took on first arrival.

My study indicates that earlier male inmigrants were significantly more concentrated in high-status skilled occupations than more recent arrivals; and this relationship is maintained among both poorly educated and better educated migrants (Table 7.5). A similar positive relationship exists between occupational status and duration of residence among female inmigrants with an elementary education or less. The small number of better educated female inmigrants in earlier years, however, precludes a meaningful analysis of female inmigrants who graduated from junior high school. Therefore, this study and McCutcheon's (1977; 1978) imply that post-arrival occupational mobility was significant among inmigrants to Surabaya. McCutcheon's data suggest mobility was confined to the better educated migrants. Data from this study imply that mobility was significant among both the better and less well-educated male migrants, and also among the less well-educated female migrants.

Post-arrival upward occupational mobility, however, is only one of three possible explanations for the higher occupational status of earlier inmigrants in 1974. Alternative explanations such as selective return migration among earlier inmigrants or greater success by earlier migrants in obtaining high status occupations on arrival, however, could account for the relatively high occupational status of pre-1970 inmigrants in 1974. The return migration explanation implies that return migration has been more common among earlier inmigrants where it has been selective of the inmigrants in low-status occupations. The earlier inmigrants still resident in Surabaya are regarded as a positively-biased sample of the total migration flows of the 1940s, 1950s and 1960s.

In the absence of a survey of returnees it is not possible to prove that more of the pre-1970 migrants had returned to their place of origin by 1974 than recent (1970-74) inmigrants. It is possible, however, to show that in 1974, pre-1970 migration flows contained fewer potential short-term migrants than the 1970-74 migration flow. For example, of the inmigrants gainfully employed in 1974, 62 per cent
of the recent (1970-74) arrivals said they would probably return to their place of origin or move from Surabaya before 1980. The comparable proportions of intending short-term migrants among the 1960-69, 1950-59 and pre-1950 arrivals were 10 per cent, 3 per cent and 2 per cent, respectively. Clearly, most of the potential returnees among the pre-1970 immigrants had already left Surabaya by 1974. In addition, 83 per cent of the gainfully employed immigrants who intended a short stay in Surabaya were employed in unskilled jobs in 1974, compared with 38 per cent of the permanent immigrants. Thus if potential returnees are an accurate guide, return migration has been selective of immigrants in low-status occupations and more common among earlier immigrants than recent (1970-74) arrivals. Consequently, the pre-1970 and recent immigrant cohorts compared in the cross-sectional analysis are not strictly comparable. This problem can be overcome if intending short-term migrants are excluded from the analysis of the relationship between occupational status and duration of residence. The resulting rank correlation coefficients are shown below with a two-category control for education and the earlier rank correlation coefficients included for comparison:

<table>
<thead>
<tr>
<th></th>
<th>Permanent inmigrants</th>
<th>All inmigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gainfully employed</td>
<td>gainfully employed</td>
</tr>
<tr>
<td></td>
<td>in 1974</td>
<td>in 1974</td>
</tr>
<tr>
<td>Male migrants with elementary</td>
<td>0.247**</td>
<td>0.251**</td>
</tr>
<tr>
<td>schooling or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male migrants with junior high</td>
<td>0.130*</td>
<td>0.164**</td>
</tr>
<tr>
<td>school qualifications or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female migrants with elementary</td>
<td>0.084®</td>
<td>0.133**</td>
</tr>
<tr>
<td>schooling or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female migrants with junior high</td>
<td>all in skilled occupations</td>
<td>-0.055®</td>
</tr>
<tr>
<td>school qualifications or better</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Levels of significance of \( \tau \):
- \( @ \) \( p<0.05 \) (i.e. not significant);
- \( * \) \( p<0.05 \);
- \( ** \) \( p<0.005 \).

The exclusion of intending short-term migrants has little effect on the relationship between occupational status and duration of residence among male migrants, whether or not they are well-educated. Their exclusion, however, dramatically reduces the value of the rank...
correlation coefficient among female inmigrants with elementary schooling until no significant relationship remains. This indicates that the earlier cross-sectional analysis which implied that female inmigrants increased their occupational status after arrival was false, and was confounded by a large component of short-term migrants among the recent arrivals. On the other hand, the presence of short-term migrants did not affect the analysis of male inmigrants, and the picture of increased occupational status among earlier male inmigrants portrayed in Table 7.5 is accurate.

Higher occupational status among earlier male migrants, however, does not necessarily mean they experienced upward occupational mobility since arrival in Surabaya. An alternative explanation is that they were more successful than recent inmigrants in obtaining high-status skilled occupations on arrival. Data presented in Figure 5.1 support this contention, with the exception of the male arrivals of the colonial years (pre-1950) who took fewer skilled jobs on arrival than their successors. It is possible that changes in migrant selectivity have been responsible for the higher occupational status of early inmigrants. The introduction of a three-category control for educational attainment, however, does not explain the changes in occupational status on arrival by period of migration (Table 7.6). For example, senior male inmigrants who had failed to complete elementary school prior to migration or males who had only an elementary education were more concentrated in higher status occupations on arrival than recent inmigrants with the same educational qualifications. There was no tendency for senior (pre-1970) male inmigrants who had completed junior high school to be more concentrated in skilled occupations on first arrival than recent inmigrants. Almost all the females who failed to complete elementary school obtained unskilled jobs on first arrival regardless of the period of migration. Females with high school qualifications were concentrated in skilled jobs on first arrival, whereas female inmigrants who had completed only elementary school took a range of occupations (Table 7.6).

There are two major reasons why senior (pre-1970) male inmigrants were more concentrated than recent male inmigrants in high-
TABLE 7.6 - Relationship between occupational status of immigrants on first arrival in Surabaya and duration of residence in the city, by sex and educational attainment

<table>
<thead>
<tr>
<th>Educational attainment at migration and occupational status on arrival</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years in Surabaya</td>
<td>Years in Surabaya</td>
</tr>
<tr>
<td></td>
<td>0-4  5-14 15-24 25 &amp; +</td>
<td>0-4  5-14 15-24 25 &amp; +</td>
</tr>
<tr>
<td>Failed to complete elementary school prior to migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(τ males = 0.168, p&lt;0.05; τ females = 0.068, p&lt;0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>-    7.7 20.8 18.8</td>
<td>-    -    -   18.2</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>16.7 7.7 33.3 28.1</td>
<td>-    -    -   -</td>
</tr>
<tr>
<td>Unskilled</td>
<td>83.3 84.6 45.8 53.1</td>
<td>100.0 100.0 100.0 81.8</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 99.9 100.0</td>
<td>100.0 100.0 100.0 100.0</td>
</tr>
<tr>
<td>N</td>
<td>6    13   24   32</td>
<td>60   17   18   11</td>
</tr>
<tr>
<td>Completed elementary school prior to migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(τ males = 0.363, p&lt;0.01; τ females = 0.542, p&lt;0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>25.0 41.2 78.6 60.0</td>
<td>-    40.0 NA   100.0</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>8.3 35.3 14.3  -</td>
<td>-    20.0 NA   -</td>
</tr>
<tr>
<td>Unskilled</td>
<td>66.7 23.5 7.1 40.0</td>
<td>100.0 40.0 NA   -</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 100.0 100.0</td>
<td>100.0 100.0 NA 100.0</td>
</tr>
<tr>
<td>N</td>
<td>12   17   14   5</td>
<td>16    5    1    2</td>
</tr>
<tr>
<td>Completed junior high school or above prior to migration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(τ males = 0.088, p&lt;0.05; τ females = 0.083, p&gt;0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>63.6 80.0 83.3 83.3</td>
<td>83.3 90.0 NA   -</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>18.2 12.0  -   -</td>
<td>-    -    NA   -</td>
</tr>
<tr>
<td>Unskilled</td>
<td>18.2 8.0 16.7 16.7</td>
<td>16.7 10.0 NA   -</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 100.0 100.0 100.0</td>
<td>100.0 100.0 NA  -</td>
</tr>
<tr>
<td>N</td>
<td>11   25   12   6</td>
<td>6     10   1    -</td>
</tr>
</tbody>
</table>

Source: Questionnaire survey
status occupations on arrival. First, job opportunities in Surabaya for newly arrived males have not remained constant over the years. Circumstantial evidence suggests the post-independence migrants of the 1950s enjoyed greater employment opportunities in skilled and semi-skilled jobs than recent migrants, who entered a city in which the public service and the armed forces were saturated with excess manpower. Second, the composition of male migration flows in the early years of independence was more selective than recent flows of persons employed in skilled occupations prior to migration (Figure 5.1). Although the three-category control for educational attainment (Table 7.6) was meant to standardise for changes in migrant selectivity, the general post-independence improvement in educational attainment may have resulted in an underestimate of the educational status of senior immigrants relative to recent arrivals. In the first few years of independence, a male with only an elementary education, but with experience in the Dutch trained civil service, was an invaluable migrant. In the administrative vacuum created by departing colonial officials he could be expected to take a high post on arrival in Surabaya. The simple two- or three-category controls for educational attainment (Tables 7.5 and 7.6) have failed to standardise adequately for changes in migrant selectivity between migration flows. Compared with recent male migrants many of the earlier migrants were concentrated in high-status occupations prior to migration to Surabaya, and their favoured occupational position was usually confirmed or increased on arrival in the city (Figure 5.1 and Table 7.6). The picture of increased occupational status among senior (pre-1970) male migrants in 1974 is to a large degree only a reflection of these occupational advantages, it does not necessarily imply real post-arrival occupational mobility.

Cross-sectional analysis of lifetime immigrants to Surabaya has resulted in two major findings. First, most of the occupational advantage of senior (pre-1970) female immigrants in 1974 may be satisfactorily explained by selective return migration and a large component of short-term immigrants among recent female arrivals. Second, in comparison with recent (1970-74) male arrivals, senior (pre-1970) male immigrants were more concentrated in high-status occupations prior to migration and on arrival in Surabaya. Much of
their occupational advantage in 1974 was due to these initial advantages. In view of these findings, we must revise the picture of widespread upward occupational mobility by immigrants after arrival in the city (Table 7.5). Instead, the real situation was probably one of general post-arrival occupational stability. Breman's (1976: 1907) viewpoint, then, appears vindicated in Surabaya, since he maintains occupational stability should be the dominant characteristic of a labour market characterised by scarcity of employment. Stability is a direct result of job scarcity and of the limited opportunities for those with work to accumulate capital or to invest in formal education. The cross-sectional approach alone cannot adequately determine the real extent of post-arrival occupational mobility, however, and we will now turn to the longitudinal approach.

7.2.2 Longitudinal Analysis of Post-Arrival Occupational Mobility Among Immigrants

Major changes in the occupational status of immigrants after their arrival in Surabaya will be identified by comparing immigrants' occupational status on arrival with their status in 1974. In order to determine the direction of occupational status mobility an examination will be made of immigrants gainfully employed both at arrival and at the time of my survey in 1974. Immigrants not gainfully employed on arrival will be considered separately, according to their occupational status on arrival.

7.2.2.1 Occupational Mobility Among Immigrants Gainfully Employed On Arrival in Surabaya

More than three-fifths of the immigrants gainfully employed on arrival in Surabaya were in the same job in 1974, strong evidence that occupational stability is the common condition among immigrants in the city. However, included in the 38 per cent who changed jobs were male migrants who had aged enough since arrival to become pension recipients in 1974 (Figure 5.1 and Table 7.7). As their change in occupation was usually just a function of increased age (unless of course the individuals concerned changed jobs before beginning their pension), the inclusion of pension recipients has artificially
**TABLE 7.7 - Post-arrival occupational status mobility and occupational status of immigrants in 1974, by occupational status on arrival, period of migration and sex**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gainedfully employed on first arrival</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upward</td>
<td>-</td>
<td>10</td>
<td>18</td>
<td>6</td>
<td>10</td>
<td>23</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable or lateral move</td>
<td>28</td>
<td>97</td>
<td>42</td>
<td>76</td>
<td>34</td>
<td>69</td>
<td>138</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downward</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>12</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Became pension recipient</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movement into not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movement into home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>29</td>
<td>100</td>
<td>55</td>
<td>49</td>
<td>49</td>
<td>99</td>
<td>100</td>
<td>176</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working on first arrival**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>-</td>
<td>NA</td>
<td>4</td>
<td>50</td>
<td>1</td>
<td>NA</td>
<td>5</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>-</td>
<td>NA</td>
<td>1</td>
<td>12</td>
<td>-</td>
<td>NA</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>1</td>
<td>NA</td>
<td>2</td>
<td>25</td>
<td>-</td>
<td>NA</td>
<td>3</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pensioner</td>
<td>-</td>
<td>NA</td>
<td>1</td>
<td>NA</td>
<td>3</td>
<td>NA</td>
<td>3</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>1</td>
<td>NA</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>NA</td>
<td>4</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>NA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>22</td>
<td>12</td>
<td>60</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2</td>
<td>NA</td>
<td>8</td>
<td>99</td>
<td>2</td>
<td>NA</td>
<td>4</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home duties on first arrival**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Farmer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39</td>
<td>93</td>
<td>35</td>
<td>86</td>
<td>36</td>
<td>84</td>
<td>64</td>
</tr>
<tr>
<td>Students</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>-</td>
<td>1</td>
<td>NA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42</td>
<td>99</td>
<td>41</td>
<td>99</td>
<td>43</td>
<td>99</td>
<td>22</td>
</tr>
<tr>
<td>Students on first arrival**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>1</td>
<td>12</td>
<td>11</td>
<td>58</td>
<td>4</td>
<td>NA</td>
<td>3</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Pensioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>7</td>
<td>88</td>
<td>37</td>
<td>1</td>
<td>NA</td>
<td>15</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>7</td>
<td>88</td>
<td>37</td>
<td>1</td>
<td>NA</td>
<td>15</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8</td>
<td>100</td>
<td>19</td>
<td>100</td>
<td>6</td>
<td>NA</td>
<td>4</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: NA = Too few observations to calculate percentages.
* Post-arrival occupational mobility among those gainfully employed on first arrival has been assessed in relation to occupational movements among the first eight occupational status categories included in Tables 7.1 and 7.2. Although migrants who were farmes prior to migration were excluded from the earlier analysis of the direction of occupational mobility from previous residence to first arrival (Table 6.1); those who were farmers and resident in Surabaya in 1974 are included here because income and educational data (Tables 7.1 and 7.2) indicate their relative occupational status in 1974 was below that of factory labourers.

** The first seven occupational status categories of income earners in 1974 (Table 7.1) have been generalised into three groups of skilled, semi-skilled and unskilled immigrants as detailed in Table 6.1.

Source: Questionnaire survey.
exaggerated the extent of post-arrival occupational change among male migrants. When pension recipients are excluded, almost three-quarters (73 per cent) of the inmigrants gainfully employed on arrival and in 1974 stayed in the same job after arrival in Surabaya. Female inmigrants were more occupationally stable than males (78 per cent compared to 68 per cent), though once the high proportion of recent arrivals among the females is allowed for, the difference becomes insignificant. McCutcheon (1977: Chapter IV, 37) found a slightly higher level of job stability (77 per cent) among an 'approximately comparable' group of male inmigrants in Surabaya\(^{(1)}\), though because of purposive sampling her survey included a higher proportion of recent inmigrants than my study\(^{(2)}\), and this is the most likely cause of the discrepancy. Of the inmigrants included in my study who did change jobs after arrival, 40 per cent were in jobs of the same occupational status in 1974 (defined according to the seven detailed categories shown in Table 7.8). Although some of these inmigrants may have made job changes involving a change in occupational status in the years between first arrival and 1974, and yet by 1974 have returned to a job of the same occupational status to that of their original job, the number involved was probably small. We may safely conclude that at least 80 per cent of the 274 inmigrants gainfully and actively employed (that is not pension recipients) on arrival and in 1974 did not change occupational status after arriving in Surabaya (Table 7.7). What were the reasons for such a high degree of occupational status stability among inmigrants included in this study?

---

(1) In this instance, McCutcheon's (1977: chapter IV, 37) sample population comprised 176 male inmigrants who were working on arrival in the city and actively employed and aged between 15 and 44 years of age at the time of her survey in 1975.

(2) McCutcheon does not indicate the proportion of recent migrants among the 176 male respondents; however, 40 per cent of her total sample of 241 males arrived in the 5 years before her survey (McCutcheon, 1977: Appendix A, Table 4), compared to less than 20 per cent of the male respondents in my sample population.
a) Immigrants Who Changed Jobs After Arrival Compared to Immigrants Who Remained in the Same Job

To determine the causes of job changes and job stability, immigrants who changed jobs after arrival and were gainfully employed on arrival were compared with immigrants who remained in the same job. The comparison was made in terms of a wide range of variables, including sex and marital status, nature of previous place of residence, region of previous place of residence, ethnic origin, occupational status on arrival and educational attainment of immigrants. In order to eliminate the obvious effects of ageing, whereby senior immigrants were more likely than recent migrants to be pension recipients or retired and not working in 1974; the analysis was confined to immigrants gainfully employed both on arrival and in 1974, and pension recipients were excluded. The analysis indicated that the probability of an immigrant changing jobs after arrival increased significantly as the immigrant's duration of residence in the city increased, regardless of whether the immigrant was male or female. This finding was predictable since the number of alternative job opportunities available to an individual migrant after arrival was to a large extent a function of time spent in the city. Because of the effect of duration of residence on the probability of an immigrant changing jobs it was decided that the causal effect of other variables on occupational mobility could be isolated most effectively if immigrants who arrived in 1970-74, 1960-69, 1950-59 and before 1950, were analysed separately.

The probability of migrants changing jobs after arrival was the same for male and female immigrants in the 1970-74, 1960-69 and the pre-1950 migration flows. But among the 1950-59 arrivals, female migrants were significantly more mobile than males. The explanation was that by 1974 many of the female arrivals of the 1950s were either widows or wives with retired husbands, and in order to supplement meagre family income a significant proportion of the females returned to the labour force. Whether a migrant came to Surabaya from a rural or urban area did not affect his or her propensity to change jobs, regardless of the period of migration.
It was expected that the educational qualifications of inmigrants either on arrival or in 1974 would affect their job mobility, with better educated migrants having more alternative job opportunities and perhaps being more job-mobile than poorly educated inmigrants. Analysis of inmigrants in the major migration flows failed to reveal a significant relationship between educational attainment and job mobility. But since there were fewer high-status job opportunities for poorly educated female inmigrants than for poorly educated males in Surabaya (refer section 7.1), it was decided to consider male and female inmigrants separately. There was still no evidence of a relationship between educational attainment and job mobility among male migrants in each migration flow. The few job changers among the most recent (1970-74) female arrivals precluded meaningful statistical tests, but among the 1960-69 female arrivals the better educated changed jobs more readily than the less well educated. This suggests the better educated female arrivals, at least during the 1960s, were more likely to be discontented with the first job they obtained in Surabaya and more likely to take advantage of alternative employment opportunities, than the poorly-educated females. Although the few better educated females among earlier inmigrants prevented additional testing, these findings lend some support to the earlier contention that lack of educational qualifications was a greater hindrance to post-arrival occupational mobility among females than among males.

It was thought an inmigrant's educational qualifications in 1974 might be more closely associated with occupational mobility than educational attainment on arrival, as the former variable would allow for inmigrants who had improved their qualifications since arrival. In fact, the findings were not altered by changing the measures of educational attainment. As predicted by Breman (1976: 1907) for labour markets dominated by job scarcity, very few of the inmigrants gainfully employed on arrival and in 1974 improved their formal educational qualifications after arriving in Surabaya (2 per cent, refer Table 7.2).

Inmigrants who took low-status occupations on arrival in Surabaya might be expected to exhibit a greater propensity to change
jobs than migrants who obtained high status occupations. Analysis of
immigrants by period of migration and separate analyses of male and
female immigrants revealed several trends in the direction predicted,
but only one statistically significant relationship between
occupational status on arrival and job mobility. Male immigrants of
the 1950s who obtained low-status jobs on arrival were more likely to
change jobs after arrival than their fellow immigrants in high-status
occupations. This implies that though most immigrants in low-status
occupations on arrival may have wished to change jobs, the only cohort
able to carry out this wish were the males who arrived in Surabaya in
the immediate post-independence years, when alternative employment
opportunities were more abundant than in other periods.

Although educational attainment and occupational status on
arrival had little effect on the occupational mobility of immigrants
when considered individually, when the variables were considered in
conjunction they significantly affected occupational mobility. The
rationale is that well educated immigrants in low-status occupations
on arrival would be more likely to change jobs than immigrants in
occupations better matched to their educational background. In order
to test this hypothesis, the occupational mobility of immigrants was
related to their level of educational attainment in 1974, with
duration of residence in Surabaya and occupational status on arrival
standardised. Among migrants employed in skilled or semi-skilled
occupations on first arrival there was no evidence that educational
attainment affected job mobility. Better educated immigrants who
first gained employment in unskilled occupations, however, were more
likely to have changed jobs since arrival than the less well-
educated. This relationship was statistically significant among
immigrants who arrived in 1960-69 and before 1950. Clearly, the
possession of formal educational qualifications superior to those of
most immigrants employed in unskilled jobs on first arrival increased
the employment opportunities of these arrivals relative to their
fellow immigrants, and thereby provided them with the opportunity to
change jobs. Also it seems likely that above average educational
qualifications may have positively encouraged these migrants to change
jobs by increasing their expectations relative to other migrants
employed in unskilled jobs on arrival.
The educational attainment and occupational mobility of recent inmigrants (1970-74 arrivals) could not be analysed statistically because of the small number of job changers in this cohort. There was no relationship between the propensity to change jobs and educational attainment among the 1950-59 arrivals who took unskilled jobs on arriving in Surabaya. Once again it appears that the unusually plentiful job market of the 1950s was responsible for 'exceptional' behavior by the 1950-59 arrivals. Unlike the scarce job market of the 1960s and the pre-1950s, the job market of the immediate post-independence years offered alternative job opportunities to inmigrants without an elementary education.

Apart from duration of residence in the city, this analysis has indicated that educational attainment relative to an inmigrant's occupational status on first arrival was a major cause of job change among inmigrants after their arrival in Surabaya. An inmigrant possessing formal educational qualifications of junior high school level who obtained an unskilled job on arrival in Surabaya, was more likely to change jobs than an inmigrant in an unskilled job who had not completed elementary school. Overall, however, the scarce job market of Surabaya offered alternative job opportunities to only a small minority of inmigrants. Consequently, almost three-quarters of the inmigrants gainfully employed on arrival and in 1974 remained in the same job during their stay in the city.

b) Occupational Status Mobility Among Inmigrants Who Have Changed Jobs

The inmigrants who changed jobs since arriving in Surabaya are now looked at in more detail in order to determine their post-arrival changes in occupational status. These changes have been assessed by comparing the occupational status of inmigrants soon after their arrival in Surabaya with their occupational status in 1974, at the time of the survey. In order to exclude migrants whose post-arrival changes in occupational status could not be classified by direction (that is downward, lateral or upward moves in occupational status), the analysis excludes pensioners and is confined to inmigrants gainfully employed both on arrival and in 1974. Also,
because of the different employment opportunities for female migrants relative to male immigrants, the sexes are considered separately.

Changes in the post-arrival occupational status of inmigrants were defined according to both the seven detailed occupational status categories and the three generalised categories (Table 7.8). Inmigrants who moved from a low-status occupation on arrival to a higher status occupation in 1974 were classed as 'upward movers', those who moved in a reverse direction as 'downward movers', and those who changed jobs but stayed in the same occupational status category as 'lateral movers'. The number of inmigrants included in this analysis is relatively small, however, because as emphasised above inmigrants who changed jobs at least once in Surabaya comprised a small minority (27 per cent) of the 274 inmigrants employed both on arrival and in 1974 (Table 7.8).

In the context of earlier remarks concerning the general occupational stability of inmigrants, the most significant finding of the longitudinal analysis is that in 1974, 40 per cent of the 75 inmigrants who changed jobs after arrival were in jobs of the same occupational status to those in which they were employed on arrival. Occupational status stability was clearly common even among job changers. The detailed occupational status classification indicates 31 per cent of the males who changed jobs and 58 per cent of the females moved laterally to jobs of the same occupational status (Table 7.8, part A). The generalised classification yields proportions of 47 per cent and 88 per cent respectively (Table 7.8, part B). A survey by McCutcheon of male inmigrants estimated that 78 per cent of the job changers were lateral movers (Table 7.8, part C, from McCutcheon, 1978: Table 3).

The difference between McCutcheon's findings and my results may be due to random variation, since both surveys deal with small sample populations. However, since the proportion of recent and

(1) McCutcheon (1978: 87) states: "nearly one-half [of the male inmigrants who changed jobs after arrival] remained at the same level of skill", but it may be seen from Table 7.8 which reproduces some of her results, that the correct proportion is 78.6 per cent.
### Table 7.8 - Occupational status in 1974 and on arrival of male and female immigrants who have changed jobs since arriving in Surabaya*

<table>
<thead>
<tr>
<th>Occupational status in 1974</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A) Detailed Occupational Status Classification (a)</td>
<td>(2.0)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>I Large scale entrepreneurs, salaried professions</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>II Low-medium level clerical etc./medium scale entrepreneurs</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>III Members of the armed forces</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>IV Semi-skilled artisans</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>V Unskilled labourers</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>VI Petty peddlers and traders</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>VII Factory labourers</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL MOVES</td>
<td>4449</td>
<td>526</td>
</tr>
<tr>
<td>B) Generalised Occupational Status Classification</td>
<td>Skilled</td>
<td>Semi-skilled</td>
</tr>
<tr>
<td>Skilled</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unskilled</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL MOVES</td>
<td>4449</td>
<td>526</td>
</tr>
<tr>
<td>C) McCutcheon's Survey (b)</td>
<td>Skilled</td>
<td>Semi-skilled</td>
</tr>
<tr>
<td>Skilled</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unskilled</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL MOVES</td>
<td>4449</td>
<td>526</td>
</tr>
</tbody>
</table>

Notes:  
* This table shows the number of respondents in each occupational status category and the corner percentages are included within parentheses.  
** The codes used for the occupational status categories upon first arrival correspond to the roman numerals alongside the categories used in the occupational status classification.  
Sources: (a) Questionnaire survey carried out for this study.  
(b) McCutcheon, 1978: Table 3
senior migrants sampled was different in the two surveys, the
difference in the reported proportion of lateral movers may be due to
contrasts in duration of residence. I used the same sampling fraction
for recent (1969-74) and senior (pre-1969) immigrants; McCutcheon
deliberately sampled recent (1970-75) migrants at three times the rate
of senior (pre-1970) arrivals (McCutcheon, 1977: Appendix A, Table 4).

Although duration of residence in Surabaya has a clear effect
on the probability of immigrants changing jobs, it is not clear how
duration of residence can influence the incidence of lateral moves
among job changers. The proportion of lateral movers within each
migration flow, however, has decreased significantly with increased
duration of residence (83 per cent of the 1970-74 job changers moved
laterally compared to 18 per cent of the pre-1950 arrivals). The
trend persisted among both male and female immigrants. Thus a long
period of residence in Surabaya appears to increase the probability
that immigrants who change jobs will eventually make a change in
occupational status. However, there was no tendency for either upward
or downward moves to predominate with increased duration of
residence. Instead, the direction of occupational mobility appears to
be a function of the immigrant's original occupational status on first
arrival, and his personal characteristics.

A major, but frequently overlooked determinant of the
direction of occupational mobility, is an individual immigrant's
initial occupational status. Immigrants already in the highest
occupational status category on first arrival could not move upward;
those in the lowest status occupations could not move downward.
Consequently, the direction of post-arrival occupational status
mobility among immigrants had a significant inverse relationship with
the immigrant's initial occupational status. Within this general
relationship, however, there were marked variations. For example, the
vast majority (87 per cent) of immigrants who were low-medium level
clerical employees or medium scale entrepreneurs on first arrival
moved laterally when they changed jobs, whereas 70 per cent of the
semi-skilled artisans moved downward in occupational status. The
majority of pedlars and traders (73 per cent) and all factory
labourers gained in occupational status by 1974, but a large minority
of the relatively high-status members of the armed forces also increased their status (43 per cent) or maintained it (57 per cent).

The occupational status mobility of immigrants has varied markedly between the sexes (Table 7.8, parts A and B). The majority of female immigrants entered unskilled occupations on first arrival (81 per cent) and by 1974, 69 per cent were still in unskilled occupations. Forty-five per cent of the male migrants to Surabaya began in unskilled occupations, but by 1974 most had taken higher status skilled or semi-skilled occupations; only 12 per cent remained in the unskilled category. Overall, the post-arrival directions of occupational status mobility of male and female immigrants are significantly different; males were more upwardly mobile than females (47 per cent compared to 19 per cent), whereas the female respondents have mostly moved laterally (58 per cent compared to 31 per cent of the males). Approximately a quarter of male and female immigrants were in lower status occupations in 1974 than they were on first arrival (Table 7.8, part A). The shorter duration of residence of female immigrants relative to male immigrants explained most of the females greater tendency towards lateral movement. Even with the differences in duration of residence controlled for, however, male migrants were more likely to increase their occupational status after arrival than female migrants. One reason for the greater probability of upward occupational status mobility by male migrants was the lack of high-status employment opportunities for females. Another reason was that most females did not remain continuously in the workforce for as long as the males. Many females entered the workforce on arrival as young unmarried immigrants, left the workforce after marriage, and resumed gainful employment in later life when their husbands retired or died. This discontinuity of employment curtailed chances of promotion which eventually may have led to higher occupational status.

Immigrants from urban areas who changed jobs after arrival in Surabaya were more likely to make upward or lateral moves in occupational status after arrival than were immigrants from rural areas. All but one of the migrants who made a downward move in occupational status after arrival came from rural areas. To assess the possibility that the rural-urban dichotomy was acting as a
surrogate for levels of educational attainment, inmigrants who had failed to complete elementary school and inmigrants who had completed elementary school only were analysed separately from inmigrants with junior high school certificates. Among the poorly-educated group, inmigrants from urban areas were more likely to make upward or lateral moves in occupational status than migrants from rural areas. This suggests urban inmigrants had advantages over rural inmigrants in post-arrival occupational mobility; advantages which are not explained away by educational differences alone. Similar findings are reported for Mexico City and Ankara (Galindo and Goldberg, 1973: 8-13), where the lack of skills required to obtain employment in the city appeared to be the reason for the relatively disadvantaged position of rural inmigrants. If this is the case, the difference in occupational status mobility between inmigrants from rural and urban backgrounds is not a reflection of a rural-urban dichotomy, but of the handicaps confronting inmigrants from farm backgrounds compared with inmigrants who have experienced off-farm occupations.

None of the inmigrants with junior high school certificates changed to a job of lower occupational status to that in which they were employed on arrival. The majority of the few well educated rural inmigrants gained in occupational status, but most of the urban migrants moved laterally to jobs of equivalent status. The concentration of urban migrants in skilled jobs on arrival has probably been responsible for the high incidence of lateral moves, since upward moves were impossible and inmigrants fortunate enough to obtain a skilled job on arrival were most unlikely to lose occupational status (Tables 5.12 and 7.8).

The importance of farm and non-farm backgrounds in explaining the differences in post-arrival occupational mobility between rural and urban inmigrants independent of education will now be assessed. This analysis was conducted by comparing the post-arrival occupational status changes of rural and urban inmigrants who came from farm and non-farm occupations prior to migration. None of the better educated inmigrants were farmers prior to migration; so this investigation was limited to the poorly-educated arrivals. Among respondents engaged in farming prior to migration, it was found that urban and rural migrants
had the same chances of upward occupational mobility after arrival in Surabaya. Among non-farmers, inmigrants from urban settlements were more likely to experience post-arrival upward mobility than those from rural areas. Two-fifths of the non-farm inmigrants from villages lost occupational status after leaving their first job in Surabaya; only 11 per cent of the urban non-farm migrants experienced downward occupational status mobility. Therefore, contrary to expectations the occupational mobility differential in favour of urban migrants persisted among poorly-educated migrants from non-farm backgrounds. Clearly, the experience of living in an urban environment prior to migration to Surabaya aided the post-arrival occupational adjustment of migrants. In an urban centre potential inmigrants could gain specialised work experience relevant to employment in Surabaya and meet a wide range of business contacts, opportunities not available to potential inmigrants residing in small villages. Also, it is likely that the two-category control for education has not eliminated the educational differential between rural and urban migrants. As suggested by Galindo and Goldberg (1973: 13) the education received by rural migrants 'is undoubtedly of poorer quality than the city men with whom they must compete'.

The few respondents of foreign or non-Javanese and non-Madurese ethnic origin prevented statistical testing of the relationship between ethnicity and the direction of post-arrival occupational status changes. Inspection of the relevant cross-tabulations (not shown) indicates that all ten respondents who were not Javanese or Madurese, moved laterally or upward when they changed occupations. In comparison, 30 per cent of the Madurese and 25 per cent of the Javanese respondents failed to improve or even to maintain their initial occupational status. Many of the Javanese and Madurese inmigrants were relatively disadvantaged in comparison to other ethnic groups prior to migration, and it appears these initial disadvantages were carried over into post-arrival occupational experience.

Overall, better educated inmigrants (junior high school graduates) were more likely to gain or maintain their initial occupational status after arrival than respondents with an elementary
education. The best educated respondents, however, were more likely to move laterally to a job of the same status than to rise in the occupational status scale. Clearly, the concentration of the best educated inmigrants in the high-status occupations on first arrival has prevented subsequent upward mobility. Indeed, grouping job changers according to the direction of their move is somewhat misleading, since it groups together inmigrants making very different job changes. A petty pedlar who becomes an unskilled labourer, for example, is grouped with a member of the armed forces who becomes a large-scale entrepreneur. The qualifications required for these changes in occupational status are completely different, and as a result I will now adopt a different approach to the study of post-arrival occupational mobility.

To overcome the problem of grouping respondents according to the direction of their change in occupational status, migrants within each of the detailed occupational status categories on first arrival will be examined separately. The majority of both male and female inmigrants employed in low-medium level clerical occupations and the medium scale entrepreneurs have moved to jobs of equivalent status since their arrival (Table 7.8, part A). It appears these white-collar employees and entrepreneurs rarely experienced downward mobility. Immigrants employed in the armed forces on arrival also enjoyed security against downward occupational status changes after arrival (Table 7.8, part A). Considering their high occupational status on arrival, inmigrants who were in the armed forces and subsequently changed jobs have been one of the more upwardly mobile groups of arrivals, though the number of observations is very small. Immigrants who moved out of the armed forces into higher status clerical or entrepreneurial activities after arrival in the city, have tended to stay within their field of expertise. For example, a police officer became a security screening officer in a local educational establishment; a former naval officer became the owner of a shipping agency. Former members of the armed forces who have moved into higher status occupations after arrival possessed average educational qualifications, and it seems that access to capital plus the relevant business contacts were more essential to such a change than formal educational qualifications.
Inmigrants who were semi-skilled artisans on arrival and who have since changed jobs, have mostly taken up lower status occupations (Table 7.8, part A). Those who changed to other semi-skilled occupations and those who took skilled occupations, possessed above average educational qualifications, but even so they changed to jobs within their field of expertise. Downward moves according to our classification involved a loss of occupational status and more precisely, a loss of income. However, many of the 'downward' changes in occupational status also involved a change from a physically demanding occupation (for example bricklaying) to a less physically onerous occupation (such as cooking), or a change from temporary work to permanent employee status.

Female inmigrants who took unskilled labouring jobs on arrival were predominantly recent migrants (1970-74), and most remained in unskilled labouring occupations after changing jobs. Eleven of the 15 female migrants who took unskilled occupations on arrival were domestic servants, all of whom either maintained their occupational status after a change of job or became petty traders or factory labourers. Several domestic servants who remained unskilled labourers after changing jobs took up other household activities, others changed employers and remained domestic servants, and others became prostitutes. Neither of the two female inmigrants who were unskilled labourers on arrival and who by 1974 had entered skilled occupations, were domestic servants on arrival. One had been a cook and received promotion to white-collar status; the other was an assistant hairdresser who became a primary school teacher. None of the inmigrants who entered prostitution on first arrival have since changed jobs. The high concentration of temporary or short-term inmigrants among prostitutes is probably the explanation; they simply do not remain long enough in the city to change jobs. For example, not one of the inmigrants who became a prostitute on first arrival in Surabaya, has been in the city for five years or longer.

In contrast to the females, most of the male inmigrants who gained initial employment in Surabaya as unskilled labourers and subsequently changed jobs, had attained white-collar high status occupations in 1974 (Table 7.8, part A). The majority of the male
migrants who experienced upward occupational mobility arrived in Surabaya either in the colonial era or during the 1950s, which means they were in a position to take advantage of employment opportunities created when Indonesia achieved independence. The male immigrants who changed to skilled occupations from unskilled labouring jobs on arrival, were not better educated than their fellow immigrants who remained in unskilled labouring jobs or lost occupational status after arrival. This implies that they did not comprise a positively selected elite, and emphasises that their upward occupational mobility may have been solely due to the timing of their migration to Surabaya. A small group of male immigrants changed from unskilled labouring tasks on arrival to jobs of similar status or to petty trading in 1974. One of the lateral moves and all of the downward moves involved a change from arduous physical work (for example becak driving, dockyard coolie) to jobs less physically demanding (for example vegetable seller, seller of second hand goods, servant in a boarding house). This change suggests that with increased age some of the earlier immigrants probably had little choice but to seek activities which were less physically demanding than their initial jobs on arrival in Surabaya.

Male immigrants who were petty peddlars or traders on arrival and later changed jobs, had all moved to higher status occupations by 1974, though only a minority were in skilled occupations (Table 7.8, part A). Those who had skilled jobs in 1974 were not exceptionally well educated, but they were the earliest arrivals (pre-1950), and the availability of white-collar employment after independence was probably responsible for their subsequent occupational status mobility. Females who entered petty trading activities on arrival and subsequently changed jobs did not experience as much upward occupational change as male immigrants; in 1974 two of the respondents had lost status and became factory labourers. The sole female petty trader in skilled employment in 1974 was the only female in this group with a formal education. None of the female immigrants who entered petty peddling on arrival migrated to Surabaya before 1950, and the recency of their migration, their lack of formal education, and the limited number of high-status occupations available to females in Surabaya, combined to exclude most females from subsequent entry to high-status occupations.
The major findings of this section may be summarised in four conclusions. First, it appears that entry into large-scale entrepreneurial occupations by immigrants in lower status occupations on arrival in Surabaya was facilitated if immigrants were of non-Javanese or non-Madurese ethnic origin, and if immigrants had access to capital resources and had previous business experience or specialised expertise in the particular activity. Second, Immigrants in the armed forces or in semi-skilled activities on arrival who have since attained entry to higher status occupations, usually remained within their field of expertise. Those previously employed in the armed forces have not required above average educational qualifications to obtain higher status occupations; those initially in semi-skilled jobs were of superior educational status to their workmates. Third, immigrants initially employed in arduous semi-skilled occupations and unskilled labouring occupations who have changed jobs and made a downward or lateral move in occupational status, have usually changed to jobs less physically demanding. This trend is particularly significant among the earlier, and by 1974, the older immigrants. Fourth, male immigrants in unskilled labouring occupations on arrival had more success in gaining entry to high-status clerical occupations by 1974 than any other comparable group of immigrants. Their achievements were not due to educational advantages. Instead, they benefited because they came to Surabaya before 1950, and were on hand to take advantage of the new employment opportunities created with national independence at the end of 1949.

c) Other Post-Arrival Changes in Occupational Status By Immigrants Gainfully Employed on Arrival

The preceding sections focused attention on immigrants actively engaged in gainful employment both on first arrival in Surabaya and in 1974. This section examines immigrants who were gainfully employed on first arrival, but were no longer engaged in the workforce in 1974. Three groups of immigrants are in this category: those who retired and became pension recipients, those who were not working in 1974, and those who had changed to home duties (Table 7.7).

As expected, the proportion of immigrants receiving pensions in 1974 increased significantly among the earlier immigrants who were
also the oldest (Table 7.7). Twenty-three per cent of the pre-1950 male immigrants who were gainfully employed on arrival were receiving pensions in 1974. Although the incomes received were not large enough to support a family and were frequently complained about by respondents, they were significantly larger than the monthly income received by petty pedlars, factory labourers and farmers (Table 7.1). None of the female migrants was a pension recipient in 1974, reflecting the low occupational status of female migrants when they were in the workforce and the discontinuous nature of their employment since arrival. Despite the absence of female pension recipients, the proportion of older inmigrants who had the security of a regular pension income was more numerous than is assumed for most LDCs. All the pension recipients were government employees in the defence forces, the public service or in state owned companies before their retirement, ample evidence that public sector employment has provided greater security to inmigrants than private sector employment.

A significant proportion of the pre-1950 male inmigrants had also moved out of the workforce completely by 1974 (Table 7.7). Most were elderly inmigrants who had dropped out of the workforce and become dependents. Unlike pension recipients, these inmigrants had not gained employment in high-status formal sector occupations during their working lives. As a result they were dependent on other family members for their livelihood in old age.

The remaining group of inmigrants who had dropped out of the workforce since arrival, were the females who changed to home duties. Most of this group had married since arriving in the city (83 per cent), and as a result they had withdrawn from the workforce to concentrate on domestic duties.

7.2.2.2 Occupational Status in 1974 of Inmigrants Without Gainful Employment on Arrival in Surabaya

There were three major groups of inmigrants who were not gainfully employed on arrival in Surabaya: inmigrants who were unemployed, female inmigrants engaged in domestic duties, and inmigrants who were attending educational institutions (Table 7.7).
The occupational status in 1974 of immigrants in these groups will now be examined.

The majority of the female immigrants engaged in domestic duties on arrival remained outside the workforce in 1974, though some of the earlier and older migrants had begun to enter the workforce. At the time of their migration 94 per cent of those who were to enter the workforce by 1974 were married or had never married. By 1974 one-third had become widows or divorcees, and the husbands of many others had retired with, at best, a small pension. In such circumstances, the only way in which the family income could be supplemented was for the wife to enter the workforce. In Indonesia and in many LDCs, the need for widows and wives of retired husbands to enter the workforce in middle age is reinforced by a large age difference between husband and wife, and the tendency for many women to continue bearing children until they reach 40 years of age (Jones et al., 1975: 6). In Java particularly, there is a tendency for the wife to be much younger than the husband; combined with the relatively short life expectancy of most Indonesians this means that many wives aged 40-45 are widows or else have husbands who have already retired from the workforce. Admittedly, by the time the wife has reached 40-45 years of age some of the older children who have not already married may be in a position to supplement the household income. However, the tendency for Indonesian women to spread childbearing over a 20-year span or longer, means that when the mother reaches 40-45 years of age the household will still need to support a large number of dependents, an almost impossible task if the housewife does not enter the workforce.

Of the immigrants who were not working on arrival, over two-thirds were females. The females consisted of two major groups. The first and most numerous group (55 per cent) comprised young unmarried females who usually accompanied their parents to Surabaya. By 1974 these immigrants had married and assumed domestic duties. The second group of females who were out of work on arrival, remained out of work in 1974. Most of this group were recent elderly immigrants

(1) The normal age of retirement is 55 in Indonesia.
already widowed at the time of their migration, who came to Surabaya after the loss of their spouse or on retirement from employment in their previous place of residence, to join family members (often children) resident in the city. A minority of the female immigrants who remained out of work in 1974 were young unmarried females yet to enter the workforce.

Most of the male immigrants who were not working on arrival in Surabaya, had joined the workforce by 1974, their occupational status generally reflecting their level of educational attainment. Post-1960 male migrants employed in unskilled occupations in 1974, however, were exceptionally well educated relative to their low occupational status. This may imply a general tightening of employment opportunities in recent years and greater selectivity by employers who can now demand higher educational qualifications from their potential employees. A small number of the male immigrants not working on arrival in Surabaya remained out of work in 1974. Some were older unqualified immigrants genuinely seeking work and unemployed; others were younger well qualified immigrants apparently awaiting suitable employment.

The third group of immigrants not gainfully employed on arrival in Surabaya were students (Table 7.7). The majority of the most recent (1970-74) student immigrants were continuing their studies in 1974, but many of the earlier arrivals, and particularly the males, had high status skilled occupations. Some of the females who were studying on arrival had married and become involved in domestic duties by 1974, but all who entered the workforce were employed in skilled occupations. Overall, the occupational status in 1974 of immigrants who were studying on arrival in Surabaya and who by 1974 had spent at least 5 years in the city is outstandingly high. Future student immigrants, however, may not enjoy a similar success story, particularly the males, because there are signs that employers are becoming more selective as the proportion of student immigrants increases and employment opportunities in higher status occupations increase more slowly than labour supply. If the educational qualifications of male immigrants who were studying on arrival and in 1974 are compared to the qualifications of migrants who were studying
on arrival but in skilled occupations in 1974, those still studying possess the higher qualifications. This implies that some of those still studying prolonged their education because employment opportunities were not available. The competition for employment among the educated will intensify in future years. Indeed, the Urban Unemployment Survey of 1972 (Universitas Indonesia, Lembaga Demografi: Table III) revealed higher unemployment rates among the tertiary educated in Surabaya than among the junior and senior high school graduates.

7.2.2.3 An Overview of Post-Arrival Changes in Occupational Status Among Immigrants

An overview of post-arrival changes in the occupational status of immigrants may be obtained by utilising an approach adopted earlier in this study (section 6.1.4 and Figure 6.1). In this approach the relative proportion of migrants in each occupational status category in 1974 has been plotted against the immigrant's occupational status on arrival in Surabaya, with male and female inmigrants and inmigrants in each major migration flow being plotted separately. The results are presented in Figure 7.1.

The first and most important finding highlighted in Figure 7.1, is the large proportion of those gainfully employed in 1974 who had remained in the same major occupational status category since their arrival in Surabaya. The critical effect of duration of residence on post-arrival occupational mobility is clearly shown; the proportion of inmigrants who had not made major changes in occupational status increases consistently among more recent immigrants. The second finding is that immigrants who were studying on arrival were concentrated in skilled high status occupations in 1974, particularly if they were male and arrived in Surabaya before 1970. The exceptions were the more recent immigrants, most of whom were still studying in 1974.

A third finding is that the pre-1950 male immigrants appear to have experienced more upward occupational mobility since arrival than more recent male immigrants. The upwardly mobile immigrants
FIGURE 7.1
Explanatory Key to Figure 7.1

% in occupational status categories of:
- Skilled (Sk)
- Semi-skilled (Ssk)
- Unskilled (Usk)
- Farming (F)
- Pensioner (Pens)
- Not working (NW)
- Household duties (HD)
- Student (S)

OCCUPATIONAL STATUS ON ARRIVAL IN SURABAYA

Occupational status on arrival different from occupational status in 1974
- Skilled
- Semi-skilled
- Unskilled
- Pensioner
- Student
- Not working
- Household duties
- Occupational status on arrival same as in 1974

Notes:

i) At first glance this figure may appear complicated. In fact it is simple, as the following example shows.

Example:
Looking at the males (N = 83) who migrated during the period 1960-69 (top right diagram) and reading vertically we learn that 89% of these in-migrants were gainfully employed in 1974: 54% skilled, 17% semi-skilled, and 18% unskilled. Non-income recipients comprised 11% of the in-migrants in 1974: 8% students and 3% unemployed. Reading the figure from left to right and looking at in-migrants in skilled occupations in 1974, we learn that 60% were in skilled occupations prior to migration (unshaded because occupational status on arrival same as in 1974), 2% were in semi-skilled, 4% were in unskilled, 9% were unemployed and 25% were studying. By way of comparison, most of the in-migrants in semi-skilled occupations in 1974 were in semi-skilled occupations (unshaded) on arrival (57%); another 36% were in unskilled occupations and only 7% were unemployed.

ii) As an additional aid to interpretation note that in the case of the first three occupational categories in 1974 (skilled, semi-skilled and unskilled), shaded sections to the left of the unshaded area represent in-migrants whose occupational status on arrival was 'higher' than that in 1974. Occupational status categories to the right of the shaded area represent in-migrants not gainfully employed on arrival or in-migrants whose occupational status on arrival was 'lower' than that in 1974.
Figure 7.1
Occupational status of in-migrants in 1974 and on first arrival in Surabaya, by period of migration and sex

Source: Questionnaire survey
within the pre-1950 migration flow were not positively selected in terms of educational attainment or type of job on arrival in Surabaya. Instead, their upward occupational mobility seems to be due to the pre-independence timing of their arrival in Surabaya. The pre-1950 male inmigrants did not gain high-status skilled occupations on first arrival, but they were on hand when national independence was finally achieved, and this alone aided their subsequent entry to skilled occupations, occupations unavailable to them in more normal circumstances.

Over 25 per cent of the pre-1950 male inmigrants were pension recipients in 1974, a reflection of the advanced age structure of this cohort of inmigrants. The largest single group of pension recipients was involved in skilled occupations on arrival, but a significant proportion were employed in unskilled occupations and others had not yet entered the workforce (Figure 7.1). Since pensions were granted only to former government employees and former employees of state owned companies (Table 7.1), most of whom were employed in higher status occupations, it is likely that migrants who were to become pensioners but who were in skilled or semi-skilled jobs on arrival in Surabaya, subsequently changed to jobs within these two status categories. Other elderly pre-1950 male inmigrants who did not have access to a pension, including a large minority of the inmigrants in unskilled occupations on arrival, joined the unemployed on retirement.

In contrast to early (pre-1950) male inmigrants, many of whom left the workforce or became pension recipients with increased age, early female arrivals tended to enter or re-enter the workforce by 1974. Most of the new entrants to Surabaya's workforce were involved in household duties on arrival, but by 1974, after a generation in the city, some had been widowed, and husbands of others had retired. In order to maintain family income many of these early female arrivals entered the workforce (Figure 7.1).

The effects of increased age are also evident among the 1950-59 and pre-1950 male inmigrants who were gainfully employed on arrival and in 1974. A comparison of their occupational status on arrival in Surabaya with their occupational status in 1974 indicates
that a large minority of those employed in semi-skilled jobs on arrival were in unskilled jobs in 1974 (Figure 7.1). This change in occupational status was most prevalent among the 1950-59 arrivals, many of whom were in physically demanding semi-skilled jobs on arrival, but with increased age had changed to 'easier' occupations by 1974. According to the classification adopted in this study this change resulted in a 'loss of occupational status', though the individual immigrant who made the change may view it quite differently (refer Appendix 6.2).

7.3 CHANGES IN SECTOR OF EMPLOYMENT OF RECENT INMIGRANTS (1969-74) SINCE ARRIVAL IN SURABAYA

To complete the analysis of the intersectoral mobility of recent immigrants begun in an earlier discussion when intersectoral changes between previous place of residence and on arrival in Surabaya were considered (section 6.2.2), I now turn to the post-arrival intersectoral mobility of recent immigrants.

Of the 126 recent immigrants included in the formal, family, informal (working) informal (not working) sectors and sub-sectors of Surabaya's labour force in 1974, 92 per cent were in the same sector in which they were employed on arrival in Surabaya (Table 7.9). The few who had changed sectors split evenly between those who moved upwards and downwards. The small amount of intersectoral mobility is not surprising, since 30 per cent of the recent immigrants arrived in Surabaya during the first half of 1974 and a further 24 per cent arrived in 1973; this restricted opportunities for job mobility.

7.4 SUMMARY AND CONCLUSIONS

This chapter completes the sequential analyses of occupational change among migrants to Surabaya by examining post-arrival changes in occupational status. The aim was to determine the extent of occupational status change and attempt to explain it. Cross-sectional and longitudinal methods of analysis were adopted to determine the extent of change. At first sight the cross-sectional results implied that there had been widespread upward mobility, since
TABLE 7.9 - Changes in sector of employment of recent inmigrants (1969-74) since arrival

<table>
<thead>
<tr>
<th>Sector of employment in 1974</th>
<th>Sector of employment on arrival in Surabaya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal</td>
</tr>
<tr>
<td>Formal</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(18.3%)</td>
</tr>
<tr>
<td>Family</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Informal</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(0.8%)</td>
</tr>
<tr>
<td>Not working</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL MOVES N = 126 (100%)

TOTAL MOVES BY DIRECTION OF MOVE
Upward = 5 (4%) Stable = 116 (92%) Downward = 5 (4%)

Note: * The absolute number of inmigrants in each sector of employment is shown while the corner percentages are included within parentheses.

Source: Questionnaire survey.

the senior (pre-1970) migrants were more concentrated in the higher status occupations than the recent (1970-74) arrivals. Detailed analysis, however, indicated that most of the occupational status differential between female migration flows could be explained by selective return migration, and a large component of short-term migrants among recent female arrivals. Similarly, much of the advantage in occupational status among senior male migrants was due to initial advantages in occupational status which these migrants already possessed prior to migration, or on first arrival in Surabaya. Therefore the advantages in occupational status which the senior (pre-1970) inmigrants possessed in 1974 were not due predominantly to post-arrival occupational mobility. Instead, it appears that the real situation was one of post-arrival occupational stability.

Longitudinal analysis confirmed the predominance of occupational stability among inmigrants to Surabaya. When pension
recipients were excluded, 73 per cent of the inmigrants gainfully employed on arrival and in 1974 stayed in the same job after arrival in Surabaya. Since 40 per cent of those who changed jobs after arrival were in jobs of the same occupational status in 1974, we may conclude that at least 80 per cent of the 274 inmigrants gainfully and actively employed both on arrival and in 1974, did not change occupational status.

An attempt was made to explain the high incidence of job stability by comparing 'job changers' with 'non-changers'. Apart from the predictable finding that the probability of a migrant changing jobs increased with duration of residence, the one substantial finding was that inmigrants in low-status occupations on first arrival who had educational qualifications above those of their workmates, were more likely to change jobs. The relationship did not persist among the 1950-59 arrivals, however, who were greeted with a relatively plentiful supply of job opportunities in the post-independence years. This implies that in a labour-surplus job market like Surabaya, the supply of jobs affected the selectivity of job changers. Moreover, as Breman (1976: 1907) found in India, job scarcity itself is probably the major factor responsible for the high degree of job stability among inmigrants to Surabaya. In a situation of extreme job scarcity there are probably two major avenues of occupational advancement: an inmigrant may improve his educational qualifications, or he may accumulate capital. Unfortunately, only 2 per cent of the migrants gainfully employed on first arrival in Surabaya were able to improve their formal educational qualifications by 1974; so this avenue was closed to most migrants in employment. The opportunities for capital accumulation were probably restricted also, and subsequent analysis of the direction of occupational mobility and ethnic origin suggests that non-Javanese or non-Madurese inmigrants probably had a comparative advantage.

Although the direction of occupational status change among the migrants who changed jobs is a function of the classification used in the analysis, even the most detailed classification of occupational status indicated that 31 per cent of the male 'job changers' and 58 per cent of the female 'job changers', moved laterally to jobs of the
same status. The generalised classification yielded proportions of 47 per cent and 88 per cent, respectively. Thus even among the 'job changers', occupational status stability was extremely common. The proportion of lateral movers in a migration flow decreased with increased duration of residence, as expected. But there was no tendency for either upward or downward moves to predominate with increased duration of residence. Instead, the direction of occupational mobility appears to be a function of the inmigrant's occupational status on first arrival and the personal characteristics of the individual migrant.

Male migrants were more likely to be upwardly mobile than female migrants who were predominantly lateral movers. The shorter duration of residence explained most of the difference, but even with length of residence standardised, male migrants were more likely to increase their occupational status after arrival than female migrants. A lack of high-status employment opportunities for female migrants and the tendency for female inmigrants not to remain in continuous employment, explained the difference in occupational status mobility.

Immigrants from urban places who changed jobs after arrival in Surabaya were more likely to make upward or lateral moves in occupational status after arrival than were immigrants from rural areas. Comparisons between rural and urban migrants were then continued with the immigrants being grouped into standard groups according to their educational qualifications, and their farm or non-farm backgrounds. In most cases the differences in occupational mobility between rural and urban migrants disappeared, but among poorly-educated migrants from non-farm backgrounds, urban migrants were more likely to experience post-arrival upward mobility than rural migrants. Clearly, the experience of living in an urban environment where specialised work experience could be obtained which would be relevant to employment in a large urban centre such as Surabaya, aided the post-arrival occupational adjustment of inmigrants.

Analysis of the occupational mobility of migrants in individual occupational status categories on arrival revealed four
major findings. First, entry into large scale entrepreneurial occupations by immigrants in low-status occupations on arrival, was facilitated if immigrants were of non-Javanese or non-Madurese ethnic origin and had relevant business experience. Since these ethnic groups had a more ready access to capital resources than the Javanese or Madurese, this implies that capital was an essential resource if immigrants in low status occupations were to enter entrepreneurial occupations. Second, migrants in the armed forces or in semi-skilled activities on arrival who have since entered higher status occupations, usually remained within their field of expertise. Upward occupational status mobility appears to have been easier for the immigrants in the armed forces, however, since unlike those upwardly mobile from semi-skilled jobs the migrants from the armed forces who moved to higher status jobs did not possess above average educational qualifications. Third, migrants initially employed in arduous semi-skilled occupations and unskilled labouring jobs who made a downward or lateral move in occupational status, usually changed to jobs less physically demanding. This trend was particularly significant among the earlier, and by 1974, the older immigrants. Fourth, male migrants in unskilled labouring occupations on arrival had more success in gaining entry to high-status clerical occupations by 1974 than any other comparable group of immigrants. Their achievements were not due to educational advantages, but to their early date of migration (pre-1950) which enabled them to be on hand to benefit from new employment opportunities created by independence.

Three groups of immigrants who were gainfully employed on arrival in Surabaya had dropped out of the workforce by 1974. These were: migrants who had retired and become pension recipients, migrants who were not working in 1974, and migrants who had taken up home duties. Like the pension recipients, most of the not-working migrants were elderly, and without a pension they were dependent on other family members for a livelihood. The migrants who took up domestic duties were mostly females who married after arrival in Surabaya and withdrew from the workforce to concentrate on domestic duties and the raising of a family.

There were three groups of immigrants not gainfully employed on arrival in Surabaya: the unemployed, females involved in domestic
duties, and students. Most of the females involved in domestic duties on arrival remained outside the workforce in 1974, but a significant proportion of those who had been widowed or divorced, or whose husbands had been retired, found it necessary to enter the workforce in order to supplement the family income. This practice reflects both the age difference between husband and wife found in Indonesia and many LDCs, and the inadequacy or complete absence of pensions or social security for the elderly. One-third of the immigrants unemployed on arrival were males, and by 1974 most had obtained employment. Over half of the remainder were young females who accompanied their families to Surabaya; by 1974 most had married and assumed domestic responsibilities. The remainder were elderly female migrants who moved to Surabaya to join family members. Most of the recent student arrivals were still studying in 1974, but many of the pre-1970 arrivals, especially the males, obtained high status occupations by 1974. Indeed, apart from immigrants already in skilled high-status occupations on first arrival in Surabaya, students took more high-status jobs than any other group. However, due to a general increase in educational qualifications, a slow growth of skilled employment opportunities and a continual oversupply of labour, it is unlikely that future student inmigrants will be as successful as their predecessors.

Like the previous chapter which assessed the occupational mobility of immigrants as they moved from their previous place of residence to their first job in Surabaya, this analysis of their post-arrival occupational mobility found conclusive evidence of general occupational stability. Indeed, most migrants gainfully employed on arrival and in 1974, did not even change jobs during their stay in Surabaya. Among the minority who changed jobs, almost half moved to jobs whose occupational status was identical to that of their first job on arrival. Job scarcity was probably the major factor responsible for the high degree of occupational stability among inmigrants in Surabaya. Occupational stability was reinforced further by the inability of most migrants in employment on arrival to improve their educational qualifications after a period of time in the city. It was also reinforced by the fact that the majority of inmigrants of Javanese or Madurese ethnic origin, were at a comparative disadvantage
in comparison to migrants of other ethnic origins, when it came to access to capital resources.

The direction of occupational mobility of immigrants who changed occupational status after arrival, was influenced by their initial occupational status on arrival, and the personal characteristics of the individual migrant. The most important characteristics were: sex, ethnic origin, rural or urban character of previous place of residence, period of migration, and educational qualifications at time of migration. All of these characteristics were determined prior to the immigrants arrival in Surabaya. Furthermore, the previous chapter indicated that these same variables were closely related to the immigrants occupational status prior to migration, and because of occupational stability, to the immigrants occupational status on first arrival. Because of these findings we can hypothesise that the pre-migration variables alone will be useful predictors of an immigrant's socio-economic status in Surabaya during 1974. The next chapter will build on these findings, and attempt to construct a multivariate model to predict the income of male and female migrants in 1974. In order to evaluate whether the multivariate approach using pre-migration predictors is a significant advance on the structural approach, advocated by the proponents of urban dualism in the 1970s, the next chapter will contain an analysis of the employment structure of immigrants in 1974 according to the tri-sectoral model.
CHAPTER VIII

OVERALL OCCUPATIONAL STATUS CHANGE, EMPLOYMENT STRUCTURE AND INCOME DISTRIBUTION OF IMMIGRANTS TO SURABAYA

In Chapter Six I examined the occupational mobility experienced by immigrants as they changed from the last job in their previous place of residence to their first job on arrival in Surabaya, and in Chapter Seven I assessed the post-arrival occupational mobility of immigrants. I am now in a position to compare the occupational status of immigrants before migration with their occupational status in 1974, in order to summarise the overall change in occupational status brought about by migration. This comparison comprises the first part of this chapter.

In the second part of this chapter I analyse the employment structure of immigrants in 1974 according to the tri-sectoral model. The aim of this section is to evaluate the ability of the model and the structural approach on which it is based to predict certain features of the composition and behaviour of immigrants employed in the various sectors of Surabaya's labour force in 1974.

In the third part of this chapter I turn away from the structural approach with its dependence on the post-arrival employment structure of migrants, and attempt to construct a multivariate model to predict the income of immigrants in Surabaya during 1974. Contrary to the structural approach, this model is based predominantly on pre-migration predictors relevant to Breman's concept of a fragmented labour market. In this fragmented labour market it is predicted that immigrants will, in all probability, see their pre-migration socio-economic status relative to other immigrants, continued in the new environment.

8.1 COMPARATIVE OCCUPATIONAL STATUS OF IMMIGRANTS BEFORE MIGRATION AND IN 1974

This section summarises the overall changes in occupational status resulting from migration by comparing the occupational status
of inmigrants in their previous place of residence with their occupational status in 1974. The comparative occupational status of inmigrants before migration and in 1974 is portrayed in Figure 8.1, by period of migration and sex of inmigrant. The analysis indicates four major findings about the occupational status mobility of male inmigrants.

First, a clear majority of the males in skilled occupations in 1974 were either in skilled occupations or studying before departure for Surabaya. The large proportion of males in skilled occupations before migration and in 1974 implies that the move to Surabaya did not result in any change in occupational status for many of the occupationally advantaged migrants, regardless of the time of their move to the city. Indeed, as noted earlier, it is unlikely that potential inmigrants already in skilled jobs before migration would have migrated, if there had been any possibility that the move would result in a decrease in occupational status. Since the migrants who were studying prior to migration were among the best educated arrivals in Surabaya (Table 5.2), the large proportion of ex-students (prior to migration) in skilled occupations in 1974 emphasises the critical role played by educational qualifications in the selection of entrants to skilled occupations.

Second, the pre-1950 male inmigrants who were farmers prior to migration were the only migrants from non-skilled or non-student backgrounds to obtain a sizeable number of the skilled occupations in 1974. This finding reinforces earlier suggestions that the migrants resident in Surabaya before independence benefited occupationally in comparison to later arrivals from similar backgrounds (Figure 8.1).

The third finding about the occupational status mobility of male inmigrants was that most of those in unskilled occupations in 1974 were farmers or unemployed prior to migration. Educational data and the reasons for moving cited by farmers and farm labourers indicate they were probably the most socio-economically underprivileged inmigrants prior to migration (Table 5.2). Their concentration in low-status unskilled occupations in 1974 reveals that their underprivileged position persisted in Surabaya, in some cases
FIGURE 8.1
Explanatory Key to Figure 8.1

% in occupational status categories of:
- Skilled (SK)
- Semi-skilled (Ssk)
- Unskilled (Usk)
- Farming (F)
- Pensioner (Pens)
- Not working (NW)
- Household duties (HD)
- Student (S)

Notes:
(i) At first glance this figure may appear complicated. In fact it is simple, as the following example shows.
Example:
Looking at the males (N = 39) who migrated during the period 1970-74 (top left diagram) and reading vertically we learn that 79% of these in-migrants were in gainful employment in 1974: 28% skilled, 8% semi-skilled, and 44% unskilled. Non-income recipients comprised 21% of the in-migrants on arrival: 18% students and 3% unemployed. Reading the figure from left to right and looking at in-migrants in skilled occupations in 1974, we learn that 46% were in skilled occupations prior to migration (unshaded because occupational status prior to migration same as in 1974), 9% were farmers, 9% were unemployed and 36% were studying. By way of comparison, most of the in-migrants in unskilled occupations in 1974 were either not working (47%) or farming (35%) prior to migration, only 6% were in unskilled jobs (unshaded), another 6% were in skilled occupations, and another 6% were studying.

(ii) As an additional aid to interpretation note that in the case of the first three occupational status categories in 1974 (skilled, semi-skilled and unskilled), shaded sections to the left of the unshaded area represent in-migrants whose occupational status prior to migration was 'higher' than in 1974. Occupational status categories to the right of the shaded area represent in-migrants not gainfully employed before migration or in-migrants whose occupational status prior to migration was 'lower' than in 1974.
Figure 8.1
Occupational status of in-migrants in 1974 and prior to migration to Surabaya, by period of migration and sex

Period of Migration: 1970-74
Males (N=39)
- Sk
- Ssk
- Usk
- NW
- S

Period of Migration: 1960-69
Males (N=82)
- Sk
- Ssk
- Usk
- NW
- S

Females (N=147)
- Sk
- Ssk
- Usk
- NW
- HD
- S

Females (N=99)
- Sk
- Ssk
- Usk
- NW
- HD
- S

Period of Migration: 1950-59
Males (N=57)
- Sk
- Ssk
- Usk
- Pens
- NW
- S

Period of Migration: Pre-1950
Males (N=49)
- Sk
- Ssk
- Usk
- Pens
- NW
- S

Females (N=71)
- Sk
- Ssk
- Usk
- NW
- HD
- S

Females (N=44)
- Sk
- Usk
- NW
- HD
- S

Source: Questionnaire survey
even after many years of residence in the city (Figure 8.1). Many of the previously unemployed male migrants, especially the recent arrivals (1970–74), were also in low-status unskilled jobs in 1974. These migrants were better educated than the ex-farmers, but their lack of previous work experience appears to have prevented all except a well-educated minority from entering high-status employment.

Male migrants who were pension recipients in 1974 came to Surabaya from the entire range of occupational status categories prior to migration. However, migrants from skilled occupations were over-represented (42 per cent) relative to their importance among all migrants before migration (19 per cent). This was to be expected given that high-status employment was more likely to offer a pension than an unskilled job; and given that those in skilled jobs before migration were likely to get skilled high-status jobs in Surabaya from which they ultimately retired.

Most female inmigrants except for the recent arrivals, were not income recipients in 1974 (Figure 8.1). Among the minority in gainful employment, unskilled low-status jobs predominated. These jobs were taken mostly by females engaged in farming or unemployed prior to migration. Like male migrants, most female inmigrants in low-status occupations prior to migration ended up in similar low-status occupations in Surabaya, unless of course they married and left the workforce (Figure 8.1). A large proportion of the older pre-1960 female inmigrants who were in gainful employment in 1974 were engaged in domestic duties prior to migration. The reason for this is that by 1974 many had lost the income previously provided by their spouse, who had died or retired from the workforce. In these circumstances where many housewives or widows still had young dependants to support, the middle-aged mother entered the workforce in order to supplement household income.

A clearer view of the overall effects of migration on the occupational status of individual inmigrants may be obtained if we examine migrants in each general occupational status category prior to migration and determine their proportional representation in each occupational status category in 1974. Interpretation of the results
is aided if male and female immigrants are considered separately, but period of migration is ignored (Table 8.1).

A large majority of the immigrants gainfully employed in non-farm occupations before migration and in 1974, were in occupations with the same occupational status in 1974 and before migration. The proportions were: 82 per cent for the male immigrants and 86 per cent for the females. Clearly, the move to Surabaya did not affect the occupational status of most migrants gainfully employed in non-farm occupations before migration and in 1974. This finding has already been emphasised in previous sections where it was pointed out that a scarce job market is the major reason for the general absence of occupational status mobility among immigrants. The detailed occupational status distributions of all immigrants, not just those gainfully employed in non-farm occupations, are presented in Table 8.1. The distributions suggest that aside from female immigrants engaged in household duties before and after migration, the males in skilled jobs prior to migration were the most stable group in terms of occupational status, with over three-quarters of their number employed in skilled jobs in Surabaya in 1974 (Table 8.1). Moreover, most of the remainder were pension recipients, a change which reflected increased age rather than a real change in occupational status. A high degree of occupational status stability was predictable among the skilled immigrants, many of whom moved to Surabaya because of job transfers (Table 5.2). Approximately one-third to one-half of the other male and female immigrants gainfully employed in non-farm occupations prior to migration were in occupations in the same occupational status category prior to migration and in 1974 (in Surabaya). Although occupational status stability was most pronounced among the males in skilled jobs prior to migration, it was also very common among immigrants in semi-skilled and unskilled jobs prior to migration (Table 8.1).

Inmigrants engaged in farming prior to migration were over-represented in unskilled jobs in Surabaya, especially the females, of whom two-thirds took up unskilled jobs. Most other female ex-farmers married after migration and were involved in household duties in 1974. A minority of the male ex-farmers obtained
<table>
<thead>
<tr>
<th>Occupational status prior to migration</th>
<th>Male (N = 229)</th>
<th>Female (N = 362)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Occupational status in 1974 (%)</td>
<td>Occupational status in 1974 (%)</td>
</tr>
<tr>
<td></td>
<td>Skilled</td>
<td>Semi-skilled</td>
</tr>
<tr>
<td>Skilled</td>
<td>77</td>
<td>2</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>Unskilled</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>Farmer</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Not working</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>Home duties</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Student</td>
<td>61</td>
<td>7</td>
</tr>
</tbody>
</table>

**Note:** * Some totals do not equal 100 per cent due to rounding.

**Source:** Questionnaire survey.
semi-skilled and skilled jobs, but these individuals were usually pre-1950 immigrants who benefited from the boost to employment opportunities provided by independence (Figure 8.1). The previously unemployed immigrants were not concentrated in the unskilled jobs in 1974 to the same extent as the ex-farmers, but except for the females who entered home duties, most male and female immigrants who were unemployed before migration were in unskilled low-status jobs in 1974 (Table 8.1). Most ex-farmers and many of the previously unemployed migrants were poorly-educated and lacked urban work experience when they migrated. Their subsequent concentration in unskilled jobs in 1974 implies that one cause was their socio-economic status prior to migration, which in terms of educational attainment was comparable with immigrants in unskilled jobs before migration (Table 5.2). A sizeable minority of the previously unemployed male migrants took skilled jobs in Surabaya, but as noted previously, these migrants were better educated than the others previously unemployed and they may well have chosen to remain out of work prior to migration, rather than accept an occupation incompatible with their qualifications.

Three-quarters of the female migrants involved in domestic duties before migration continued in these duties in Surabaya, but 19 per cent of the others, mostly the older pre-1960 arrivals, entered the workforce to supplement family income with the death or retirement of their spouse (Figure 8.1). The final group comprised immigrants who were studying before migration. Educational data indicate these immigrants were socio-economically privileged in comparison to most other immigrants prior to migration (Table 5.2). This finding is predictable since only wealthier families could afford to keep children at school until they reached at least 15 years of age, which was the minimum age at migration of immigrants included in this study. The 'student immigrants' who chose or were given the opportunity to enter the workforce rather than continue their studies in Surabaya, successfully maintained their initial socio-economic advantage by taking skilled jobs (Table 8.1).

Overall, this discussion has indicated that for immigrants gainfully employed in non-farm occupations before and after migration, the individual immigrant's occupational status prior to migration is
an accurate predictor of occupational status in Surabaya in 1974. Other inmigrants tended to concentrate in occupational status categories in 1974 which were most compatible with their general socio-economic status prior to migration. Consequently, the socio-economically underprivileged inmigrants who were concentrated in farming activities or were unemployed prior to migration, were concentrated in unskilled jobs in 1974. On the other hand, socio-economically advantaged inmigrants such as students continued their studies in Surabaya, or else obtained employment in skilled high-status occupations.

8.2 EMPLOYMENT STRUCTURE OF LIFETIME INMIGRANTS IN 1974

The employment structure of lifetime inmigrants in 1974 will be analysed within the framework of the tri-sectoral model and the sectoral definitions outlined earlier (Section 5.2.3). Initially, I will look at the employer status and workforce characteristics of enterprises employing inmigrants in each sector of Surabaya's labour force, in order to identify the sectors and types of enterprises which were most important in employing inmigrants. The industrial grouping within which these enterprises operated will also be examined. An attempt will then be made to identify the demographic and socio-economic characteristics of inmigrants employed within the major sectors. Finally, the empirical relevance of the tri-sector model will be evaluated with regard to its ability to predict an inmigrant's intersectoral occupational mobility, intending duration of residence and the intensity of social and economic ties between inmigrants and their source areas.

8.2.1 Major Employers of Immigrants

The dominant role of government as the major single employer of inmigrants within the formal sector of Surabaya's labour force is clearly illustrated in Table 8.2. If state-owned companies are included within the 'government' category, government employed almost 63 per cent of the inmigrants working within the formal sector. One of the concerns involved in the formulation of the sectoral definitions was the need to exclude from the informal sector
<table>
<thead>
<tr>
<th>Sector</th>
<th>Employer</th>
<th>Respondent or respondent's family</th>
<th>Owner's family + respondent</th>
<th>Workforce &lt;5 others</th>
<th>Owner's family +</th>
<th>Owner's family + 5-10 others</th>
<th>Over 10 non-family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FORMAL (N=174)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private company</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>State company</td>
<td>-</td>
<td>1.1</td>
<td>0.6</td>
<td>1.7</td>
<td>-</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>51.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FAMILY (N=96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small businessman/informal</td>
<td>-</td>
<td>-</td>
<td>6.3</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>business group</td>
<td>15.6</td>
<td>5.2</td>
<td>14.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small businessman/informal</td>
<td>-</td>
<td>1.0</td>
<td>17.7</td>
<td>35.4</td>
<td>-</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>business group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land/livestock owner</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No permanent employer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INFORMAL (N=71)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self</td>
<td>97.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>2.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:** * Corner percentages shown sum to 100 per cent for each sector, except for errors due to rounding.

**Source:** Questionnaire survey.
self-employed businessmen who employed non-family labour along capitalist lines (section 5.2.3). This was achieved by including self-employed businessmen who employed non-family labour within either the family or formal sectors, according to the size of the workforce in their enterprise. Table 8.2 reveals that this earlier concern with their placement was exaggerated since their numerical contribution to the formal and family sectors was minimal.

In addition to government, private business employed a large proportion (32 per cent) of the immigrants working in the formal sector. Nevertheless, the role of private enterprise as an employer of immigrants within the formal sector of Surabaya's economy was minor in comparison to that of government. This implies that at least until 1974, modern large-scale capital intensive development, had made a minor contribution to the absorption of immigrants into Surabaya's labour force. Only one of the 341 respondents included in Table 8.2 was employed by a large joint-venture company. Many of the very recent large industrial estates involving joint-venture arrangements with foreign companies, however, have been located south of the city within the kecamatan of Rungkut and Wonocolo, which are outside Old Surabaya and excluded from this study.

Small businessmen or informal business groups were the major employers (54 per cent) of immigrants within the family sector (Table 8.2). Prostitution was the major activity engaged in by such organisations. Heads of household also employed a large proportion (35 per cent) of family sector workers, most of whom were domestic servants. The number of immigrants employed in true informal sector enterprises where a peasant mode of production predominated, was relatively small (21 per cent of the gainfully employed). Within the informal sector self-employed immigrants were much more numerous than immigrants employed by other family members.

The formal sector was the major employer of lifetime immigrants, followed by the family sector, and the informal sector, even if respondents who were unemployed in 1974 are included within the sectoral model (Friedmann and Sullivan, 1974) as a 'not working' sub-sector (Table 8.3). These findings appear to contradict research
### TABLE 8.3 - Occupational, demographic and socio-economic characteristics of immigrants by sector of employment in 1974

<table>
<thead>
<tr>
<th>Sector</th>
<th>N (%)</th>
<th>Industrial grouping (%)*</th>
<th>Occupational status (%)*</th>
<th>Median &amp; (mean) monthly income (Rp)**</th>
<th>Males per 100 females</th>
<th>Sex and marital status (%)*</th>
<th>Educational attainment in 1974 (%)*</th>
<th>Ethnic origin (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture</td>
<td>Manuf &amp; construction</td>
<td>Wholesale &amp; retail</td>
<td>Transport, finance, services &amp; defence</td>
<td>Skilled</td>
<td>Semi-skilled</td>
<td>Unskilled</td>
</tr>
<tr>
<td>Formal</td>
<td>174</td>
<td>146</td>
<td></td>
<td></td>
<td></td>
<td>15000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Family</td>
<td>99</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td>16000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Informal</td>
<td>71</td>
<td>19</td>
<td>-</td>
<td>14</td>
<td>74</td>
<td>12900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not working</td>
<td>33</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>377</td>
<td>(100)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11875</td>
<td>51</td>
<td>48</td>
</tr>
</tbody>
</table>

Notes:  
* Each row totals 100 per cent except for errors due to rounding.  
** In 1973-74 the exchange rate of the Indonesian rupiah was approximately Rp485 = A$1.00, or Rp415 = US$1.00  
Source: Questionnaire survey.
(McGee, 1976) which has emphasised the role of the informal sector as a source of employment for immigrants. However, there are three major qualifications to this conclusion.

First, this study is concerned only with Surabaya's lifetime inmigrant population. Since we know little from other sources of the relative intersectoral distribution of Surabaya's lifetime resident population, these findings do not enable us to assess whether inmigrants were disproportionately concentrated in particular sectors of the city's economy. However, the enumeration survey indicated that approximately three-quarters of Surabaya's heads of household were non-Surabaya born; thus lifetime inmigrants predominate within the city's labour force.

A second qualification to our conclusion that most inmigrants were employed in the formal sector arises from the sampling method used in this study. Once the enumeration survey had identified all the surviving lifetime inmigrants aged 15 years or more at the time of their migration to Surabaya, a uniform sampling fraction (25 per cent) was used to sample migrants for inclusion in the questionnaire survey. The sample fraction was applied to all inmigrants regardless of their period of migration. Two hundred and seven recent inmigrants (1969-74 arrivals) and 391 senior inmigrants (pre-1969 arrivals) were included in the questionnaire survey. The ratio of 207:391 was representative of the duration of residence of the surviving lifetime inmigrant population of Old Surabaya. One-time inmigrants who had either moved elsewhere or returned to their place of origin by 1974, were not included in the sample population. It may be argued that returnees would be disproportionately concentrated in the non-formal sectors of the city's labour force, and that their exclusion would lead to an understatement of the employment capacity of the non-formal sectors of the city's economy. This view may be countered by arguing that onward migrants would be disproportionately concentrated in the city's formal sector as, for example, civil servants.

It may also be argued that since my survey included a majority of senior inmigrants (pre-1969 arrivals), and in view of earlier comments about the availability of formal sector government
employment in the first few years of independence, it might be expected that my sample contained more formal sector employees than a sample biased towards recent migrants. McCutcheon's (1978: Table 1) survey results support this argument: 35 per cent of her senior immigrants (pre-1970 arrivals) were government employees, compared to 28 per cent of the recent arrivals. Clearly, when generalising about the capacity of the various sectors of Surabaya's economy to employ migrants, care must be taken to stipulate the duration of residence of the migrants concerned.

The third qualification is that I have used a tri-sectoral model in which the family sector is intermediate between the formal and informal sectors of the bipolar dualism model. Most researchers who have referred to the absorptive capacity of the informal sector have used the dualism model (for example McGee, 1976). The tri-sectoral model may be 'converted' to an approximation of the dualism model if the family and informal sectors are combined. When this is done with my data, the formal and the 'expanded' informal sectors have absorbed almost equal shares of the surviving lifetime migrants to Surabaya (Table 8.3).

The relative employment capacity of the various sectors of Surabaya's economy may be debated. There is no doubt, however, that the industrial grouping which includes the service activities of transport, finance, community, social and personal services, and defence, has absorbed a majority of the gainfully employed migrants (Table 8.3). In view of the importance of government as an employer in the formal sector, the dominance of tertiary activities in this sector is not surprising. The family sector of the labour force was even more concentrated than the formal sector in service activities, again, unsurprisingly considering many of the respondents in this sector were prostitutes or domestics. In contrast, three-quarters of the informal sector workers were occupied in wholesale and retail trade; the remainder were equally divided between manufacturing and construction, and service activities (Table 8.3).
8.2.2 Socio-economic Status and Demographic Character of Immigrants by Sector of Employment

The urban dualism model implies that rural immigrants of low formal educational standards and low socio-economic status will concentrate in the informal sector of the urban workforce, because it is easier to gain entry to this sector than to the formal sector. The concomitant assumption is that immigrants in the formal sector are of higher socio-economic status and are better educated than immigrants employed in the informal sector.

In Surabaya, the occupational status and educational attainment of immigrants employed in the formal sector was far superior to that of immigrants in the family and informal sectors (Table 8.3). This finding accords with the predictions of the urban dualism and tri-sectoral models. The occupational status and educational attainment of immigrants in the family sector, however, was significantly below that of immigrants in the informal sector. This appears to have been a function of the large proportion of females in the family sector compared to the informal sector. It has been suggested that non-formal sector workers are more likely to be rural migrants than formal sector employees, who will predominantly originate from urban source areas. My data clearly support this suggestion (Table 8.4). Moreover, it appears that only the formal sector contains a substantial proportion of immigrants who were multiple movers. Thus the premise that formal sector employees are socio-economically advantaged in comparison with non-formal sector workers is supported by evidence from the immigrant population of Surabaya. However, immigrants in the family sector which the tri-sectoral model envisaged as an intermediate group, are in many ways more disadvantaged than migrants in the informal sector.

The mean and median monthly incomes of immigrants employed in the formal sector in 1974 were higher than that of immigrants in the family sector (Table 8.3). Immigrants working in the family sector, however, enjoyed slightly higher earnings than migrants engaged in informal sector enterprises. This hierarchy of incomes accords with the ranking predicted by Friedmann and Sullivan (1974: 389), but the
<table>
<thead>
<tr>
<th>Sector</th>
<th>N (%)</th>
<th>Region of origin (%)*</th>
<th>Occupation status on arrival (%)*</th>
<th>% changed jobs since first arrival **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>174 (46)</td>
<td>26 7 3 2 9 11 14 37 24 4 5 15 16 1 35 48 12 18 7 2 13</td>
<td>66 28 7 24 13 3 25</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>99 (26)</td>
<td>69 4 2 5 15 28 9 4 1 5 44 28 5 2 2 2 91 3 2</td>
<td>16 6 6 61 17 11 -</td>
<td></td>
</tr>
<tr>
<td>Informal</td>
<td>71 (19)</td>
<td>42 21 8 15 3 24 10 7 8 32 17 17 11 10 5 3 4 7 3</td>
<td>37 6 9 37 9 9 6 6</td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>31 (9)</td>
<td>46 24 3 6 15 3 6 24 52 15 13</td>
<td>31 12 47 6 29 6</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>377 (100)</td>
<td>42 11 4 1 21 2 14 5 23 13 13 16 12 16 21 21 26 13 4 9 27 22 19 24 9 45 9 6 7</td>
<td>35 18 8 33 12 13 16</td>
<td></td>
</tr>
</tbody>
</table>

Notes: * Each row totals 100 per cent except for errors due to rounding. ** Includes only those immigrants who were gainfully employed or not working on first arrival in Surabaya.

Source: Questionnaire survey.
income differential between migrants in the formal and non-formal sectors was not large.

In Malaysia, Mazumdar (1976: 665) discovered that male employees (formal sector workers) and male self-employed (informal sector workers) had similar inverted U-shaped age-earning profiles. Earnings increased from a minimum among young workers (aged 13-15 years) to a peak at the age of 35, and from then on there was a slow decline. Female employees and females who were self-employed had flatter age-earning profiles than the males, but the degree of flatness was stronger for the females in the informal sector.

When the mean and median monthly income of inmigrants in each sector of Surabaya's labour force is graphed by age group (Figure 8.2) it is possible to compare age-earning profiles in Surabaya with Mazumdar's (1976: 665) findings in Malaysia. The small number of observations made my profiles more erratic than Mazumdar's, especially in the informal and family sectors, and prohibited a breakdown by sex. As indicated by the difference between the mean and median values, the distributions within most age groups were positively skewed, but even so something of an inverted U-shaped profile is evident among migrants in each sector, particularly if the age groups with only one or two inmigrants in the family sector are ignored and if median values rather than mean values are considered for formal sector workers (Figure 8.2). The 'flatness' observed by Mazumdar in the age-earning profile of non-formal sector workers, however, was not evident among the inmigrants working in the informal or the family sectors of Surabaya's labour force in 1974. Instead, two other findings were observed: young inmigrants in the informal and family sectors received larger monthly incomes than inmigrants of a similar age employed in the formal sector; among migrants employed in the formal sector there was a general increase of income with increased age, whereas among informal and family sector workers there was a tendency for income to decline after early middle age (Figure 8.2).

There are two interpretations of the age-earning profiles of inmigrants in the formal and non-formal sectors of Surabaya's workforce. First, like Mazumdar (1976: 665), we may assume that the
Figure 8.2
Usual monthly earnings* of in-migrants gainfully employed by sector of employment and age group, Surabaya 1974

Gainfully employed in informal, family and formal sectors

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Gainfully employed in informal sector</th>
<th>Gainfully employed in family sector</th>
<th>Gainfully employed in formal sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>160- (21)</td>
<td>70- (7)</td>
<td>150- (17)</td>
</tr>
<tr>
<td>25-34</td>
<td>150- (18)</td>
<td>60- (15)</td>
<td>150- (35)</td>
</tr>
<tr>
<td>35-44</td>
<td>50- (6)</td>
<td>50- (10)</td>
<td>70- (56)</td>
</tr>
<tr>
<td>45-54</td>
<td>40- (15)</td>
<td>30- (1)</td>
<td>60- (37)</td>
</tr>
<tr>
<td>55+</td>
<td>30- (2)</td>
<td></td>
<td>50- (20)</td>
</tr>
</tbody>
</table>

Note: *In order to obtain representative estimates of monthly earnings, in-migrants were asked their 'usual monthly income.'

Source: Questionnaire survey
profiles indicate real changes in earnings with age. If this assumption is adopted, the larger earnings of older formal sector employees relative to younger employees in the same sector reflect promotions and increased real wealth with increased age. Conversely, the smaller incomes of older non-formal sector workers compared with young non-formal sector workers suggest that outside the formal sector increased age may seriously decrease earnings in the absence of the security offered by a system of promotion.

The high incomes of young migrants aged 15–24 in the family sector compared to formal sector employees of the same age are partly a reflection of the large earnings of young females engaged in prostitution, who were concentrated in the family sector. Some of the young to middle-aged informal sector workers aged 25–34 and 35–44 also received larger monthly incomes than similarly aged employees in the formal sector, however, and since there were no prostitutes in the informal sector the large income of these 'young' migrants in the informal sector and to a lesser extent in the family sector was not due solely to prostitution. Instead, it was likely that the flexibility of employment in the informal and family sectors, in terms of lack of contractual commitments and irregular hours, allowed young workers in these sectors to maximise their earnings by concentrating on the most profitable, but frequently physically-demanding employment. With increased age, immigrants were less able to compete successfully for these high-income but physically-demanding activities. On the other hand, young formal sector employees appear to have been willing to accept a slightly lower income in return for the job security and greater long-term earning potential of formal sector employment.

Because the majority of immigrants in each sector arrived in Surabaya aged less than 30 there is a close correlation between an immigrant's age in 1974 and his duration of residence in Surabaya. As a result, we may assume that in addition to indicating real changes in earnings with age, age-earning profiles also reflect the effects of duration of residence and changes in employment opportunities at time of migration on earnings. For example, older immigrants in the formal sector in 1974 were usually the earliest formal sector employees to
move to Surabaya, and as noted previously, there were more employment opportunities for newly arrived formal sector employees in the early 1950s than in the early 1970s. By 1974 these migrants were middle-aged; most had been with the same employer for 20 or more years, had received promotions, and were earners of a substantial income.

In contrast, non-formal sector employees who arrived in Surabaya 20–25 years ago may have been faced with more limited income-earning opportunities than recent arrivals. This was certainly the case for young females who arrived in Surabaya just after independence, and this may partly explain the smaller income of older immigrants in the non-formal sectors (Figure 8.2). It is also possible, however, that their decrease in income with increased age reflects a movement out of prostitution by older female immigrants.

It appears that age-earning profiles reflect not only real changes in earnings with age, but also changes in earnings with duration of residence and changes in employment opportunities for newly arrived immigrants. Nevertheless, it must be emphasised that the main result of the age-earning profiles has been to indicate that though the overall income differential between immigrants in the formal and non-formal sectors is not great (Table 8.3), formal sector employees did benefit from a consistent gain in earnings with increased age. Family and informal sector workers, however, frequently experienced a drop in income with the onset of middle- or old-age (Figure 8.2).

In a review of the demographic composition of workers in the informal sector in Belo Horizonte (Brazil) and Peru, Mazumdar (1976: 660) notes a disproportionate concentration of females, a disproportionate number of workers outside the prime age group, and a large number who were not heads of household. These and other data led him to conclude that many members of the informal sector were secondary workers from families where the head of the household was employed in the formal sector.

Demographic data from Surabaya are not as conclusive (Table 8.3). The formal sector was dominated by males of prime working age,
most of whom were married. In marked contrast, the family sector consisted almost entirely of young females, almost half of whom had never been married; and most of the remainder were either divorced or separated from their husbands (Table 8.3). The huge sex imbalance between the formal and family sectors reflects the more limited scope of employment opportunities in high-status occupations for females, and the lower educational attainment level of most female migrants. On the other hand, the huge number of females in the family sector is a reflection of female job specialisation in unskilled activities, such as domestic service and prostitution. Despite these contrasts which accord with Mazumdar's (1976: 660) findings, there is no evidence to suggest that a significant number of the family sector employees were secondary workers seeking merely to supplement family incomes. Indeed, the small proportion of married females and the large number of divorcees implies a contrary interpretation, that most were working to support themselves (Table 8.3). A disproportionate number of the family sector employees intended only a short stay in Surabaya (Table 8.5); this implies that many were target migrants, but not necessarily secondary workers.

The demographic composition of the true informal sector workers, the self-employed and family employed, was more in accord with Mazumdar's (1976: 660) results than the demographic characteristics of inmigrants in the family sector. Although male immigrants outnumbered females in the informal sector, married females were disproportionately over-represented and many may have been secondary workers (Table 8.3). The older age structure of immigrants in the informal sector also implies that a significant number of the inmigrants were outside the prime working age group of 25-49. The not-working sub-sector was dominated by elderly female inmigrants, many of whom were widows who migrated to Surabaya on the death of their spouse to live with family members. The true informal sector, then, may contain a disproportionate share of older female secondary workers, but the importance of secondary workers was not as great as Mazumdar (1976: 660) implies. Moreover, the family sector, appeared to contain a disproportionately small number of secondary workers.
A frequent assumption about the informal sector is that it contains more recent inmigrants than the formal sector. Friedmann and Sullivan (1974: 398) state this assumption in the context of the tri-sectoral model when they claim the informal sector (that is, the informal [working] and the informal [not-working] sub-sectors of their tri-sectoral model) contains more recent immigrants than the family or formal sectors. Data on the average duration of residence of inmigrants in Surabaya do not substantiate this assumption (Table 8.4). Indeed, the formal, informal, and not-working sectors and sub-sectors all were dominated by senior inmigrants with an average sixteen years or more continuous residence in Surabaya. In marked contrast, the family sector consisted almost entirely of recent arrivals; inmigrants within the family sector averaged a mere three years residence in Surabaya. The large number of young short-term female inmigrants engaged in prostitution and domestic service accounts for the rapid turnover rate within the family sector. Other workers within the sector were more permanent residents. On the basis of these data the city's informal (working) and informal (not-working) sub-sectors did not receive a disproportionately large share of the most recent inmigrants.

8.2.3 Intersectoral Mobility of Inmigrants

Friedmann and Sullivan (1974: 402-4) also recognised that the tri-sectoral model of the urban labour force has implications for occupational mobility. They suggest that top occupations in the formal sector are usually only reached by entrants previously employed in 'superior' sub-sectors of the formal sector, but that the family sector can be entered with roughly equal probability from any of the sub-sectors below it. Generally, they suggest that upward occupational mobility as far as the family enterprise sector is not particularly selective of the entrant's previous sector of employment, but that promotion from the family or informal sectors to the formal or corporate sector, is not common. Instead, most entrants to formal sector employment come from jobs in the formal sector. Downward mobility, particularly to unemployment, however, is possible from any employment sub-sector regardless of hierarchical position (Friedmann and Sullivan, 1974: 403).
The Friedmann and Sullivan (1974: 402-4) hypotheses about intersectoral occupational mobility may be used to aid this study of the inmigrant population of Surabaya in two ways. First, the hypotheses may be confined to the urban labour force as their authors intended, where they may be used to help explain the post-arrival intersectoral occupational mobility of inmigrants; or second, they may be used to aid our understanding of the intersectoral occupational mobility of inmigrants between their employment prior to migration and their employment in Surabaya in 1974.

In the absence of data about the sector of employment of senior inmigrants (pre-1969 arrivals) on first arrival in Surabaya, and in view of the insignificant amount of post-arrival intersectoral occupational mobility by recent inmigrants (section 7.3), the Friedmann and Sullivan hypotheses can not be strictly applied to the post-arrival intersectoral mobility of migrants. However, some idea of their relevance may be gleaned from a comparison of the occupational status of inmigrants on arrival in Surabaya with their sector of employment in 1974 (Table 8.4). The comparison appears to support the major thrust of Friedmann and Sullivan's hypotheses. For example, 48 per cent of the inmigrants in formal sector employment in 1974 were in skilled occupations on arrival in Surabaya, and 13 per cent were students. This indicates that the majority of those employed within the formal sector in 1974 were socio-economically privileged on arrival in Surabaya. On the other hand, the majority of family and informal sector workers were in unskilled low-status jobs on arrival, and a significant proportion of informal sector workers were engaged in household duties (Table 8.4). However, as emphasised previously, the scope for post-arrival occupational mobility in a scarce job market is very limited; and as a consequence the majority of the inmigrants gainfully employed on arrival were in the same jobs in 1974. Nevertheless, when the analysis was limited to inmigrants who changed jobs after arriving in Surabaya, a majority of formal sector jobs were taken by inmigrants employed in skilled occupations or studying on arrival (Table 8.4). In contrast, most of the family and informal sector employment was taken by migrants in unskilled jobs, or by migrants engaged in domestic duties on arrival. Therefore despite our inability to assess directly the full extent of
post-arrival intersectoral labour mobility among migrants to Surabaya, occupational status data imply that Friedmann and Sullivan's hypotheses have real relevance. However, the Friedmann and Sullivan model failed to predict the success of students in gaining entry to formal sector employment on completion of their studies.

The value of the Friedmann and Sullivan hypotheses to our understanding of the overall occupational mobility experienced by migrants since their departure for Surabaya, may be assessed by comparing the immigrant's sector or employment prior to migration with his or her sector of employment in Surabaya in 1974 (Table 8.4). If migrants employed in the formal sector in 1974 are considered first, it is clear that the Friedmann and Sullivan hypothesis that most entrants to formal sector employment come from jobs in the formal sector is not correct, when applied to the overall occupational mobility of Surabaya's inmigrant population. Only 29 per cent of the migrants employed in the formal sector in 1974 were employed in formal sector employment prior to migration (Table 8.4). It may seem unfair to include in this assessment migrants not in the labour force prior to migration, but if they are excluded, the proportion in formal sector employment prior to migration increases only to 46 per cent, still not a majority. This finding highlights two major inadequacies in adopting the tri-sectoral model to explain the intersectoral occupational mobility of inmigrants.

The first inadequacy of the tri-sectoral model when it is applied to occupational mobility is that it fails to classify satisfactorily individuals who were not working. It places them in one uniform category positioned hierarchically immediately 'below' the informal (working) sub-sector, and classifies them along with informal sector employees as part of the informal sector. This classification appears to imply that most of those who were unemployed will find employment in the informal sector. This may well be correct numerically, but it ignores the fact that an important component of the not-working population, especially in urban source areas, comprised relatively well-educated migrants to be, who were out of work by choice rather than necessity (refer Table 5.6). Perhaps because all the unemployed were included in the informal sector,
Friedmann and Sullivan overlook their significance among the entrants to the formal sector. In Surabaya, however, migrants unemployed prior to migration accounted for 14 per cent of all immigrants employed in the formal sector in 1974. They were more numerous than migrants previously employed in the informal or family sectors of the workforce (Table 8.4).

The second inadequacy in the ability of the tri-sectoral model to explain the composition of the immigrants employed in the formal sector in Surabaya in 1974, is that the model ignores completely immigrants who were not in the workforce prior to migration. This is a serious omission since 37 per cent of the migrants employed in the formal sector were in this category prior to migration (Table 8.4). Occupational status data reveal that 95 per cent of these migrants were students, who were better educated and from wealthier family backgrounds than most immigrants (Table 5.2).

In view of these serious inadequacies the tri-sectoral model was not a good predictor of which immigrants would gain entry to formal sector employment in Surabaya. Nevertheless, more than 60 per cent of the migrants employed in the formal sector in 1974 were either formal sector employees or students prior to their departure for Surabaya. Since immigrants attending school at the age of 15 (or over) when they migrated to Surabaya must be from wealthier households, formal sector employment in Surabaya was to a large extent confined to migrants socio-economically privileged prior to migration. Therefore, although the tri-sectoral model could not predict accurately which migrants would find employment in the formal sector of Surabaya's labour force, its tenet, that individuals socio-economically privileged prior to a change in occupation would predominate in the formal sector, was confirmed.

The Friedmann and Sullivan hypothesis that entrance to the family sector can be accomplished with roughly equal probability from any of the sub-sectors below it is strongly supported by empirical data from Surabaya. The observations conform ideally to the hypothesis: 26 per cent of the family sector employees were employed in the family sector prior to migration; 28 per cent in the informal
(working) sub-sector; and 28 per cent in the informal (not-working) sub-sector (Table 8.4). Only 8 per cent of the family sector employees did not conform to the hypothesis: they were employed in the formal sector prior to migration.

Although the occupational origins of immigrants in the informal (working) sub-sector were not specifically predicted by the tri-sectoral model (Friedmann and Sullivan, 1974: 402-4), employees in this sub-sector originated with almost equal probability from any of the non-formal sectors (Table 8.4). As predicted by Friedmann and Sullivan, the boundary between formal and non-formal appears to be the one intersectoral boundary which effectively inhibits intersectoral labour mobility. As a predictor of intersectoral occupational mobility resulting from migration, the tri-sectoral model is not an advance on the traditional urban dualism model. Indeed, data from Surabaya suggest that except for student immigrants (which the traditional model, like the tri-sectoral model ignores) and except for the unemployed, whose position is unclear, the traditional model seems a reasonable predictor of intersectoral occupational mobility among immigrants.

8.2.4 Origins and Intended Duration of Residence in Surabaya of Immigrants by Sector of Employment in 1974

Consistent with the higher educational qualifications of migrants from urban source areas compared to rural migrants, most immigrants in the formal sector originated from urban places (Table 8.4). Conversely, most of the immigrants in the non-formal sectors of the labour force in 1974, originated from rural areas. Family sector employees who were mostly females, were the most common short distance migrants, a finding consistent with the large number of short-term immigrants in this sector. However, others in the non-formal sector were also predominantly short distance migrants, and even in the formal sector only one-third of the immigrants came to Surabaya from previous places of residence outside East Java (Table 8.4).

Hugo (1977: 62-3) has shown that most of the circular migrants whom he surveyed in West Java found employment in the
non-formal sector of the urban economy. As a result, I have hypothesised that immigrants employed in the non-formal sector of Surbaya's economy would regard themselves as less permanent residents of the city than formal sector employees, and that migrants in the non-formal sector would maintain closer economic and social ties with family members resident in their place of origin.

A tri-sectoral division of the urban labour force reveals that in the case of Surabaya, the dichotomy between formal and non-formal has little value in predicting intended duration of residence, or frequency of visits to place of origin (Table 8.5). Instead, most of the immigrants intending short-term stays in Surabaya were employed in the family sector of the economy in 1974. The majority of the migrants employed in other sectors and sub-sectors were committed to continuous residence in the city (Table 8.5).

The high proportion of prostitutes within the family sector accounts for the large proportion of short-term migrants in this sector. Many prostitutes 'circulate' between Surabaya and their place of origin at least once every 2-3 months, and carry official identity cards or travel documents issued in their place of origin (Table 8.5). The possession of travel authorisation from outside Surabaya is one way in which prostitutes circumvent the need to register as residents of Surabaya. If these documents are renewed every few months by a quick trip to their home village or town they can remain in Surabaya as temporary residents, and this reinforces the regularity of their home visits (Table 8.5).

Most migrants employed in the family and informal sectors in Surabaya regarded themselves as members of the society in their place of origin. This finding was less common among respondents employed in the formal sector, or among those not working in 1974 (Table 8.5). The type of activity engaged in by many inmigrants in the family sector encouraged short-term migration and frequent circulation between Surabaya and the place of origin, all of which reinforced the social ties between the individual migrants and their place of origin. On the other hand, the migrants employed in the formal sector were more likely to be permanent residents of Surabaya with secure
<table>
<thead>
<tr>
<th>Intended duration of residence in Surabaya after survey (%)</th>
<th>Self classification of residency (%)</th>
<th>Frequency of visits to place of origin (%)</th>
<th>% still feel member society in place of origin</th>
<th>% usually send goods outside Surabaya</th>
<th>% usually take goods outside Surabaya</th>
<th>% plan to return to live in place of origin</th>
<th>Residential documents in possession of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 yr</td>
<td>1-5 yr</td>
<td>&gt;5 yr</td>
<td>Temp. resident</td>
<td>May move while working</td>
<td>Perm. working life</td>
<td>Perm. lifetime</td>
<td>Once every 2-3 mths</td>
</tr>
<tr>
<td>Formal</td>
<td>2</td>
<td>3</td>
<td>95</td>
<td>1</td>
<td>13</td>
<td>21</td>
<td>65</td>
</tr>
<tr>
<td>Family</td>
<td>36</td>
<td>30</td>
<td>34</td>
<td>32</td>
<td>40</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Informal</td>
<td>2</td>
<td>10</td>
<td>88</td>
<td>1</td>
<td>17</td>
<td>28</td>
<td>54</td>
</tr>
<tr>
<td>Not working</td>
<td>6</td>
<td>7</td>
<td>94</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>81</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>80</td>
<td>9</td>
<td>21</td>
<td>18</td>
<td>52</td>
</tr>
</tbody>
</table>

Note: * Each row totals 100 per cent except for errors due to rounding.

Source: Questionnaire survey.
employment prospects. Although these inmigrants frequently visited their place of origin, most did not consider themselves members of its society. In contrast, three-quarters of the migrants working in the informal sector of Surabaya's economy regarded themselves as members of the society in their place of origin. The strong sense of attachment with their source society felt by most informal sector workers has persisted despite the fact that, like migrants in the formal sector, informal sector employees were predominantly permanent residents of Surabaya who visited their place of origin only as frequently as formal sector employees (Table 8.5). The large number of informal sector employees from rural places of origin probably accounts for their closer identification with their place of origin than formal sector employees (Tables 8.4 and 8.5). Most of the unemployed inmigrants were also from rural places of origin, but unlike migrants in the informal sector most of the unemployed severed their social ties with their place of origin when they came to Surabaya to join other family members resident in the city (Table 8.5).

Economic links between inmigrants and their place of origin were weaker than expected. Only one per cent of the inmigrants gainfully employed or not working in 1974 stated they had lived and worked or lived and looked for work outside Surabaya since they migrated to the city. However, many lifetime inmigrants regularly take or send goods or money to their place of origin (Table 8.5). There is not much differentiation between sectors, though because of the greater frequency of their visits, family sector workers are more likely to take the goods or money personally than are respondents in other sectors.

Thirty-nine per cent of all lifetime inmigrants said 'yes' when asked if they planned to return to their place of origin to live. Whether these plans are realised is, of course, not known. Intentions to reside ultimately in their place of origin were more common among the temporary residents, the family sector employees (Table 8.5). Self- or family-employed members of the informal sector were more likely to intend to return to their place of origin to live than formal sector employees or inmigrants who were not working. Some non-formal sector workers were less committed to an urban existence.
than formal sector employees, but only the temporary inmigrants in the family sector maintained close social and economic links with their place of origin.

8.3 DETERMINANTS OF THE MEAN MONTHLY INCOME OF INMIGRANTS IN SURABAYA, 1974

8.3.1 Introduction to the Predictive Model

Previous sections have shown that migration to Surabaya did not cause profound changes in the occupational status of most inmigrants, although moving appeared to increase most immigrants' levels of income and improve their standard of living. Because of this lack of change in relative occupational status and because the occupational status hierarchy was determined in part by relative monthly income, it may be hypothesised that the occupational status of immigrants prior to migration and the determinants of that occupational status: ethnic origin, rural or urban nature of previous place of residence and formal educational qualifications will be useful predictors of the individual immigrant's relative economic standing in Surabaya in 1974. In this section I attempt to quantify the influence of these and other predictor variables on the relative economic status of immigrants resident in Surabaya in 1974.

The usual monthly income of migrants in 1974 was adopted as a useful estimate of the relative economic status of immigrants in Surabaya, and throughout this analysis it was the dependent variable. Actual estimates of usual monthly income (in rupiah) were collected from all of the gainfully employed immigrants interviewed. Since income data were collected at an interval level of measurement, but almost all of the predictor variables were measured at ordinal (ranking) or nominal (categories) scales only, it was decided that multiple classification analysis (MCA) was the most valid multivariate technique relevant to this analysis. The MCA technique offered several important advantages pertinent to this study which were unavailable in other multivariate procedures such as multiple regression analysis (refer Andrews, Morgan, Sonquist and Klem, 1973: 3-6). Two of the most important advantages were:
1) The MCA technique has the ability to show the effect of each predictor on the dependent variable both before and after taking into account the effects of all other variables.

ii) The MCA technique does not assume that the independent or predictor variables are measured on an interval scale or that relationships are linear (or linearised). Instead it was designed to accept predictor variables measured on a nominal scale only. Ideally, the dependent variable, however, should be measured on an interval scale; the income data collected in my study satisfied this requirement.

The only assumption of the MCA technique which posed problems for this analysis was the requirement that the values of the dependent variable should not be badly skewed. Income data, however, are usually positively skewed and as noted in a previous section (refer section 8.2.2), the distribution of income among migrants resident in Surabaya in 1974 was also positively skewed. The problem was minimised by excluding from the analysis several extreme values four or more standard deviations from the mean. However, the data remained skewed, and the remaining income values were transformed into log values in a further attempt to overcome the problem. The log transformation removed the skewness, but unfortunately the transformed values are not as readily interpreted as absolute income data when analysing the effect of the predictor variables on income levels. Therefore it was decided to utilise absolute income data (with several extremely high incomes excluded) for this analysis, although the $R^2$ values of MCA analyses carried out on transformed income data (with the same extreme values excluded) are included in the tabulations for comparison. The similarity between the values of $R^2$ from comparable analyses carried out on absolute income data and transformed (log transformation) income data, indicate clearly that the skewness of the absolute income data did not confound the results.

(1) This approach is advocated by Andrews, Morgan, Sonquist and Klem (1973: 10).
Preliminary analyses revealed that the major predictor variables could explain more of the variance in the mean monthly income of migrants if male and female immigrants were analysed separately. Moreover, it was found that some predictor variables (such as employer status in 1974) had a different effect on the income of male and female immigrants. Thus it was decided to analyse male and female immigrants separately in each application of the MCA technique.

Logically the predictor variables may be divided into sets of pre-migration and post-migration variables. The pre-migration or 'background' variables were characteristics or attributes which the immigrants possessed prior to their migration to Surabaya. The important pre-migration predictors were:

- occupational status prior to migration ($OS_o$);
- ethnic origin ($E_o$);
- rural or urban nature of previous place of residence ($U_o$);
- educational attainment at time of migration ($ED_o$); and
- year of migration ($Y_o$).

The important post-migration or current predictors were:

- employer status in 1974 ($ES_{74}$);
- sector of employment, 1974 ($I_{74}$);
- occupational status in 1974 ($OS_{74}$); and
- age in 1974 ($A_{74}$).

Computing limitations restricted the additive models used in this analysis to a maximum of five categorical predictor variables plus five interval level predictors which were treated as covariates. As seven of the major predictors listed above were measured at the categorical level (that is $OS_o$, $E_o$, $U_o$, $ED_o$, $ES_{74}$, $I_{74}$, and $OS_{74}$), the only way the interval level variables of year of migration ($Y_o$) and age in 1974 ($A_{74}$) could be included in a model with the major categorical variables was to include them as covariates, and this approach was adopted throughout.
An idea of the success of the various additive models in predicting the mean monthly income of immigrants in 1974 may be obtained from the value of $R^2$, which, as in multiple regression analysis, indicates the proportion of variance in the dependent variable (mean monthly income in 1974) explained by all predictors together (Andrews, et al., 1973: 7). The major finding revealed by the $R^2$ values is that 26 per cent and 25 per cent of the total variance in the mean monthly income of male and female migrants respectively, may be explained by five pre-migration variables (refer Table 8.6, model 4). If the mean monthly income values are transformed into log values, the proportion of the variance explained increased slightly to 28 per cent and 31 per cent, for male and female immigrants respectively (Table 8.6, model 4). This finding indicates that at least one-quarter of the usual earning capacity of immigrants resident in Surabaya in 1974 may be predicted solely from pre-arrival determinants. Most of the determinants reflected the immigrants' socio-economic status prior to migration, and most were correlates of the immigrants' occupational status prior to migration. The capacity of these same variables to predict a significant proportion of the post-arrival income levels of immigrants resident in Surabaya indicates that they were also important determinants of the post-arrival earning capacity of migrants.

When post-arrival predictor variables were included in the additive models the predictive capacity (as measured by $R^2$) of the models was usually enhanced (Table 8.6). Age of migrant in 1974 ($A_{74}$), however, was no more effective than year of migration as a predictor of earnings in 1974 (refer models 4 and 5, Table 8.6), a predictable result given the high degree of positive correlation between the two variables (males, $r = 0.8$, $p<0.001$; females, $r = 0.8$, $p<0.001$). Earlier analysis indicated sector of employment was not a good discriminator of migrants' income in 1974 (Table 8.3 and Figure 8.2). In view of those results it was predictable that the addition of sector of employment in 1974 ($I_{74}$) to predictor models based on pre-migration characteristics failed to increase significantly the proportion of variance in the dependent variable explained by the models (refer models 4 and 8, Table 8.6).
TABLE 8.6 - Proportion of variance ($R^2$) in usual monthly earnings of migrants in Surabaya during 1974 explained by selected additive models

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Independent variables included in selected additive models</th>
<th>Usual monthly income</th>
<th>Log transformation of usual monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>OS$_0$ with $Y_0$</td>
<td>0.16</td>
<td>0.09</td>
</tr>
<tr>
<td>2</td>
<td>OS$_0$ +E$_0$ with $Y_0$</td>
<td>0.17</td>
<td>0.14</td>
</tr>
<tr>
<td>3</td>
<td>OS$_0$ +E$_0$ +U$_0$ with $Y_0$</td>
<td>0.23</td>
<td>0.22</td>
</tr>
<tr>
<td>4</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ with $Y_0$</td>
<td>0.26</td>
<td>0.25</td>
</tr>
<tr>
<td>5</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ +A$_74$ with $Y_0$</td>
<td>0.22</td>
<td>0.25</td>
</tr>
<tr>
<td>6</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ +ES$_74$ with $Y_0$</td>
<td>0.30</td>
<td>0.36</td>
</tr>
<tr>
<td>7</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ +ES$_74$ +A$_74$ with $Y_0$</td>
<td>0.26</td>
<td>0.36</td>
</tr>
<tr>
<td>8</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ +I$_74$ with $Y_0$</td>
<td>0.29</td>
<td>0.26</td>
</tr>
<tr>
<td>9</td>
<td>OS$_0$ +E$_0$ +U$_0$ +ED$_0$ +OS$_74$ with $Y_0$</td>
<td>0.36</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Key to independent variables:

1) Pre-migration variables
   - OS$_0$ - occupational status prior to migration
   - E$_0$ - ethnic origin
   - U$_0$ - rural or urban nature of previous place of residence
   - ED$_0$ - educational attainment at time of migration
   - $Y_0$ - year of migration

2) Post-migration variables
   - ES$_74$ - employer status in 1974
   - I$_74$ - sector of employment in 1974
   - OS$_74$ - occupational status in 1974
   - A$_74$ - age in 1974

Note: The use of 'with' indicates that the variable that follows was treated as a covariate in the multiple classification analysis.

Source: Questionnaire survey.
Overall, the additive model which includes the five pre-migration variables plus employer status in 1974 (model 6, Table 8.6) is the most satisfactory predictor model, explaining 30 to 31 per cent of the variance in the 1974 income of male migrants and 36 to 48 per cent of the variance in the 1974 income of female migrants. Admittedly, the increased proportion of variance explained by this model in comparison to the model based solely on pre-migration predictors (models 4 and 6, Table 8.6) is most evident among female inmigrants, where the increase is in the order of 50 per cent, but there was also a significant increase among male inmigrants. The quantitative effect of employer status on income in 1974 will be assessed later in this section.

The addition of the inmigrants' occupational status in 1974 ($OS_{74}$) to the model based on the five pre-migration predictors (models 4 and 9, Table 8.6) boosted the proportion of variance in income of male migrants explained by the models, but since 1974 income was used as a major input in the determination of a hierarchy of occupational status categories, it may not be included as a valid 'independent' predictor. Therefore, overall, model number 6 (Table 8.6) is the most satisfactory predictor of an inmigrant's income in 1974.

It is a fair assumption that if more predictors were included in the additive models, the models' capacity to accurately predict the income of migrants in 1974 would also increase. The relatively small size of the sample populations (males, $N=186$; females, $N=145$) and the need to retain a relatively large number of categories to avoid meaningless groupings within some predictors (such as $OS_{0}$, Table 8.7), however, restricted the number of independent variables which could be considered simultaneously to a maximum of six. It is noteworthy, however, that even the most successful additive model (model 6, Table 8.6), still manages to predict only about one-third to one-half of the variance in the income of inmigrants in 1974. This implies that a significant proportion of inmigrants' earning capacity may be determined by the urban contacts, personal attitudes, or even the luck of individual migrants. Variables like these are difficult to measure, and almost impossible to include in a predictive model,
### TABLE 8.7 - Mean monthly income of male migrants to Surabaya in 1974, adjusted for effect of pre-migration characteristics and employment status in 1974

<table>
<thead>
<tr>
<th>Variable and category</th>
<th>Unadjusted mean monthly income (Rp)</th>
<th>Mean monthly income adjusted for effect of pre-migration variables ((\eta)) (Rp)</th>
<th>Mean monthly income adjusted for effect of pre-migration variables + employment status in 1974 ((\beta)) (Rp)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupational status before migration ((OS_1))</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>24,457</td>
<td>21,950</td>
<td>23,275</td>
<td>38</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>12,162</td>
<td>12,342</td>
<td>11,651</td>
<td>10</td>
</tr>
<tr>
<td>Unskilled</td>
<td>9,561</td>
<td>9,959</td>
<td>8,966</td>
<td>11</td>
</tr>
<tr>
<td>Farmer</td>
<td>10,946</td>
<td>16,387</td>
<td>15,950</td>
<td>42</td>
</tr>
<tr>
<td>Not working</td>
<td>15,085</td>
<td>15,212</td>
<td>15,172</td>
<td>30</td>
</tr>
<tr>
<td>Student</td>
<td>19,309</td>
<td>16,703</td>
<td>16,973</td>
<td>55</td>
</tr>
<tr>
<td><strong>Ethnic origin ((E_0))</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Javanese</td>
<td>16,601</td>
<td>16,278</td>
<td>16,858</td>
<td>128</td>
</tr>
<tr>
<td>Madurese</td>
<td>11,632</td>
<td>16,720</td>
<td>15,855</td>
<td>26</td>
</tr>
<tr>
<td>Other indigenous Indonesians</td>
<td>20,463</td>
<td>19,152</td>
<td>17,941</td>
<td>21</td>
</tr>
<tr>
<td>Foreigners (mostly Chinese)</td>
<td>25,364</td>
<td>19,084</td>
<td>18,899</td>
<td>11</td>
</tr>
<tr>
<td><strong>Rural or urban place of origin ((Un_1))</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic rural</td>
<td>11,260</td>
<td>14,456</td>
<td>15,462</td>
<td>57</td>
</tr>
<tr>
<td>Other rural</td>
<td>15,674</td>
<td>16,659</td>
<td>16,323</td>
<td>33</td>
</tr>
<tr>
<td>Lower urban</td>
<td>13,485</td>
<td>10,634</td>
<td>10,941</td>
<td>22</td>
</tr>
<tr>
<td>Higher urban</td>
<td>22,631</td>
<td>20,631</td>
<td>20,136</td>
<td>74</td>
</tr>
<tr>
<td><strong>Educational attainment at migration ((ED_1))</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>7,340</td>
<td>9,146</td>
<td>8,395</td>
<td>20</td>
</tr>
<tr>
<td>Some elementary classes</td>
<td>15,056</td>
<td>14,153</td>
<td>13,552</td>
<td>43</td>
</tr>
<tr>
<td>Completed elementary schooling</td>
<td>17,638</td>
<td>18,825</td>
<td>18,408</td>
<td>54</td>
</tr>
<tr>
<td>Completed junior high school or above</td>
<td>20,204</td>
<td>19,285</td>
<td>20,435</td>
<td>67</td>
</tr>
<tr>
<td><strong>Employer status in 1974 ((ES_1))</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private, foreign or state company</td>
<td>14,520</td>
<td>-</td>
<td>14,569</td>
<td>52</td>
</tr>
<tr>
<td>Public servant</td>
<td>22,750</td>
<td>-</td>
<td>17,614</td>
<td>24</td>
</tr>
<tr>
<td>Armed forces</td>
<td>17,098</td>
<td>-</td>
<td>15,080</td>
<td>49</td>
</tr>
<tr>
<td>Small businesses or informal business grouping</td>
<td>16,528</td>
<td>-</td>
<td>18,244</td>
<td>9</td>
</tr>
<tr>
<td>Self employed or employed by family member or head of household</td>
<td>16,868</td>
<td>-</td>
<td>20,710</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>16,830</td>
<td>-</td>
<td>186 (c)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: (a) Mean monthly income adjusted for effect of pre-migration variables: occupational status before migration, ethnic origin, rural or urban nature of previous place of residence, educational attainment at migration and year of migration was measured at an interval scale and was treated as a covariate in the MCA analysis. Unlike the other independent variables, year of migration was measured at an interval scale and was treated as a covariate in the MCA analysis.

(b) Mean monthly income adjusted for effect of pre-migration variables (using multiple classification analysis) plus employment status of immigrants in 1974.

(c) Total number of cases in the MCA analysis which included employment status in 1974 was 184, due to incomplete data.

Source: Questionnaire survey.
suggesting that a total 'explanation rate' of one-third to one-half may approximate to one-half or three-fifths of the readily explainable variance. Considered from this viewpoint, pre-migration predictors alone may explain as much as one-third or 40 per cent of the 'explainable variance' in the 1974 income of migrants. This is clearly a significant finding, a finding which indicates that a large proportion of the post-arrival earning capacity of migrants in Surabaya is constrained by their pre-migration background. The act of migration, therefore, does little to free immigrants from the realities of their socio-economic background prior to migration. Instead, the advantages and disadvantages of that background are carried with them to Surabaya, where they play a major role in determining their post-arrival socio-economic status. I will now attempt to quantify the gross and net effect of each of these determinants on the usual monthly income of immigrants in 1974.

8.3.2 Influence of Major Predictors on the Income of Male Migrants

Multiple classification analysis shows the effect of each predictor on the dependent variable (usual monthly income) both before and after taking into account the effects of the other predictor variables (gross and net effects, respectively). This analysis will assess in turn the effects of the major predictors on the income of male and female inmigrants. The analysis of each predictor will be carried out in three stages:

i) Examination of the gross effects of the predictor as shown by the unadjusted mean income of inmigrants in each category of the major predictors (column 1, Tables 8.7 and 8.8).

ii) Comparison of the unadjusted mean income with mean income adjusted for the effect of all other pre-migration predictors (comparison of columns 1 and 2, Tables 8.7, 8.8). The additive model used to obtain this first set of adjusted means was model 4, Table 8.6. This set of adjusted means indicates what the predicted income of male or female inmigrants in a particular predictor category would have been, if that group had been exactly like the total male or
### TABLE 8.8 - Mean monthly income of female migrants to Surabaya in 1974, adjusted for effect of pre-migration characteristics and employment status in 1974

<table>
<thead>
<tr>
<th>Variable and category</th>
<th>Unadjusted mean monthly income</th>
<th>Mean monthly income adjusted for effect of pre-migration variables</th>
<th>Mean monthly income adjusted for effect of pre-migration variables + employment status in 1974</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) (Rp)</td>
<td>(2) (Rp)</td>
<td>(3) (Rp)</td>
<td></td>
</tr>
<tr>
<td><strong>Occupational status before migration (OIs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled or semi-skilled</td>
<td>23,750</td>
<td>10,367</td>
<td>9,801</td>
<td>9</td>
</tr>
<tr>
<td>Unskilled</td>
<td>13,750</td>
<td>13,408</td>
<td>16,991</td>
<td>18</td>
</tr>
<tr>
<td>Farmer</td>
<td>15,017</td>
<td>17,420</td>
<td>15,966</td>
<td>52</td>
</tr>
<tr>
<td>Not working</td>
<td>10,338</td>
<td>11,017</td>
<td>13,126</td>
<td>37</td>
</tr>
<tr>
<td>House duties</td>
<td>15,290</td>
<td>19,253</td>
<td>18,693</td>
<td>19</td>
</tr>
<tr>
<td>Student</td>
<td>14,210</td>
<td>2,568</td>
<td>5,489</td>
<td>10</td>
</tr>
<tr>
<td><strong>Ethnic origin (En)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Javanese</td>
<td>14,363</td>
<td>14,307</td>
<td>14,376</td>
<td>123</td>
</tr>
<tr>
<td>Madurese</td>
<td>5,850</td>
<td>6,457</td>
<td>7,086</td>
<td>15</td>
</tr>
<tr>
<td>Other indigenous Indonesians or foreigners</td>
<td>28,706</td>
<td>20,048</td>
<td>28,088</td>
<td>7</td>
</tr>
<tr>
<td><strong>Rural or urban place of origin (Un)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic rural</td>
<td>12,623</td>
<td>13,756</td>
<td>13,684</td>
<td>67</td>
</tr>
<tr>
<td>Other rural</td>
<td>12,496</td>
<td>12,055</td>
<td>13,199</td>
<td>36</td>
</tr>
<tr>
<td>Lower urban</td>
<td>12,564</td>
<td>11,208</td>
<td>12,058</td>
<td>16</td>
</tr>
<tr>
<td>Higher urban</td>
<td>21,249</td>
<td>19,233</td>
<td>18,520</td>
<td>28</td>
</tr>
<tr>
<td><strong>Educational attainment at migration (EDn)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>12,393</td>
<td>13,812</td>
<td>13,502</td>
<td>56</td>
</tr>
<tr>
<td>Some elementary classes</td>
<td>12,513</td>
<td>11,295</td>
<td>11,602</td>
<td>50</td>
</tr>
<tr>
<td>Completed elementary schooling</td>
<td>18,038</td>
<td>13,086</td>
<td>15,132</td>
<td>23</td>
</tr>
<tr>
<td>Completed junior high school or above</td>
<td>19,089</td>
<td>21,956</td>
<td>23,303</td>
<td>18</td>
</tr>
<tr>
<td><strong>Employer status in 1974 (ESn)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private, foreign or state company</td>
<td>12,601</td>
<td>-</td>
<td>9,729</td>
<td>18</td>
</tr>
<tr>
<td>Public servant or armed forces</td>
<td>17,260</td>
<td>-</td>
<td>14,419</td>
<td>8</td>
</tr>
<tr>
<td>Small businessman or informal</td>
<td>19,718</td>
<td>-</td>
<td>18,697</td>
<td>48</td>
</tr>
<tr>
<td>Business grouping</td>
<td>15,159</td>
<td>-</td>
<td>17,295</td>
<td>34</td>
</tr>
<tr>
<td>Head of household</td>
<td>6,376</td>
<td>-</td>
<td>7,819</td>
<td>35</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>14,158</td>
<td>-</td>
<td>-</td>
<td>145(e)</td>
</tr>
</tbody>
</table>

Notes: (a) Mean monthly income adjusted for effect of pre-migration variables: occupational status before migration, ethnic origin, rural or urban nature of previous place of residence, educational attainment at migration and year of migration (using multiple classification analysis). Unlike the other independent variables, year of migration was measured at an interval scale and was treated as a covariate in the MCA analysis.

(b) Mean monthly income adjusted for effect of pre-migration variables (using multiple classification analysis) plus employment status of immigrants in 1974.

(c) Total number of cases in the MCA analysis which included employment status in 1974 was 145, due to incomplete data.

Source: Questionnaire survey.
female inmigrant population with respect to its distribution over all the other pre-migration predictor classifications.

iii) Comparison of the first and second sets of adjusted mean incomes (columns 2 and 3, Tables 8.7, 8.8). The second set has been adjusted for the effect of all other pre-migration predictors plus employer status in 1974. The additive model used to calculate this set was model 6, Table 8.6. Therefore the only difference between the first and the second adjusted sets is that the second set has also been adjusted for the effect of employer status in 1974.

The eta statistic summarises the strength of the bivariate relationship between a predictor and the dependent variable. The beta statistic is a useful indicator of the strength of a relationship between a predictor and the dependent variable while holding constant all other predictors. (1)

Considering male migrants initially, and comparing the eta values for the various predictors, then in terms of gross effects only, occupational status prior to migration and rural or urban nature of previous place of residence were the predictors most closely related to income in 1974. Educational attainment at migration and ethnic origin were of some importance also, whereas the employer status of inmigrants in 1974 was not a discriminating predictor of income at the gross level (Table 8.7). If all other pre-migration predictors except for the one in question were held constant, the importance of each predictor decreased (comparison of eta and beta values) indicating interrelationship between predictors, but place of origin, education, and occupational status prior to migration remained important predictors of income. Ethnic origin, on the other hand, lost almost all importance once other pre-migration predictors were held constant, implying that most of the gross effect of ethnic origin

---

(1) The beta statistic should not be interpreted in terms of per cent of variance explained (Andrews et.al., 1973: 7,34). The eta statistic, however, may be viewed as an indicator of explained variation in the dependent variable and \( \eta^2 \) indicates the proportion of the total sum of squares explained by a particular predictor (Andrews et.al., 1973: 7).
on income resulted from the close correlation of this predictor with other more discriminating variables. Indeed, a comparison of the beta statistics for ethnic origin when each new predictor was added to the model showed the largest decrease when the occupational status of migrants prior to migration was held constant. This implied that the close relationship between ethnic origin and occupational status before migration explained most of the gross relationship between ethnic origin and income in Surabaya. An indication of this close relationship was that 69 per cent of the Madurese male migrants were farmers prior to migration and 55 per cent of the foreign male migrants were employed in skilled jobs, compared to 22 per cent and 21 per cent respectively, of all male migrants.

The influence of both occupational status prior to migration and place of origin also decreased as the other pre-migration predictors were held constant (Table 8.7). Beta values for both variables showed the greatest decrease when the other variable was introduced into the model. Clearly, some of the effect from each of these two variables spilled over into the effect of the other. Evidence of interrelationship is that 53 per cent of the male migrants in skilled jobs prior to migration, and 62 per cent of those studying, came from higher order urban places, compared to 40 per cent of all male immigrants. Nonetheless, the beta values of these two predictors remained relatively high even after the other pre-migration variables were held constant (Table 8.7). The beta value for educational attainment after adjustment for other pre-migration variables was slightly lower than the eta value, but the effect of education on income was less influenced by interrelationships with other predictors than the effects of occupational status, place of origin, and ethnic origin on income; evidence of the consistent significance of educational attainment as a differentiator of income among immigrants regardless of their other characteristics (Table 8.7). A comparison of the beta values of individual predictors after adjustment for all other pre-migration variables with beta values after adjustment for pre-migration variables plus employer status in 1974, indicates that the inclusion of employer status in the predictor model did not significantly affect the role of the pre-migration variables in predicting the income of male migrants in 1974.
The influence of individual predictors on levels of absolute income may be considered in more detail if individual predictors are discussed in turn. Male migrants from skilled occupations and those who were studying prior to migration averaged the highest monthly incomes in 1974 (Rp 24,457 and Rp 19,309, Table 8.7). This accords with the earlier findings that these inmigrants were more successful in obtaining high-status occupations in Surabaya than inmigrants from other occupational backgrounds (Table 8.1). Male migrants unemployed prior to migration were also relatively high income earners in 1974, but migrants from semi-skilled, unskilled and farming occupations were less fortunate. Some of the high income of the migrants from skilled jobs and the former students was due to their other comparative advantages, such as a better education and urban source areas, since their predicted incomes declined marginally when other pre-migration predictors were held constant (Table 8.7). The predicted income of inmigrants in other occupational status categories before migration was similar to their unadjusted mean income, with the exception of farmers, whose predicted income after adjustment was 50 per cent above their actual pre-adjustment earnings. Apparently, it was not so much their farming background which was responsible for these inmigrants' low earnings in 1974, but the other pre-migration attributes of most farmers, especially their low level of educational attainment and their previous rural place of residence. Once these handicaps were compensated for statistically, inmigrants from a farming background had a predicted income equal to that of former students or unemployed male migrants (Table 8.7). Although these other correlates can be compensated for in a statistical analysis, prospective employers of labour in Surabaya could not afford such allowances, and the actual monthly earnings of former farmers were lower than those of most other inmigrants.

The actual earnings (unadjusted mean income) of male migrants were distributed unequally according to the ethnic origin of the individual inmigrant (column 1, Table 8.7). Foreign (mostly Chinese) migrants received the highest mean income and other indigenous Indonesian ethnic groups non-Javanese and non-Madurese received average earnings above the mean income of the male migrant population overall. The Javanese, who comprised a majority of male migrants,
received an average level of income, but the income of Madurese
immigrants was only two-thirds of the mean income of the male migrant
population overall. Some of the difference in income between male
migrants of different ethnic origin remained after adjustment for
other pre-migration predictors and after adjustment for other
pre-migration predictors plus employer status in 1974, the migrants of
'foreign' or 'other Indonesian' ethnic origin remained the highest
income earners (columns 2 and 3, Table 8.7). This suggests that
non-Javanese and non-Madurese migrants had a net advantage over other
migrants in obtaining high income occupations in Surabaya, an
advantage probably related to their reputed ability to obtain
capital. In contrast, after adjustment for other predictors, Madurese
migrants had a theoretical predicted income approximately equal to the
mean income of the male migrant population, indicating their low
earnings in 1974 were predominantly due to other pre-migration
characteristics such as a low status occupation prior to migration,
poor educational qualifications or rural origin (columns 1, 2 and 3,
Table 8.7).

Male migrants from higher order urban centres received the
highest mean income in 1974, and even after the other predictor
variables were held constant, the adjusted mean income of migrants
from large urban centres remained well above the mean for all male
migrants (Table 8.7). Clearly, prior residence in a large urban
centre assisted male migrants in obtaining well-paid occupations in
Surabaya. Conversely, male migrants from basic rural and other rural
centres received below average incomes in Surabaya. Once the other
predictor variables such as occupational status, ethnic origin,
education and employer status in 1974 were allowed for, however, the
predicted income of these migrants approached the overall mean. This
implies that it was the distribution of these other attributes among
rural migrants rather than the influence of the places themselves,
which accounted for the low income of inmigrants of rural origin. In
terms of unadjusted mean income, migrants from lower order urban
centres were more comparable with migrants from rural areas than
inmigrants from large urban centres. When the other predictors were
held constant, however, the predicted income of these migrants dropped
even further (Table 8.7). The major reason for the decrease was that
migrants from lower order centres places were more concentrated in skilled occupations prior to migration than immigrants from other centres, and when this advantage was removed statistically, their predicted income declined. A substantial proportion of the migrants from lower order urban centres were low ranking members of the armed forces in Surabaya, but a close analysis of their occupations and attributes does not reveal why coming from a lower order urban centre should have handicapped their income earning capacity after migration.

The distribution of unadjusted mean income between immigrants according to educational attainment at time of migration was exactly as expected: those without formal education received the lowest income and the best educated received the highest (Table 8.7). Predicted mean incomes with other predictor variables held constant were similar to the actual mean incomes, and overall, educational qualifications appear to be the most consistent and independent determinant of income among male migrants in Surabaya. The educational qualifications used as a predictor of income were those of immigrants at the time of their departure for Surabaya, however, and it may appear unusual that a pre-migration predictor is so closely related to income in 1974. It will be recalled, however, that very few migrants improved their formal educational qualifications after arrival in Surabaya; so in almost all cases the pre-migration qualifications of immigrants were identical with their 1974 qualifications.

The employer status of male immigrants in 1974 was not a good discriminator of income (Table 8.7). Nevertheless, it is of interest that government employees in the public service were the largest earners, while members of the armed forces, employees of small businessmen or informal business groups, and the self-employed received average earnings. Male migrants employed in private, foreign or state-owned companies were not well-paid suggesting that it was the high salaries of public servants which gave formal sector employees overall a higher median and mean income than migrants in the family and informal sectors (Table 8.3). Comparison of the unadjusted mean income with the predicted income adjusted for the effect of all pre-migration characteristics (columns 1 and 3, Table 8.7) provides
evidence that in relation to their pre-migration background, the self-employed have been the most successful inmigrants in terms of earning capacity. Considering their pre-migration attributes, employees of small businessmen and informal business groups were also large income earners, whereas considering their pre-migration advantages public servants and members of the armed forces were not well-paid in 1974. Employees of private, foreign or state-owned companies on the other hand, appear to have received an income commensurate with their pre-migration attributes and background.

Since year of migration ($Y_o$) was treated as a covariate in the predictive models, it was impossible to obtain actual and predicted values of mean income by year of migration in the multivariate models used in Tables 8.7 and 8.8. The analyses, however, did produce statistically significant F values for year of migration as an independent variable in both predictive models (i.e. models which included and excluded $ES_{74}$). A separate analysis in which year of migration was recoded and included as a categorical variable showed that the unadjusted mean income of male migrants varied with period of migration as follows:

<table>
<thead>
<tr>
<th>Period of migration</th>
<th>Unadjusted mean income per month (Rp)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-74</td>
<td>13,080</td>
<td>30</td>
</tr>
<tr>
<td>1965-69</td>
<td>14,296</td>
<td>34</td>
</tr>
<tr>
<td>1960-64</td>
<td>15,760</td>
<td>37</td>
</tr>
<tr>
<td>1955-59</td>
<td>14,673</td>
<td>15</td>
</tr>
<tr>
<td>1950-54</td>
<td>21,798</td>
<td>36</td>
</tr>
<tr>
<td>1945-49</td>
<td>18,874</td>
<td>18</td>
</tr>
<tr>
<td>1940-44</td>
<td>22,287</td>
<td>8</td>
</tr>
<tr>
<td>1935-39</td>
<td>19,275</td>
<td>4</td>
</tr>
<tr>
<td>pre-1935</td>
<td>17,224</td>
<td>4</td>
</tr>
<tr>
<td><strong>All male migrants</strong></td>
<td><strong>16,830</strong></td>
<td><strong>186</strong></td>
</tr>
</tbody>
</table>

Generally, the unadjusted mean income of migrants increased with duration of residence and age, since earlier inmigrants were almost invariably the oldest. This trend was reversed among the pre-1940 arrivals, however, who by 1974 had begun to reach retirement age and were dependent on pensions. These were the more fortunate older inmigrants; the less fortunate frequently had no income and were dependent on relatives for their livelihood.
In summary, it appears that when all predictors are considered, level of educational attainment and occupational status prior to migration were the best predictors of the income of male migrants in Surabaya. Both variables were pre-migration predictors, and in both instances the migrants who were relatively advantaged with regard to these two correlates of socio-economic status prior to migration (for example migrants in skilled jobs, students or inmigrants who had completed junior high school), were the inmigrants who received the largest actual monthly incomes in Surabaya during 1974. This is clear quantitative evidence that migration to Surabaya did not affect the socio-economic status of most male migrants relative to other members of the inmigrant population. The ranking of the predicted incomes of migrants in the various categories of these two predictors after adjustment for the effect of all other predictors, was almost identical with their unadjusted ranking (columns 1 and 3, Table 8.7). This indicates that these two predictors were relatively independent determinants of an individual inmigrant's income in Surabaya. The only exception was the farmers. Their statistically-predicted level of income after allowance for other disadvantages, such as a low level of education, was substantially above their actual income and approximately equal to the overall mean monthly income. Clearly, coming from a farming occupation was not by itself a significant constraint on a reasonable level of income in Surabaya. Instead, their actual low monthly income after migration was a function of other disadvantages common to a farming population, such as an inadequate formal education.

The rural or urban nature of the migrants' previous places of residence and their employer status in 1974, were also useful predictors of income in Surabaya, although contrary to expectation migrants from low order urban centres and migrants employed in the public service and the armed forces were not well-paid when their level of education and background are taken into consideration. Ethnic origin was not a useful independent predictor of income, most of the difference in income between migrants of contrasting ethnic origin being explained by other predictors.
8.3.3 Influence of Major Predictors on the Income of Female Migrants

A very different picture emerges when we analyse the income distribution of female migrants in Surabaya during 1974. First, their overall mean income per month was only Rp 14,158 compared to Rp 16,830 for male immigrants (Tables 8.7 and 8.8). Second, in terms of the distribution of both unadjusted income and income adjusted for the influence of all other predictors, employer status in 1974 was the single most important predictor of female income in Surabaya, whereas for male migrants employer status was a relatively unimportant predictor of income. Third, ethnic origin also turned out to be a major predictor of the post-arrival income of female immigrants. Its significance persisted after the predicted incomes were adjusted for the influence of other predictor variables, whereas among male migrants ethnic origin became an insignificant predictor when other variables such as education and place of origin were held constant.

The educational attainment of female migrants at time of migration was another important predictor of their income in 1974. It will be recalled that education was an important predictor of the post-arrival income of male migrants, but in contrast to those results, which showed fairly constant or declining values for eta and beta when other variables were held constant, the MCA results for females indicated that educational attainment became a more discriminating predictor of income when other variables were held constant (Tables 8.7 and 8.8). This result implies that a 'suppressor effect' has operated to depress the capacity of educational attainment to predict the income of female migrants. Close examination of the relationship between educational attainment and income as individual predictors were progressively included, one at a time, in the additive model, revealed that the interrelationship between educational attainment and occupational status prior to migration was confounding the relationship. Indeed, if the eta value for occupational status is compared to the beta value after all other pre-migration variables, including educational attainment, have been held constant, then occupational status also becomes a better predictor of income (columns 1 and 2, Table 8.8). The cause of the 'suppressor effect' between level of educational attainment and occupational status was that
although there was a general positive relationship between educational attainment and income among female inmigrants, some migrants who were very poorly educated received an above average level of income in 1974. Females engaged in household duties or farming prior to migration were two groups of migrants who came within this category. Their standard of formal education was the worst of all female inmigrants: 89 per cent and 92 per cent of each group, respectively, having failed to complete elementary school. Despite this apparent handicap, the mean income of migrants in the two categories was Rp 15,290 and Rp 15,017, respectively. In this situation neither educational attainment or occupational status considered alone, will satisfactorily predict the income of these migrants in Surabaya. If both variables are considered together, however, the predictive power of each is increased as indicated by the beta values. Interestingly, because the high income of these particular migrants was related to their employer status in 1974, once it was included in the model, the predictive capacity of occupational status decreased (columns 2 and 3, Table 8.8).

The rural or urban nature of the inmigrant's previous place of residence was not as valuable as a predictor of income for females as it was for male inmigrants (compare Tables 8.7 and 8.8). In addition, the value of the variable as a discriminator of income among female migrants, decreased steadily as other predictors were included in the additive models.

Analysis of individual predictors begins with employer status in 1974 since this variable was the most important predictor of income among female inmigrants in Surabaya (Table 8.8). In terms of actual unadjusted income, females employed by small businessmen or informal business groupings were the largest earners, followed by public servants and members of the armed forces. Ninety-two per cent of the females employed by small businessmen or by informal business groups were engaged in prostitution, and this explains their high income relative to higher status employment such as the public service. Self- or family-employed females also received above average earnings in 1974. Almost three-quarters of the self- or family-employed were either mobile or marketplace petty pedlars or traders, which
emphasises the earning capacity of informal sector activities. The females employed in private, foreign or state-owned companies were, like their male counterparts, poorly paid, though since almost half were involved in unskilled labouring jobs or lowly ranked clerical occupations without much responsibility, their low income was predictable. The worst paid migrants, however, were females employed by their head of household. Ninety-four per cent of these workers were domestic servants and although the value of board and keep was probably underestimated by the majority of servants from rural areas, there is little doubt they constituted a grossly underprivileged group among the gainfully employed immigrants (Table 8.8).

Comparison of the unadjusted mean income of female migrants in each employer status category with the predicted mean income of each category adjusted for the effect of all pre-migration variables, revealed few differences in the value or comparative ranking of income by employer status category (Columns 1 and 3, Table 8.8). This result and the high value of beta, indicate that employer status in 1974 was a major determinant of the income of female migrants, and that its influence was independent of the pre-migration background of the individual immigrant. In contrast, employer status was an unimportant predictor of the income of male migrants both before and after adjustment for pre-migration predictors (refer column 1 and 3, Tables 8.7 and 8.8). The fact that the income predictor models based solely on pre-migration variables produced almost identical R^2 values for male and female immigrants, however, refutes any suggestion that the post-arrival income of female migrants was less constrained by pre-migration variables than the income of male migrants (Tables 8.7 and 8.8). Instead, employer status should be viewed as an additional predictor to the pre-migration variables, a predictor which for both male and female immigrants was independent of pre-migration variables. Because employer status was a better discriminator of income among female migrants than among males, the additive model adopted in this analysis was more successful as a post-arrival income predictor for female migrants than for males (R^2 = 0.36 and 0.30, Tables 8.8 and 8.7).
Of the five pre-migration variables included in the predictor model, ethnic origin and educational attainment were the most important predictors of income among female migrants. The differences in unadjusted income between female migrants from different ethnic backgrounds were most striking, although the small number of non-Javanese in the sample populations implies the distribution should be interpreted with caution. Ethnically 'foreign' migrants (usually Chinese-born or of Chinese descent) and Indonesians of non-Javanese or non-Madurese ethnic background received approximately twice the mean income of Javanese migrants, whereas the Madurese received less than half the income of the Javanese (Table 8.8). The differences remained very similar when pre-migration variables and pre-migration variables plus employer status in 1974 were held constant, indicating that the influence of ethnic origin on income was independent of these other predictors (columns 1, 2 and 3, Table 8.8). This was different from the situation among males where the income discriminating capacity of ethnic origin decreased substantially when these other variables were held constant (columns 1, 2 and 3, Tables 8.7 and 8.8).

Investigation of the activities engaged in by the various ethnic groups reveals that each group has 'fenced off' certain activities for its own members, a practice which Breman (1976: 1905) has observed in South Gujarat, India, where like Surabaya, the job market was characterised by extreme scarcity. For example, all of the female migrants engaged in prostitution and domestic service in 1974 were of Javanese ethnic origin. In contrast, Madurese inmigrants were disproportionately over-represented in petty trading and peddling activities, and in coolie or factory labouring jobs. Non-Javanese or non-Madurese inmigrants, were disproportionately over-represented in skilled white-collar occupations, especially in the fields of banking, teaching and the armed forces. Clearly, the income of migrants in the various ethnic groups reflected their occupational status in 1974, which was in turn, at least partly, a function of their ability to 'fence off' certain activities for members of their own ethnic group. Interestingly, the ranking of unadjusted income between the ethnic groups was the same for male and female migrants (Tables 8.7 and 8.8). This observation raises the question of why other correlates such as education or occupational status prior to migration explained
most of the inter-ethnic group differences among male migrants, but not among females? Perhaps the reason was that educational attainment, occupational status prior to migration, and other correlates of ethnic origin were more evenly distributed among male migrants than among females. For example, only 6 per cent of the female migrants were in skilled occupations prior to migration compared to 20 per cent of the males, while 12 per cent of the females had completed junior high school or above prior to migration compared to 36 per cent of the males. In addition, the proportion of male migrants in the smaller ethnic groups was larger than the proportion of females. Together, these two factors enhanced the probability that ethnic origin may have a more independent influence on the income of female migrants than on the income of males.

The distribution of unadjusted income among female migrants according to level of educational attainment was similar to the distribution among males: better educated migrants obtained larger incomes than the less well-educated (Tables 8.7, 8.8). Further analysis of the adjusted mean incomes, however, discovered two major differences from the male migrants. First, because of a 'suppressor effect' discussed earlier, the capacity of educational attainment to predict the income of female migrants increased as other predictor variables were held constant, whereas the predictive capacity of educational attainment remained relatively unchanged among male migrants when other predictors were introduced into the model. Second, male migrants who arrived in Surabaya without any formal education were seriously disadvantaged in terms of income in comparison to better educated male arrivals, even if the better educated arrivals had failed to complete elementary school (Table 8.7). This income differential persisted when other predictors were included in the model. Female migrants without a formal education, however, received an unadjusted income almost commensurate with female migrants who had completed some elementary classes, and once adjustment was made for other predictors, those without any formal education had a larger predicted income than those who had attended some elementary schooling (Table 8.8). The reason for the difference was that education was a prerequisite for most well-paid employment available to male migrants, but it was not essential for many well-
paid occupations available to females. Instead, because they tended to be those most in need, the least educated female migrants were those most likely to enter prostitution or petty peddling and trading, both lucrative activities without formal educational requirements. Females who entered prostitution or petty peddling were more likely to be from small villages, Javanese or Madurese, and from a low-status occupation prior to migration, yet contrary to other male and female migrants from that background they were above-average income earners in Surabaya. Because their background was 'atypical' of above-average income earners, the predicted income of female migrants without any formal education increased as other pre-migration variables were held constant (columns 1, 2 and 3, Table 8.8).

Occupational status prior to migration was another important discriminator of income among female migrants in 1974 (Table 8.8). Female migrants from skilled or semi-skilled occupations prior to migration (grouped because of the small number) received the largest unadjusted income, like their counterparts among the male migrants (column 1, Tables 8.7, 8.8). Apart from this similarity, however, the income distributions among male and female migrants by occupational status before migration, were very different. Females who were students or unemployed before migration received considerably less income than their male counterparts, whereas females who were in unskilled jobs or engaged in farming prior to migration, received much more than the males. Females in home duties before migration, somewhat unexpectedly, received an above-average income in 1974.

Comparison of the predicted income of female migrants in each occupational status category after other predictors were held constant with the unadjusted mean income, and comparison of these results with comparable results for male migrants, provided additional insights into the relative significance of occupational status as a predictor of income. The first finding from these comparisons was that although the predicted income of male migrants who were studying or in skilled or semi-skilled occupations before migration remained unaffected when other predictor variables were held constant, this was not the case among female migrants (columns 1, 2 and 3, Tables 8.7, 8.8). Among female migrants there was a dramatic decrease in the predicted income.
once the other predictors were held constant. Indeed, female migrants who came to Surabaya from these occupational backgrounds were disadvantaged income-wise, when their other pre-migration characteristics such as education or ethnic origin were adjusted statistically to conform with the average of the group. This implies that most of the large-to-average actual mean income received by these female immigrants in Surabaya was due to other predictor variables, such as education, ethnic origin, place of origin, employer status, or year of migration. This was very different from the situation among male migrants, where school attendance or employment in a skilled occupation immediately prior to migration was a net advantage income-wise, after arrival in Surabaya. Why was there this difference between the sexes?

One possible reason why high-status occupational experience was not reflected in the income of female migrants after arrival in Surabaya, was that many of the females from these high-status occupations did not remain permanently in the workforce after migration. Therefore, even if they were in the workforce in 1974, many had not stayed in continuous employment long enough to achieve promotion and an income comparable with that of male migrants from a similar background. Another and more important factor is that there were fewer well-paid employment opportunities for qualified and experienced female migrants than for similarly qualified males. The observation that a substantial proportion of the females who were studying or employed in skilled or semi-skilled occupations prior to migration were employed by private, foreign or state-owned companies which did not offer a high rate of remuneration, was indirect evidence of a lack of employment opportunities. The more fortunate and better qualified female migrants entered the public service in Surabaya, but though the public service offered a higher income than private companies, it was not as remunerative for female immigrants as for their male counterparts; that there were fewer opportunities for advancement to a highly-paid job for female migrants, than for males.

In contrast to female migrants from skilled, semi-skilled or student backgrounds, female migrants who were farming, unemployed, or engaged in domestic duties before migration, benefited income-wise
from these backgrounds in Surabaya when other predictors were held constant at average levels. This implies that if this latter group of migrants had not been 'disadvantaged' in terms of the other predictors (such as educational attainment), their predicted income in Surabaya during 1974 would have exceeded the actual income of ex-student inmigrants. Moreover, if the predicted incomes of female migrants from all occupational status categories are compared when all the other predictors are held at constant levels, the inmigrants who were farming, unemployed or engaged in domestic duties (as a housewife or an unpaid family worker) before migration had the highest predicted income. Of course such adjustment is only possible statistically, and the actual income of these migrants did not equal the actual income of the female migrants employed in skilled jobs before migration. The comparison of the predicted incomes, however, confirms the earlier conclusion: that because of remunerative employment opportunities in prostitution and petty peddling in Surabaya, the most 'disadvantaged' female inmigrants prior to migration, could benefit more economically from a move to Surabaya than comparably-placed male migrants, provided of course, the individual inmigrants were willing to pay the high social and personal costs of these activities.

Of all the predictor variables included in the additive model developed to explain the income of female migrants in Surabaya in 1974, the urban or rural nature of the inmigrant's previous place of residence was the least successful. Once other predictors were held constant at average levels, the independent predictive capacity of previous place of residence was reduced to a beta value of 0.17, well below that of any other predictor (Table 8.8). Apart from this basic weakness, however, there is no doubt that female migrants from higher order urban places were larger income-earners in Surabaya than females from other places, even when other predictors were standardised. This is similar to the pattern of income distribution discovered among male migrants to Surabaya (Table 8.7), and together the findings agree with research by Galindo and Goldberg (1973) in Mexico City and Ankara. Galindo and Goldberg also used MCA to investigate income differences. Their results showed that though migrants from rural backgrounds received approximately the same income as native residents in these two cities once educational and age differences were eliminated.
statistically, urban migrants enjoyed a net advantage in earning capacity once these other factors were held constant.

There appear to be two major reasons for the net advantage in earning capacity (that is after other predictors were held constant) experienced by migrants from higher order urban places (Tables 8.7, 8.8). First, it appears that migrants from higher order urban centres were positively selected for income and occupational mobility, and second, the effects of their positive selection were not completely eliminated by statistical standardisation techniques used in multiple classification analysis. This study has already produced evidence indicating that in terms of socio-economic indicators like educational attainment and occupational status prior to migration, migrants to Surabaya from higher order urban centres were positively selected relative to other inmigrants. There was also a higher incidence of multiple movers, many of whom were government-employed transferees, among the migrants from large urban centres, a finding which also implies positive selection in terms of migration experience.

Apart from the obvious socio-economic characteristics, many of which could be easily included and standardised in a predictive model of income in Surabaya, there were other characteristics or experiences common among migrants from large urban centres which were likely to enhance their income earning potential and occupational mobility in Surabaya. For example, the reasons for moving given by migrants and the incidence and nature of problems in their previous place of residence, indicate that migrants from large urban centres moved predominantly because of job transfers, promised jobs, or for educational reasons. Most moved for reasons of personal aspiration; only a few mentioned acute economic or social problems in their place of origin. On the other hand, migrants from lower order urban centres or villages were more likely to be 'dislocated' or 'displaced' movers, migrating because of unemployment, land shortages, job promises or personal and social problems in their previous place of residence. It seems likely that given the circumstances and motivations of their moves, urban migrants would be more selective of their employment in Surabaya, than the rural migrants. Urban migrants had more to lose by an ill-considered move than rural migrants. Indeed, most of the urban
migrants probably would not have considered moving to Surabaya without attractive guarantees of economic advancement prior to migration. Thus the attitudinal background of the decision to migrate probably enhanced the income earning capacity of the urban migrants after arrival in Surabaya, but additudinal considerations were almost impossible to include in the predictive model of income.

It is also likely that while living and working in a large urban area prior to migration, migrants from higher order urban centres established contacts with employers or friends who had business contacts in Surabaya. It is also likely that experience gained working in a large urban centre prior to migration, enabled migrants to obtain specialised occupational skills marketable in Surabaya. Both of these opportunities were not as readily available to migrants from smaller urban centres or villages, and both opportunities were likely to increase the earning capacity of urban migrants on arrival in Surabaya relative to other inmigrants.

Unfortunately, many of the factors which may have enhanced the earning capacity of urban migrants in Surabaya could not be included in the predictive model of income. For example, the model included educational attainment and occupational status prior to migration but excluded attitudinal variables, personal contacts and specialised urban work experience. The exclusion of these variables may explain why the model predicted that migrants from large urban centres would have a larger income than other migrants after the other predictors were held constant. But even the predictors included in the MCA model were probably inadequately standardised. For example, educational attainment was measured and standardised by level of attainment, yet as Galindo and Goldberg (1973: 13) point out, to equate a junior high school certificate obtained in a small rural school with a junior high school certificate from a large provincial centre, completely disregards the superior quality of the urban education. It is therefore likely that much of the net advantage in earning capacity enjoyed by urban migrants according to the predictive model, reflects the inability of this model, or any model, to completely reflect reality.
The only other predictor included in the predictive model of income was year of migration, but since it was a continuous variable it was treated as a covariate and quantitative estimates of its effect on income were unobtainable from the original model (Table 8.8). Analysis of variance, however, produced an F value of 3.3 (significant at the 90 per cent confidence level). Some idea of the distribution of income among female migrants by period of migration was obtained from a separate analysis in which year of migration was recoded into periods of migration. The results were as follows:

<table>
<thead>
<tr>
<th>Period of migration</th>
<th>Unadjusted mean income per month (Rp)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-74</td>
<td>14,642</td>
<td>84</td>
</tr>
<tr>
<td>1965-69</td>
<td>12,011</td>
<td>16</td>
</tr>
<tr>
<td>1960-64</td>
<td>21,031</td>
<td>17</td>
</tr>
<tr>
<td>1955-59</td>
<td>14,680</td>
<td>7</td>
</tr>
<tr>
<td>1950-54</td>
<td>4,971</td>
<td>7</td>
</tr>
<tr>
<td>1945-49</td>
<td>15,573</td>
<td>6</td>
</tr>
<tr>
<td>Pre-1945</td>
<td>6,533</td>
<td>9</td>
</tr>
<tr>
<td>All female migrants</td>
<td>14,174</td>
<td>146</td>
</tr>
</tbody>
</table>

The income distribution was erratic owing to the smaller number of migrants in some periods, but the largest income earners were the females who arrived in the early 1960s, who by the time of the survey were mostly in the 25-40 age group. Unlike the male migrants, some of the younger more recent female arrivals were also large income earners, reflecting the high income of females engaged in prostitution, most of whom were very recent arrivals aged less than 25 in 1974.

In summary, analysis of income distribution among female migrants has shown that although employer status in 1974 was more important as a predictor of income among female migrants than among males, pre-migration variables explained approximately the same proportion of the total variance in income among both male and female migrants (25-26 per cent, Tables 8.7, 8.8). Ethnic origin was the most important predictor among the pre-migration variables. It was much more important and independent as an income predictor for female migrants than for males, mainly because female migrants were more successful than male migrants in 'fencing-off' particular activities for members of their own ethnic group.
Although pre-migration predictors were of equal importance in explaining the income distribution of male and female migrants, close examination revealed major differences between the sexes in the way income was distributed between predictor categories. Admittedly, there was a general tendency for the female migrants who were advantaged prior to migration (such as migrants of foreign ethnic origin with a high school education, from urban places or from skilled occupations), to receive larger incomes in Surabaya than the more disadvantaged (such as Madurese migrants with no formal education, from rural places or from unskilled occupations). At least to this extent, the income distribution among female migrants was similar to that among males. But there were some important differences.

First, a significant proportion of female migrants in the lowest occupational status categories and without any formal education prior to migration earned larger actual incomes or had larger predicted incomes (after other predictors were held constant) than expected on the basis of their pre-migration characteristics. They also earned larger incomes than male migrants with comparable pre-migration backgrounds. The explanation was that some remunerative but socially unattractive occupations in Surabaya, such as prostitution and petty peddling and trading were negative-selective in the sense that they were attractive to poorly-educated female migrants who moved to Surabaya direct from a farming job in a small village. Provided the entrants to these activities, especially the entrants to prostitution, were prepared to meet personal and social costs arising from participation in such activities, then migration offered them outstanding opportunities for economic advancement, considering their pre-migration background. Comparable levels of economic remuneration were unavailable to many other female migrants with more advantaged backgrounds, or to male migrants with similar backgrounds.

A second difference from the income distribution among male migrants was the finding that female migrants from skilled occupations or a student background prior to migration were disadvantaged income-wise in Surabaya in comparison with female migrants from other occupations or male migrants from comparable backgrounds, once other predictors were held constant. It appears that their relative
disadvantage was due to a shortage of employment opportunities for skilled female migrants, or to the fact that most females did not stay in continuous employment long enough to benefit from promotion to senior positions.

8.4 SUMMARY AND CONCLUSIONS

The first part of this chapter compared the occupational status of inmigrants in Surabaya during 1974 with their occupational status prior to migration. The results emphasised a major finding of this study, that migration to Surabaya did not result in widespread occupational mobility among inmigrants. Indeed, a remarkable 82 per cent of the male migrants and 86 per cent of the female migrants gainfully employed in non-farm occupations before migration and in 1974, were in jobs of the same general occupational status before migration and in 1974. Immigrants engaged in farming activities prior to migration were relatively over-represented in unskilled jobs in Surabaya, especially the females, but subsequent analysis of the income of these migrants indicates that many of the unskilled occupations were remunerative. Overall, this analysis indicated that for inmigrants gainfully employed in non-farm occupations before and after migration, occupational status prior to migration is an accurate predictor of occupational status in Surabaya during 1974. Other migrants tended to concentrate in jobs whose status was compatible with their general socio-economic status prior to migration. These findings imply that a multivariate model, designed to predict the income distribution of migrants in Surabaya, should be reasonably successful even if it is based solely on pre-migration predictors.

The second part of this chapter examined the employment structure of inmigrants in 1974 according to the tri-sectoral model. The analysis confirmed the model's empirical relevance, though some findings did not accord with assumptions traditionally associated with models of urban dualism. Respondents employed in Surabaya's family sector appeared to conform more closely to the preconceived idea of informal sector workers, than did the self- or family-employed members of the city's informal sector. Many migrants in the family sector were young temporary inmigrants of low educational status engaged in
prostitution, and their inclusion meant that the family sector did not have the features of an intermediate sector as envisaged by Friedmann and Sullivan (1974). Analysis indicated that the formal sector of Surabaya's economy employed as many lifetime inmigrants in 1974 as the family and informal sectors combined. This finding accords with other research (Bienefeld, 1974: 15; Breman, 1976: 1872) which has raised doubts about the capacity of the informal sector to employ migrants. Although the incomes of migrants employed in the formal, family and informal sectors in Surabaya were in general accord with the ranking predicted by Friedmann and Sullivan (1974: 389), the income differential between migrants in the formal and non-formal sectors was not large. Indeed, young inmigrants in the informal and family sectors frequently received larger incomes than young migrants in the formal sector. The income advantage disappeared with age, however, and from 45 onwards formal sector employees usually received larger incomes.

A comparison of the sector of employment of inmigrants in 1974 with their sector of employment prior to migration indicated that few inmigrants had moved between the formal and non-formal sectors of the labour market. This is consistent with the major tenet of the structural model of rural-urban migration developed by McGee (1972; 1976). In addition, survey results indicated that movement between the family and informal sectors was as common as intrasectoral movement, as predicted by Friedmann and Sullivan (1974: 403).

In the final part of this chapter a multivariate model was developed to predict the income of male and female inmigrants in Surabaya during 1974. A satisfactory model was developed which included the five pre-migration variables: occupational status prior to migration, ethnic origin, rural or urban nature of previous place of residence, educational attainment at time of migration, and year of migration. This model explained 26 per cent and 25 per cent of the variance in the mean monthly income of male and female migrants, respectively. The skewed distribution of the income data appears to have depressed these values slightly. When income was transformed into log values to minimise the possible effects of the skewed distribution, the proportion of variance explained was: 28 per cent and 31 per cent for male and female inmigrants, respectively, using
the five pre-migration variables only; and 31 per cent and 48 per cent for male and females, respectively, when employer status in 1974 was included along with the pre-migration variables.

The multivariate model was clearly a successful predictor of the income of inmigrants in Surabaya. The fact that pre-migration predictors alone explained between a quarter and a third of the total variance, and probably one third to two-fifths of the potential 'explainable variance' in income, is unequivocal evidence of their importance as determinants of an inmigrant's relative socio-economic status in Surabaya. In comparison, sector of employment in 1974 was not a good predictor of income among migrants. These findings imply that the labour market in Surabaya is a fragmented structure, in which the relative socio-economic status of inmigrants is strongly constrained by their pre-migration background. In comparison, attempts to predict the socio-economic status of inmigrants solely on the basis of their sector of employment in Surabaya are of little value.

The predictive model of income for male migrants indicated that level of educational attainment and occupational status prior to migration were the most important and independent predictors of income in Surabaya. Migrants who were relatively advantaged with regard to either of these correlates of socio-economic status prior to migration were the inmigrants who tended to receive the largest actual monthly income in Surabaya during 1974. This clearly indicates that migration to the city has not changed the socio-economic status of most male migrants relative to other male migrants. Breman's (1976: 1907) prediction:

Under otherwise equal conditions, determinants of a high ranking in the rural system [or previous place of residence] are converted into advantages over other categories of migrants who, conversely, see their former backward position in the village [or previous place of residence] continued in the urban environment.

appears as valid in the case of Surabaya's male migrants as it was in his study of South Gujarat. The rural or urban nature of the migrant's previous place of residence, employer status in 1974, and year of migration were also significant and independent predictors of
income among male migrants. Ethnic origin was not a useful predictor, most of the difference in income between migrants of contrasting ethnic origin was explained by other predictors.

In contrast to the male migrants, ethnic origin was the most important pre-migration predictor of income for female migrants. Its greater importance was due to the success of female migrants in fencing off particular activities for members of their own ethnic group. Like the male migrants, there was a general tendency for the females who were relatively advantaged in terms of occupational status or level of educational attainment prior to migration to receive the largest unadjusted mean monthly income in 1974. This implies that like the males, migration to Surabaya did not change the socio-economic status of most female migrants relative to other female arrivals. However, because of employment opportunities in remunerative but 'socially-unattractive' activities such as prostitution, some female migrants, especially the short-term arrivals from desperately disadvantaged backgrounds prior to migration, gained exceptionally large incomes in Surabaya. On the other hand, owing to a lack of employment opportunities for skilled females and because many females did not remain in continuous employment, female migrants from skilled occupations or a student background prior to migration were relatively disadvantaged income-wise in Surabaya, once the other predictors such as level of educational attainment were held constant.
CHAPTER IX

CONCLUSIONS

This thesis has investigated the origins of lifetime migrants to Surabaya and examined the occupational mobility which they experienced as a result of migration. The study had four specific aims: to investigate the geographic, demographic and socio-economic origins and migration history of migrants to Surabaya; to determine the amount of occupational mobility experienced by these migrants; to evaluate Friedmann and Sullivan's (1974) tri-sectoral model as an aid to an understanding of occupational mobility; and to relate occupational mobility to job scarcity and the origins of migrants. In this chapter I will outline the major findings and implications of this study in terms of these objectives. I will conclude the chapter with a discussion of the policy implications of this study.

9.1 MAJOR FINDINGS

9.1.1 Origins and Selectivity of Inmigrants

Since independence Surabaya has steadily extended its migration field over a larger area and by 1971 it was a more important destination for metropolitan-bound migrants from many provinces of East Indonesia than Jakarta. Distance was a good predictor of per capita migration rates from individual source areas to Surabaya, provided allowance was made for the fact that urban-born migrants were more likely to move long distances to get to Surabaya than rural-born migrants. The only areas with per capita migration rates exceptional to those predicted by a simple gravity model were areas with established historical ties with Surabaya, where the model underestimated rates of migration, and source areas close to alternative destinations (such as Jakarta) or areas within commuting range of Surabaya, where rates of migration were overestimated.

Four out of every five lifetime migrants moved direct to Surabaya from their birthplace without intermediate places of residence to act as 'steps' or 'stages'. Only one-third of the 22 per cent who moved in stages followed the process of upward stepwise migration through the settlement
hierarchy from lower-order to higher-order settlements. The majority of pre-Surabaya migrations consisted of lateral moves between centres of similar status within the settlement hierarchy, but there was also a significant number of downward moves from higher to lower-order urban settlements, particularly by migrants moving back to their birthplace after an initial unsuccessful move from their village of birth in search of education or employment. These findings imply that the traditional view of stepwise migration as a progression through the settlement hierarchy from lower to higher-order settlements should be modified to incorporate lateral and downward moves within the hierarchy. However, my study has been confined to migrants who arrived in Surabaya and a comprehensive evaluation of stepwise migration requires studies of the migration histories of migrants resident in settlements at each level of the settlement hierarchy.

Since the late 1960s females have become more dominant numerically in annual migration flows to Surabaya. Most of the increased female component comprised young migrants from rural areas of East Java who have migrated to Surabaya because of a significant decline in productive employment opportunities for females in agriculture since the adoption of high-yielding rice varieties and their associated technology and harvesting techniques in the late 1960s. A significant proportion of the recent female arrivals were socio-economically disadvantaged relative to other inmigrants at time of migration, and on arrival in Surabaya many entered domestic service or prostitution. These activities demanded no formal educational qualifications and offered remunerative incomes and the opportunity for migrants to engage in short-term or circular migration between their home village and Surabaya.

9.1.2 Changes in Occupational Status

The second and major part of this thesis (Chapters Five, Six, Seven and Eight) examined and attempted to explain the occupational mobility experienced by migrants as a result of their move to Surabaya. Occupational mobility was examined in two stages: the occupational change which occurs as a migrant moves from his previous place of residence to his first job in Surabaya; and the post-arrival occupational change between first
arrival and 1974, when this study was undertaken. The occupational mobility that occurred at these stages was assessed from the viewpoint of changes in occupational status and changes in sector of employment as defined by Friedmann and Sullivan's (1974) tri-sectoral model of the urban labour market.

Comparison of the occupational status of migrants in their previous place of residence with their occupational status on arrival revealed an increase of approximately one-third in the number gainfully employed on arrival. Most new income earners came from the ranks of the unemployed and the students, whose numbers fell by half as a result of migration. Almost all migrants who sought work obtained gainful employment within two weeks of arrival. Immigrants who were unpaid family workers or unemployed prior to migration clearly benefited economically from the move to Surabaya, but available data indicate migrants gainfully employed prior to migration also benefited economically despite higher living costs in Surabaya.

The large boost in the number gainfully employed and the fact that many migrants were farmers prior to migration complicated analysis of changes in occupational status between previous place of residence and first arrival. When comparison is confined to migrants gainfully employed in non-farm occupations before migration, however, two-thirds of the migrants on arrival in Surabaya entered jobs of the same occupational status as their jobs before migration. Even when transferees were excluded, migration had little effect in inducing occupation status mobility.

Job scarcity appears to have minimised occupational status mobility in several ways. It has reduced the opportunities of upward occupational mobility for immigrants from low-status jobs while at the same time it has ensured that migrants from high-status occupations will be unlikely to move without guarantees of an occupation of similar status. In the absence of empirical data about Surabaya's labour market, however, the precise effect of job scarcity on occupational changes among migrants is unknown.
Most inmigrants who were farmers prior to migration entered low-status occupations on arrival in Surabaya because of their low level of educational attainment and lack of work experience relevant to the urban labour market. The small number of farmers with elementary school certificates took better jobs than their fellow farm workers. Immigrants who were unemployed or studying prior to migration entered higher status occupations than farmers, predominantly because of their superior educational qualifications.

Post-arrival changes in occupational status were looked at cross-sectionally and longitudinally. At first sight the cross-sectional results implied that there had been widespread upward mobility, since the senior migrants were more concentrated in the higher status occupations than the recent arrivals. Subsequent analysis indicated that most of the occupational status differential among female migrants could be explained by selective return migration, and the earlier male arrivals were already occupationally advantaged on arrival or prior to migration in comparison to more recent male migrants. This implies that post-arrival occupational stability was more common than occupational mobility.

Longitudinal analysis of occupations held by migrants on first arrival and in 1974 supports this interpretation. Three-quarters of the migrants gainfully employed on arrival and in 1974 stayed in the same job after arrival in Surabaya, and since two-fifths of those who changed jobs after arrival were in jobs with the same status in 1974, at least 80 per cent of the migrants did not change occupational status after arriving in Surabaya. Job scarcity was probably the major factor responsible for the high degree of occupational stability; but stability was reinforced by the small proportion (2 per cent) of the migrants gainfully employed on arrival who were able to improve their formal educational qualifications by 1974, and by the fact that the majority of inmigrants of Javanese or Madurese ethnic origin were at a comparative disadvantage relative to migrants of other ethnic origins in obtaining access to capital.

The direction of post-arrival changes in occupational status was affected by the initial occupational status of migrants on arrival, but male migrants and non-farm migrants from urban areas were more likely to
experience post-arrival upward mobility than female migrants and non-farm migrants from rural areas. A shortage of high-status employment opportunities for female migrants and a tendency for females not to remain in continuous employment explained their lack of upward occupational status change, whereas work experience in an urban environment helped the urban non-farm migrants to advance occupationally in Surabaya.

Entry to high-status occupations by inmigrants in low-status occupations on arrival was facilitated if migrants were of non-Javanese or non-Madurese ethnic origin and sometimes if the migrants were members of the armed forces. Male migrants in unskilled jobs on arrival who came to Surabaya in 1950 had the most success in obtaining high-status clerical occupations in 1974. This was not due to any educational advantages, but to the fact that they were on hand to benefit from new employment opportunities created by independence.

Apart from migrants already in skilled high-status occupations on first arrival in Surabaya, students took more high-status jobs than any other migrant cohort. Due to a general increase in educational qualifications, a slow growth of skilled employment opportunities and a continual oversupply of labour, however, it is unlikely that future student immigrants will be as occupationally successful as their predecessors.

In summary, analysis of the occupational status of inmigrants before migration, on first arrival, and in 1974 revealed widespread occupational status stability. This is emphasised by the observation that 82 per cent of male migrants and 86 per cent of female migrants gainfully employed in non-farm occupations before migration and in 1974 were in jobs of the same general occupational status before migration and in 1974.

9.1.3 Intersectoral Mobility of Inmigrants to Surabaya: An Evaluation of the Tri-Sectoral Model

In an attempt to evaluate the tri-sectoral model as an aid to understanding the labour force in the cities of LDCs this study has applied the tri-sectoral model to the employment structure of inmigrants before migration and in 1974. The first finding was that as an aid to under-
standing the occupational and personal characteristics of migrants, the tri-sectoral model was not a significant advance on the dualism model. Like the dualism model, it succeeded in identifying a degree of bi-polar dualism between migrants in the formal and non-formal sectors, the formal sector employees being socio-economically advantaged in comparison with the non-formal workers. However, migrants in the family sector were not intermediate either occupationally or educationally as envisaged by Friedmann and Sullivan (1974).

A second problem with the tri-sectoral model was that all not-working immigrants were classed as members of the informal sector. This implies that the unemployed comprise a relatively homogeneous group of socio-economically underprivileged persons who tend to drift into employment in the informal sector. Investigation of migrants unemployed prior to migration revealed a heterogeneous sub-group, a significant proportion of whom were well-educated first-time job-seekers who preferred to withhold their labour until migration, rather than drift into informal level occupations considered beneath their expected level of occupational status.

The ranking of income between migrants in the formal, family and informal sectors accords with that predicted by Friedmann and Sullivan (1974: 389), but the income differentials were not large. Indeed, young immigrants in the informal and family sectors frequently received larger incomes than young migrants in the formal sector. The income advantage disappeared with age, however, and from 45 onwards formal sector employees usually received larger incomes. The explanation is that young non-formal sector workers were able to make use of their flexible working hours to maximise earnings by concentrating on the most profitable, but frequently physically demanding employment. On the other hand, young formal sector employees appear to have been willing to accept a slightly lower income in return for job security and greater long-term earning potential.

Friedmann and Sullivan (1974) suggest that the informal sector (informal /working/ plus informal /not working/) contains more recent migrants than the family or formal sectors. Data on the average duration of residence of inmigrants in Surabaya do not support this prediction: the
formal, informal (working) and (not-working) sectors and sub-sectors were all dominated by senior immigrants. On the other hand, the family sector consisted almost entirely of short-term female migrants engaged in domestic service and prostitution. Based on the proportion of migrants employed in each sector the formal and non-formal sectors have absorbed almost equal numbers of immigrants. This supports doubts raised by others (Bremian, 1976: 1872, Bienefeld, 1974: 15) about the capacity of the informal sector to employ migrants, and emphasises the importance of government as an employer of migrants in Surabaya.

As predicted by Friedmann and Sullivan (1974) the non-formal sectors in Surabaya employed a higher proportion of rural migrants than the formal sector. Because of their rural origins informal and family sector workers felt a stronger attachment to their place of origin than formal sector employees, but most migrants intending short-term stays were employed in the family sector of the economy in 1974. The majority of migrants in both the formal and the informal sectors were committed to continuing residence in the city.

When the tri-sectoral model was applied to the intersectoral mobility of recent immigrants as they moved from their last place of residence to their first job in Surabaya, it had some success in explaining the predominance of intra-sectoral moves into the formal and informal sectors in Surabaya. However, it did not predict the dominant role played by family sector activities such as prostitution and domestic service in absorbing female migrants from all non-formal sectors.

When the sector of employment of migrants prior to migration was compared to their sector of employment in Surabaya in 1974, then the assumption of the model that most entrants to formal sector employment originate from jobs in the formal sector was not correct. In fact only 29 per cent of those employed in the formal sector in 1974 were employed in that sector prior to migration, whereas a remarkable 37 per cent were not in the workforce prior to migration, and another 14 per cent were not working. The remainder were employed in the informal (working) and family sectors. It may seem unfair to include in this assessment migrants not
in the labour force prior to migration, but even if they are excluded, the proportion in formal sector employment prior to migration is less than half. This finding highlights two major inadequacies in adopting the tri-sectoral model to explain the intersectoral occupational mobility of migrants.

The first inadequacy has been noted: the unsatisfactory classification of all not-working individuals into a uniform category positioned hierarchically immediately 'below' the informal (working) sub-sector. This classification implies most will find employment in the informal sector. This may well be correct numerically, but it ignores the fact that an important component of the not-working population, especially in urban source areas, comprised relatively well-educated migrants-to-be, who were out of work by choice rather than necessity. In Surabaya, 14 per cent of the migrants employed in the formal sector in 1974 were not working prior to migration. They were more numerous in the family sector than migrants previously employed in the informal or family sectors of the workforce. The second inadequacy of the model was that it ignored completely migrants not in the workforce prior to migration. This is a serious omission since 37 per cent of the migrants employed in the family sector in 1974 were in this category, 95 per cent of whom were students.

These shortcomings indicate that the tri-sectoral model was not a good predictor of which individuals would gain entry to the formal sector in Surabaya. However, if it is assumed that migrants who were students at the age of 15 or more when they migrated to Surabaya were from wealthier families, then the basic tenet of the model was confirmed: namely, that individuals socio-economically privileged prior to migration would predominate in the formal sector.

Migrants in the family or informal (working) sectors and sub-sectors in 1974 originated with almost equal probability from any of the non-formal sectors, as Friedmann and Sullivan (1974) predicted; the only previous sector of employment under-represented among the migrants was the formal sector. Consequently, as predicted in the simple dualism
model, the boundary between formal and non-formal appears the one intersectoral boundary which has effectively inhibited intersectoral labour mobility.

As a predictor of intersectoral occupational mobility resulting from migration, the tri-sectoral model is not an advance on the traditional urban dualism model. The basic premise of the urban dualism model that intersectoral occupational mobility is more difficult than intra-sectoral mobility is confirmed by data from Surabaya. If migrants in the workforce in 1974 are examined, only one-quarter of those in the family or informal (working) sub-sectors prior to migration were employed in the formal sector in 1974, compared with 65 per cent of those not in the labour force prior to migration (mostly students) and 83 per cent of those in the formal sector prior to migration. Even with considerable time in Surabaya, few migrants made the transition from non-formal employment prior to migration to formal sector employment in 1974.

9.1.4 Occupational Mobility, Job Scarcity and the Origins of Immigrants

In the absence of reliable information about employment opportunities in Surabaya it is impossible to evaluate the precise role played by job scarcity in limiting occupational mobility among immigrants to Surabaya. Some of the findings of this study, such as the concentration of certain ethnic groups in specialised activities or industrial sectors, and the high incidence of job promises among immigrants are consistent with the symptoms of job scarcity noted by Breman (1976). In addition, the fact that upward occupational mobility has been selective of migrants better educated than their workmates, or of migrants with access to capital, also confirms the importance of job scarcity. Male immigrants on hand to benefit from the boost in job opportunities created by independence comprised the only major cohort who achieved upward occupational mobility without either of these advantages. Thus, the findings of this study are consistent with Breman's (1976) hypothesis that job scarcity has been the major inhibitor of occupational mobility; but the inadequate data do not permit definite conclusions.
On the other hand, because of occupational immobility, the post-arrival occupational and socio-economic status of migrants is closely associated with the individual migrant's pre-migration origins, particularly his or her geographic, demographic or socio-economic background. Migrants who were male, of foreign ethnic origin (predominantly Chinese), well-educated, and from urban source areas were more likely to be in high-status occupations both before and immediately after migration than female Javanese or Madurese immigrants who were poorly educated and from rural backgrounds. However, all newly arrived migrants were over-represented in industries protected from or of little interest to modern capital intensive-labour extensive firms. Newly arrived migrants were concentrated in service industries, such as the government public service, the armed forces, domestic service and prostitution.

In an attempt to assess the effect of the pre-migration attributes of migrants on their income in 1974, a multivariate model was developed to predict the income of male and female inmigrants in Surabaya. A satisfactory model was developed which included the five pre-migration variables: occupational status prior to migration, ethnic origin, rural or urban nature of previous place of residence, educational attainment at migration and year of migration. This model explained 26 and 25 per cent of the variance in the mean monthly income of male and female migrants, respectively. When employer status in 1974 was included along with the pre-migration variables, the proportion of variance explained increased to 30 per cent for males and 36 per cent for females. The fact that pre-migration predictors alone explained between one-quarter and one-third of the total variance, and probably one-third to two-fifths of the potential 'explainable variance' in income, is unequivocal evidence of their importance as determinants of an immigrant's relative socio-economic status in Surabaya. In comparison, sector of employment in 1974 was not a good predictor of migrants' income. These findings imply that a predictive model such as the urban dualism model based solely on sector of employment, is too coarse and mechanistic to substantially contribute to an understanding of occupational mobility. These findings suggest that the labour market in Surabaya is a fragmented structure similar to that hypothesised by Breman (1976), in which the relative socio-economic status of migrants is
strongly constrained by their pre-migration background. If researchers are interested in predicting the occupational and socio-economic status of individual inmigrants in this fragmented market, then a model which can successfully incorporate the migrants' personal attributes is essential.

9.2 SOME POLICY IMPLICATIONS

Although research for this study was carried out in 1974 and though the study was confined to Old Surabaya, some of the findings have implications for development policy in East Java and Surabaya. Some of the more important findings and their policy implications are:

i) As most migrants appear to have benefited economically from the move to Surabaya, rates of immigration to the city will probably increase in future years. Closure of the city and other administrative procedures which attempt to reduce immigration without tackling its basic cause, the lack of productive employment opportunities in rural areas and smaller urban centres, are bound to fail. The already overburdened administrators of Surabaya have no real choice except to prepare for increased flows of inmigrants with their attendant demands on housing stock and employment.

ii) Results from this study indicate that though most migrants have benefited economically from the move to Surabaya, few migrants have been occupationally mobile. Migrants from underprivileged backgrounds prior to migration have in most cases seen their underprivileged position relative to other migrants carried with them into their new environment. Javanese migrants from rural areas and Madurese inmigrants appear to have found it more difficult to gain entry to entrepreneurial occupations requiring capital resources than migrants from other ethnic origins. The provision of low-interest capital to some of the more disadvantaged migrants with suitable business experience may overcome some of these handicaps. Another reason for the lack of occupational advancement was the low level of educational
attainment of many migrants. Only two per cent of the
migrants in gainful employment on arrival in Surabaya
improved their educational qualifications after arrival,
and the provision of specialised vocational training courses
to immigrants without a basic education may also assist
occupational advancement.

iii) Evidence from this study suggests that changes in agricultural
technology in rural Java since the late 1960s have deprived
many young females of productive employment in agriculture.
As a consequence the number of female immigrants to Surabaya
has increased substantially in recent years. Some of these
migrants are short-term arrivals, but there has also been
an increase in the number of young female permanent arrivals.
Because of a shortage of employment opportunities and the
remunerative nature of the employment, many young females
have entered prostitution on arrival in Surabaya. Clearly,
serious consideration needs to be given to the creation of
alternative productive employment for these young females,
both in Surabaya and in their place of origin.

iv) This study has indicated that most informal sector employees
engaged in activities other than prostitution or domestic
service in Surabaya are not circular migrants. The study
has also shown that most of the Madurese immigrants
interviewed were permanent residents of the city. As
permanent residents, these two groups of immigrants require
the same urban services as those available to other
Surabaya residents.

v) Female migrants in Surabaya are occupationally disadvantaged
relative to male migrants with the same educational
qualifications at all levels of employment. Discontinuous
employment by female migrants may explain some of the
differential, but it appears that there is a real shortage
of employment opportunities for well-educated females in
Surabaya.
vi) In comparison with Jakarta, Surabaya has been starved of development funds in the last decade. Despite this, the city has been expanding its migration field and with increased government assistance, Surabaya could relieve Jakarta of some of its potential influx of metropolitan bound migrants. It is in Jakarta's own interest to see that Surabaya and other major metropolitan centres in Indonesia obtain a more equitable share of development funds in the decades ahead.
APPENDIX 1.1

Major Data Sources

The aim of this thesis is to analyse the origins and occupational mobility of migrants (1) to Surabaya. Given this aim, detailed time specific data about the demographic, socio-economic and geographic origins of immigrants are required, plus details of the immigrants' sequence of occupations at different stages during migration to the city. One way to obtain these data would be to interview immigrants currently at different stages of migration: intending immigrants, newly arrived immigrants resident in Surabaya, and migrants who have already spent a considerable period of time in the city. The financial costs of an origin and destination study plus the practical difficulty in locating intending immigrants, however, precluded this approach. Moreover, this approach would be cross-sectional and would involve the comparison of different cohorts of migrants which raises the problem of changing selectivity over time. Instead, it was decided to concentrate time and financial resources in Surabaya with the aim of collecting data from migrants already resident in the city.

This approach has two major advantages over the cross-sectional approach: it is more time and cost efficient, and by using retrospective data it provides a longitudinal or sequential view of occupational change among the same cohort over time. Moreover, provided immigrants are standardised by period of migration, this approach eliminates some of the confounding influences caused by changes in migrant selectivity or employment opportunities over time. The use of retrospective data, however, raises the problem of

(1) Lifetime migrants were defined as: persons who at the time of the survey were usually resident in Surabaya (that is, usually slept and lived in the city and were not merely visiting or working in Surabaya), but whose birthplace was located outside the present boundaries of the municipality. Surabaya Municipality incorporated five additional rural kecamatan in 1969, and to avoid confusion in the minds of respondents the present boundaries of the city were used to define immigrants. This means that persons at present resident in Old Surabaya who were born in the five newly incorporated kecamatan are not classified as lifetime immigrants.
post-event rationalisation and imperfect recall. Questionnaires used in this study were designed to examine occupational change in sequential order in an attempt to minimise these problems, but the problems could not be completely overcome.

When this study was begun in Surabaya during October 1972, information about the origins and occupational mobility of the immigrant population of Surabaya was not available from any source. The result is that all the major data for this study have had to come from my own fieldwork surveys carried out with local assistance. Only in a few instances has there been any relevant census and survey information available, and in these cases it has been utilised to evaluate and supplement the fieldwork data.

1. Official Census and Enumeration Data

Widjojo (1970) has provided the most comprehensive evaluation of the population enumerations and censuses in the Netherlands East Indies (NEI), plus an evaluation of the first post-independence Indonesian census of 1961. He concludes that although all the population data collected before 1930 have limited reliability, 'a number of the essential features of a modern census were incorporated in the 1930 census' (1970: 71-2), and although the treatment of age is primitive, 'there is no doubt that this census was far superior to all preceding enumerations' (Widjojo, 1970: 74). Certainly the 1930 Volkstelling (census) contained more detailed information on the geographic patterns of lifetime internal migration than any data collected on a nationwide bases before or since. It defined all indigenous persons enumerated outside their kewedanaan (district) of birth as migrants, and although as noted by Hugo (1975a: 14-5) data at this level were not published, data at the kabupaten (regency) level are available.

This information provides a picture of the de facto\(^1\) stock of lifetime migrants in 1930 on a regency basis. The city of Surabaya plus a large surrounding area, however, was classed as one regency,

\(1\) A de facto population count was carried out in Java, but in most other islands there was a de jure count (Widjojo, 1970: 72).
thereby excluding intra-city analysis. Of course, the stock of inmigrants 42 years ago has little relevance to this study, though this information plus data on ethnic group, also collected for the only time in the 1930 census, provides historical background useful in comparative studies.

The next census was the 1961 population census carried out in October 1961. It has been described as the first nationwide census in the modern sense of the term, as the 1930 census did not meet present day requirements in its treatment of age classification, and in its lack of detailed coverage of most populations outside Java (Widjojo, 1970: 169). These drawbacks were overcome in the 1961 census, but unfortunately political and economic problems in the mid-sixties interrupted processing of the data and it has never been completed. Complete analyses were published of the population data from Jakarta, but the data from Yogyakarta and East Java were tabulated but never published. A set of tables from a 1 per cent sample of returns received by the Biro Pusat Statistik (BPS - Central Bureau of Statistics) was also published.

The 1961 census is of little aid in the study of migration. It was conducted on a combined de jure and de facto basis with persons being enumerated at their usual place of residence during the three months preceding the survey in Java, whereas enumeration on a de facto basis was allowed in the outlying regions because of transport problems and political unrest. As noted by Hugo (1975a: 15) many circular and short-term migrants in Java would have been enumerated in their de jure residence and classed as non-migrants. In addition, although a question on place of birth was included in the census, details were only obtained of the province of birth, and since Surabaya is part of the populous province of East Java(1), only the small number of residents in Surabaya who were born in other provinces were identified as lifetime inmigrants. To make matters worse, tabulation of these data only distinguished persons born in East Java, elsewhere in Java, the Outer Islands, and overseas. Also, as with the 1930 census, there was neither a question on length of residence nor a

---

(1) East Java had a population of 21,823,000 in 1961.
question on whether the person has ever lived elsewhere. Although both the 1930 and 1961 censuses provide estimates of the permanent stock of migrants, they provide no information about the annual flow.

In terms of the major aims of this study, the 1961 census is of little value. However, the unpublished 1961 population figures for lingkungan urban wards within Kotamadya Surabaya and surrounding kabupaten were made available to me on request. These figures provide a more detailed intra-urban pattern than the published kecamatan totals and since they are comparable with those made available to me from the 1971 census, a map of population change between 1961 and 1971 was constructed which detects lingkungan whose population has grown at exceptional rates, presumably the lingkungan which have received the greatest number of inmigrants.

In September 1971 Indonesia conducted its second population census, which is the most accurate and comprehensive census so far conducted in the Republic. The census was carried out in two parts. A complete population enumeration collecting information on sex, age, and citizenship was held in September 1971, but unfortunately age was coded into the four very broad categories of: 0-4, 5-14, 15-24 and 25 years and above. From late September until early October an independent sample enumeration was conducted to collect detailed information on the characteristics of housing and individual socio-economic conditions. In this detailed sample enumeration, individual census enumeration blocks were systematically random sampled within each kotamadya and kabupaten, the population within the census blocks so chosen being completely enumerated. Thus the sample was of census blocks rather than individuals which means that the smallest units for which representative detailed information can be obtained from the sample census are kabupaten and kotamadya.

Although the complete 1971 enumeration is of little value except for crude population totals, the sample enumeration survey included a number of key migration questions, such as place of birth, (1) There were 11 kecamatan, within the 1961 Kotamadya Surabaya boundaries compared to 37 lingkungan.
whether respondent has ever resided elsewhere and if so where, and total number of years in present residence, plus educational and other socio-economic information. This should have provided a wealth of information on inmigrants to the major kotamadya including Surabaya, but unfortunately with the exception of Jakarta this was not the case. The reason is that each of the migration questions only differentiates inter-provincial migrants. The question on place of birth only asks for details of the province of birth; 'whether ever resident elsewhere' means ever resident in another province, and if so, in what province, and 'total number of years in present residence' means number of years in present province. The sample census information for Surabaya only detects the inmigrants who have moved relatively long distances from other provinces and completely ignores the intra-provincial migrants, who as later data indicate make up the majority of internal migrants in Indonesia.

Furthermore, as noted by Hugo (1975a: 17) the fact that all the 1971 census enumeration was conducted on a combined de jure and de facto basis with a six month absence criteria caused confusion among enumerators and resulted in an underestimate of circular migrants in West Java, where such persons were enumerated as non-migrant village residents. Indeed, some researchers (1) have suggested that the relative shortage of young males in the total census figures suggests that some members of this highly mobile group were not enumerated. In addition, the official nature of the census induced many usual city dwellers whose de jure residence was the village, to return to the village to be enumerated, so as to avoid the possibility of problems with government officials over registration papers. (2) Despite such problems, the 1971 sample census is the only accurate demographic information available on a nationwide basis, and the socio-economic and demographic information which it provides about Surabaya's population is a most valuable datum point for all surveys, including this study.

(1) Dr G.W. Jones and Dr P.F. McDonald, personal communication.

(2) Husein, formerly of the Bagian Pendaftaran Penduduk, Kotamadya Surabaya, personal communication.
2. National Social and Economic Surveys (SUSENAS)

The lack of published information about migration in the 1961 census is partly compensated for by the Survey Sosial Ekonomi Nasional (National Social and Economic Survey, abbreviated SUSENAS), the second and third rounds of which collected data on migration. The second round was held from November 1964 to February 1965 and covered all of Indonesia except East Nusa Tenggara, Maluku and Irian, and had a sampling fraction of 1/1000 (Indonesia, BPS, 1968). Unfortunately the sample coverage of Jakarta was considered inaccurate (McNicoll, 1968: 31) and returns for that province were not processed. The third round of SUSENAS was held over September-October 1967 and was restricted to Java and Madura. It had sampling fractions of 1/750 in rural areas and 1/300 in cities (Indonesia, BPS, 1970).

Both SUSENAS surveys define migrants as individuals or household members who at the time of the survey were not residing in the desa/kota/kotamadya (rural village/town/municipality) where they resided five years prior to the survey. Therefore, respondents who moved their place of residence within the same desa/kota/kotamadya were not classed as migrants (Indonesia, BPS, 1968: viii) contrary to the view of some researchers (Hugo, 1975a: 21).

Questions asked in these surveys covered duration of residence in present desa, kota, or kotamadya (excluding short visits to other places) and, for those of less than five years residence, the last place of dwelling and main reason for moving (McNicoll, 1968: 31). Tables published in the two SUSENAS rounds include numbers and percentages (1964-65 round only) of the following:

1) Migrants X age X last place of residence.

2) Migrants X duration of residence at present place X sex X last place of residence.

3) Migrants X present place of residence X last place of residence.
4) Migrants X reason for change of residence X last place of residence.

5) Migrants (10 years and over) X sex X marital status X age.

6) Migrants (10 years and over) X educational standard X age.

7) Migrants (10 years and over) X educational standard X sex X age.

8) Migrants (10 years and over) X duration of residence at present place X sex X occupation.

9) Migrants X age X sex X last place of residence (1967 round only).

10) Migrants X sex X present place of residence X last place of residence (1967 round only).

11) Migrants X sex X rural or urban character of last place of residence X last place of residence (1967 round only).

12) Migrants X sex X reason for change of residence X last place of residence (1967 round only).

13) Migrants (10 years and over) X sex X place of birth.

All these tabulations were differentiated by the rural-urban character of the present place of residence, and the 1964-65 round of SUSENAS also disaggregated by the inside-outside Java location of the
present place of residence. The tabulations were not
differentiated by the rural-urban character and location of the
migrant's previous place of residence as claimed by Temple (1974: 47)
and Hugo (1975a: 21).

The reliability of the SUSENAS surveys has been questioned by
McNicoll (1970: 9) and others. The estimates of birth and death
rates derived from it are too low (McNicoll, 1968: 31) and there is
some evidence of sampling error (McNicoll, 1970: 9). This raises
doubts about the reliability of the results. However, of the two
rounds of SUSENAS discussed, the third carried out in 1967 appears
more reliable since it includes Jakarta data and has a larger sampling
fraction in urban areas. In addition, the earlier 1964-65 SUSENAS was
held at a time of acute economic hardship and political tension in
Indonesia.

McNicoll (1968) has utilised the second round of SUSENAS as a
major data source for a study of internal migration, but as with all
other recent official data, the smallest areal-unit for which the
details of migrant flows can be obtained is the province, which means
no data are available on the migrant flow to Surabaya. However, the
definition of migrants utilised for these surveys did include
intra-provincial movers as migrants, and so some assessment may be
made of the degree of underestimation of migration in the 1971 census
which excluded such persons.

(1) Reference to the tabulations in the second round of SUSENAS
(Indonesia, BPS, 1968: 55-72) illustrates that the
'inside-outside Java' distinction refers to the present place of
residence of migrants. Evidence that the rural-urban
distinction refers to present place of residence and not to
place of origin, however, is not so apparent in the second
round, though the composition of migrants by place of origin in
a province with a large urban population such as D.I. Yogyakarta
(Indonesia, BPS: 61, 67) implies that this is the most likely
interpretation. Cross-tabulations between the present and
previous place of residence of migrants in the third round of
SUSENAS (Indonesia, BPS: 13,16) confirm that the rural-urban
dichotomy refers to present place of residence. For example,
rural tabulations do not include any migrants presently resident
in Jakarta, but include migrants previously resident in the
Indonesian capital.
Tabulations from the 1964-65 SUSENAS (Indonesia, BPS, 1968: 55-72) reveal that of the estimated 1,262,000 migrants who crossed either desa, kota or kotamadya boundaries over the period 1960-64, and whose last place of residence before migration was in East Java, 88 per cent moved to destinations within the province of East Java. A mere 12 per cent of the total migration flow consisted of inter-provincial migrants.\(^{(1)}\) The 1967 SUSENAS (Indonesia, BPS, 1970: 21) which included Jakarta, indicates that of the 531,805 migrants whose last place of residence before the survey was in East Java, 91 per cent moved to destinations within East Java during the five years 1963-67, and only 9 per cent participated in migrations across Javanese provincial boundaries. These results indicate that official figures which include only inter-provincial migrants seriously underestimate the amount of population mobility in Indonesia. Moreover, they distort the image of migrants by describing a small and perhaps exceptional minority of long distance, relatively permanent movers.

3. Local Surveys

Aside from the LEKNAS survey of 1973 (Suharso et al., 1976) and the survey by McCutcheon (1977, 1978)\(^{(2)}\) in 1975, there has been no study of migration to Surabaya. Pardoko and Suroso (1971) provided some preliminary information on birthplace in their study of the fertility of Indonesian women in Surabaya Municipality, and Suroso (1973) has collated some of the registration data on gross in- and out-migration of the Municipality. The survey of urban unemployment in DKI Jakarta, Kotamadya Surabaya and Kotamadya Bandung (Universitas Indonesia, Lembaga Demografi, 1972) contained data about unemployment and working conditions among migrants in Surabaya, but most of the analysis did not distinguish between migrant and non-migrant. Clearly, data from censuses, SUSENAS, LEKNAS, McCutcheon and local surveys are inadequate for this study. Consequently, field surveys

\(^{(1)}\) A slight underestimate since migrants from East Java enumerated in Jakarta were excluded from the 1964-65 SUSENAS results.

\(^{(2)}\) The LEKNAS and McCutcheon surveys are described in Chapter One (section 1.1).
carried out by the writer with local assistance are the major sources of data for this thesis. Details of these surveys are provided in the following appendices (Appendix 1.2, Appendix 1.3, Appendix 1.4, Appendix 1.5 and Appendix 1.6).
APPENDIX 1.2

Population Registration Survey, 1972-3

The major problem I faced at the beginning of this study in October 1972, was the lack of factual demographic information about Surabaya. The only data available were 1971 population census totals by kecamatan (sub-district) which were cross-tabulated by citizenship and sex (Indonesia, BPS, 1972). If a sample questionnaire survey was begun immediately in order to obtain the basic data for this study, such a survey would have to proceed blind, since nothing was known about the sub-population of lifetime immigrants. Without knowledge of the possible size and location of the lifetime immigrant sub-population, the design of a survey is impossible. General information and the 1930 census indicated that the population of Surabaya Municipality comprised a sizeable proportion of Madurese and other non-local ethnic groups, and since many of the members of these ethnic groups were probably born outside Surabaya, it was likely that the immigrant population was also of diverse ethnic origin. In these circumstances a stratified random sample is preferable to a simple random sample, as the latter guarantees a fair representation of each ethnic group in the sample population. It seemed, then that before a major questionnaire survey was begun, information was required concerning the number, location and ethnic origin of the immigrant population. Such information was available from population registers.

The most important single source of population data was the family population registration card (kartu keluarga). Each family head who is a permanent resident of Surabaya is required to register with the lingkungan (urban ward) office details of each of the members of his family. The details are then entered on the kartu keluarga. The registration procedure begins with the lowest ranking honorary official in the kampung (a 'village' within an urban area), the Kepala Rukun Tetangga (head of the neighbourhood association within the kampung), and then progresses to the top of the administrative hierarchy of the municipality (refer Appendix Table 1.1).
APPENDIX TABLE 1.1 - Administrative hierarchy within the province of East Java

<table>
<thead>
<tr>
<th>Level in the hierarchy</th>
<th>Name</th>
<th>Number within Kotamadya Surabaya 1971</th>
<th>Number within East Java 1971</th>
<th>Mean population 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Propinsi (Province)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>25.5 m.</td>
</tr>
<tr>
<td>2. Kabupaten(1) (Regency - rural areas)</td>
<td>-</td>
<td>29</td>
<td>791,306(3)</td>
<td></td>
</tr>
<tr>
<td>Kabupaten (Municipality - urban areas)</td>
<td>1</td>
<td>8</td>
<td>322,355(3)</td>
<td></td>
</tr>
<tr>
<td>3. Kewedanaan (District - rural areas)</td>
<td>-</td>
<td>nd(2)</td>
<td>nd</td>
<td></td>
</tr>
<tr>
<td>Wilayah (District - urban areas)</td>
<td>3</td>
<td>nd</td>
<td>nd</td>
<td></td>
</tr>
<tr>
<td>4. Kecamatan (Sub-district - rural and urban areas)</td>
<td>16</td>
<td>544</td>
<td>46,924(3)</td>
<td></td>
</tr>
<tr>
<td>5. Desa (Rural Village)</td>
<td>104</td>
<td>nd</td>
<td>2,153(4)</td>
<td></td>
</tr>
<tr>
<td>Lingkungan (Urban Ward)</td>
<td>37</td>
<td>nd</td>
<td>36,007(4)</td>
<td></td>
</tr>
<tr>
<td>6. Rukun Kampung (Kampung Association - rural areas)</td>
<td>nd</td>
<td>nd</td>
<td>3-20 RT(4)</td>
<td></td>
</tr>
<tr>
<td>Rukun Warga (Kampung Association - urban areas)</td>
<td>nd</td>
<td>nd</td>
<td>nd</td>
<td></td>
</tr>
<tr>
<td>7. Rukun Tetangga (Neighbourhood Association)</td>
<td>nd</td>
<td>nd</td>
<td>24-199 Family Heads</td>
<td></td>
</tr>
</tbody>
</table>

(1) The usual second level in the administrative hierarchy, the Residency, has been excluded from this table as it appears to have little practical relevance in present-day East Java.

(2) nd - no data.

(3) All of East Java.

(4) Kotamadya Surabaya only.

Family registration is part of the population registration procedure administered within Surabaya by the Population Registration Division of the Municipality (Bagian Pendaftaran Penduduk, Kotamadya Surabaya). The basic raison d'etre of the system of population registration in Indonesia, of which the kartu keluarga is a small part, is the regulation whereby all persons aged 15 years and over are
required to become registered inhabitants of the particular area\(^{(1)}\) where they permanently reside, and obtain an identity card, kartu penduduk, which contains the name, address, place and date of birth, occupation, sex, thumb print, and photograph of each registered permanent resident.

Files containing copies of the kartu keluarga and the information on each kartu penduduk are held in the central office of the Bagian Pendaftaran Penduduk, and in each lingkungan office, although in some of the larger lingkungan the Kepala Rukun Warga (the Head of the Kampung Association) holds the file. Each Kepala Rukun Warga (Head of Neighbourhood Association) also maintains a register which lists all the permanent residents of that Rukun Tetangga, including the resident's name, address, sex, relationship to head of household, age and birthplace, and in the case of the head of household the resident's occupation. Each of these registers is required to be up to date and to do this the local officials also maintain registers of births (buku lahir), deaths (buku mati), arrivals (buku datang), and departures (buku pindah). Persons wishing to migrate permanently from their resident Rukun Tetangga are obliged to obtain permission from their local official in the form of a surat pindah which is lodged with officials in the place of destination, where the inmigrant must register and obtain a new kartu penduduk and complete a new kartu keluarga.

Because of the inconvenience, cost and time involved for the residents, and honorary administrators\(^{(2)}\) (unless, as is common, a charge\(^{(3)}\) in addition to the nominal official fee of Rp100 for registration, is requested), the degree to which the registered de

\(^{(1)}\) In Surabaya this means the particular Rukun Tetangga where they reside.

\(^{(2)}\) The officials on the lowest two rungs of the hierarchy (the Kepala Rukun Warga and Kepala Rukun Tetangga in urban areas) are unpaid officials.

\(^{(3)}\) The usual charge for obtaining a kartu penduduk in Surabaya is Rp 200-300 for each individual card which is valid for two years after the date of issue.
The jure population accurately approximates the de facto permanent population depends on the efficiency of the individual official. This is particularly true of birth, death, arrival and departure numbers which are understated more than permanent population totals which may be compared with census totals. This implies that the length of time a registration system has been in operation affects its relative accuracy, earlier systems tending to have a higher proportion of dead and already departed residents still registered, and a higher proportion of unregistered recent arrivals and births, than newer systems. One reason suggested by local residents for the under-reporting of infant deaths is that many government employees receive a child allowance, paid in rice, and if a child's death is not reported or the report delayed, the allowance is maintained.

Despite imperfections in the population registration system, it has inestimable value as a data source capable of providing an otherwise unobtainable overview of the demographic and socio-economic characteristics of the total population of Surabaya. The files of kartu keluarga, which provide details on the one card of a complete family, were the major data source for this registration survey as they provide a representative overview of the city population, both Surabayan and non-Surabayan born. The registers of permanent arrivals (buku datang) and temporary arrivals (buku tamu) used in the 1973 LEKNAS study were not used in this study. These registers provide details on the recent inmigrant population only. Because of the problems noted above, plus official pressure encouraging underestimation of the rate of urbanisation (resulting from the official closure of the city in 1970), the details these two files contain were regarded as a biased sample of the total inmigrant population.

From the end of December 1972 until mid-May 1973 a 0.75 per cent (1) random sample was made of the estimated 443,187 (2) family

---

(1) The smallest sampling fraction which provided a sample of family heads large enough to be statistically significant, and the largest sample that could be carried out in the time available.

(2) As of the end of December, 1972. Estimated from the 1971 census and population registration changes since then.
cards required to register completely the total permanent population
of Kotamadya Surabaya. To obtain a representative sample of the
population of each lingkungan and a geographically representative
coverage of the city, the random samplings was geographically
stratified by the estimated total number of family heads in each
lingkungan(1). At the end of December 1972, 419,144 family heads
had actually completed kartu keluarga, which represented 95 per cent
of the estimated total number of family heads in the city. The number
of kartu keluarga to be sampled was determined by the total estimated
number of family heads in the city, not from the actual number already
registered, since the former total represented a theoretically more
complete universe from which the sample should be drawn. By following
his procedure the sample size in a particular lingkungan was not
influenced by the completeness or incompleteness of registration
within that lingkungan. Although this approach eliminated bias in the
sample size between lingkungan, it was impossible to prevent sample
bias in favour of those who had registered as against those who had
not.

This procedure resulted in the detailed sampling of 3324
kartu keluarga in the course of the population registration survey.
These 3324 cards contained information about 11,431 individual
residents of the city, which represented a 0.7 per cent sample of the
city's estimated total population at the end of 1972. Each kartu
keluarga should contain the following details about the family head
and each family member:

i) Full name.
ii) Full address.
iii) Sex.
iv) Place of birth.
v) Date of birth.
vi) Relationship to head of family.
vii) Marital status.

(1) The five recently incorporated kecamatan have not yet been
subdivided into lingkungan; so for these areas the sample could
only be stratified by the estimated number of family heads in
each kecamatan.
viii) Nationality.
ix) Occupation.
x) Religion.
xii) Educational achievement.
xii) Place of last residence.
xiii) Date of arrival at present place of residence.
xiv) Date of first arrival in Surabaya Municipality.
xv) Other official documents in the resident's possession.

The information on religion and official documents was of no importance to this study, but all the other information was listed by kartu keluarga number for each of the individual 11,431 residents, whose names were entered on the 3324 kartu keluarga sampled.

Unfortunately, many of the cards were found to be incomplete. Educational achievement, date of arrival at present place of residence, and date of first arrival in Kotamadya Surabaya were found to be so incomplete they were not analysed. Nationality, marital status and relationship to head of family were used as checks on the internal consistency of the data. The relative significance of incomplete listings is indicated in Appendix Table 1.2. Data on place of birth, sex and date of birth were more complete; last place of residence data were usable only for family heads (80 per cent complete). Occupational data were most unsatisfactory particularly for family members, where it was not worth analysis, but it was almost 70 per cent complete for family heads and provided a picture of the socio-economic status of Surabaya's population.

The incompleteness of data on the kartu keluarga is a serious problem, but other questions about the registration data are more serious. For example, it is important to know the proportion of the population listed in the registration system, and the degree to which those listed are a representative sample of the de facto population of the city. The system of population registration in Surabaya was overhauled in 1970, and the total population was re-registered. As a result, the system does not contain many redundant cards remaining after the individual's death or departure, and generally the system appears more complete in Surabaya than in other cities of Java.
APPENDIX TABLE 1.2 - Sampled Kartu Keluarga with incomplete(1) data

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Family Head</th>
<th>Family Members</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Name</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Address</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Sex</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Place of birth</td>
<td>53</td>
<td>1.6</td>
<td>66</td>
</tr>
<tr>
<td>Place of last residence</td>
<td>654</td>
<td>19.7</td>
<td>2610</td>
</tr>
<tr>
<td>Occupation</td>
<td>1010</td>
<td>30.4</td>
<td>na</td>
</tr>
</tbody>
</table>

(1) 'Incomplete' refers either to individuals for which data were either not listed and if listed were inaccurate, or in the case of a place name impossible to locate.

(2) Data so incomplete that they were not analysed are indicated by 'na'.

Population re-registration in Bandung was not started until after 1970 and as a result re-registration in Surabaya was closer to completion when this survey began in late 1972. By the end of December 1972 the shortfall between the estimated total number of family heads requiring registration and the total number registered in Old Surabaya was estimated at 24,043 or 5.4 per cent. The shortfall in total population registered was estimated at 5.5 per cent. These were official estimates; however, their accuracy was dependent on the efficiency of the Kepala Lingkungan or Kepala R.W./R.T. Where the lingkungan offices issued the population registration cards, the proportion registered appeared to be higher than where the cards were issued by Kepala R.W. In one populous lingkungan where registration was the responsibility of Kepala R.W., 14 per cent of the estimated 42,713 family heads were not registered.

Problems associated with incomplete data and incomplete population registration are not as fundamental, however, as doubts about the 'representativeness' of those registered. In Surabaya the
only persons eligible to be registered on kartu keluarga and kartu penduduk are so-called *de jure* or 'permanent' residents. Temporary residents and seasonal migrants are deliberately excluded. Many Madurese inmigrants resident in Surabaya are excluded because of seasonal visits to their place of origin, though some hold two population registration cards, one from their home village in Madura and one from Surabaya Municipality. Residents who circulate between their home village and Surabaya are also excluded from registration on kartu keluarga. For example, many becak (pedicab) drivers live in the city for three to five weeks until they accumulate savings, return to their family in the desa (rural village) for five or six days, and then return to the city once again. In some cases the cycle continues for years. During this period the becak driver may spend more time resident in Surabaya than in his home village, yet at no stage will he qualify as an official resident of the city.

The exclusion of seasonal and circular migrants from the registration data is a serious shortcoming. Their exclusion is a direct consequence of an attempt to close the city to temporary inmigrants in February 1970. At that time the Mayor ordered that the only inmigrants who could be immediately issued with population registration cards on request were:

1) Transferred members of the armed forces.
2) Government officials who have been moved.
3) Students or schoolchildren, and
4) Children of permanent Surabayan residents on reaching adulthood.

Other new arrivals were required to live continuously in the city for six months, obtain a permanent address and an occupation before they could register as permanent residents. Only after these requirements were met could they obtain a kartu penduduk and complete a kartu keluarga. Seasonal inmigrants and circular migrants were officially designated as 'pseudo-inmigrants' who could be registered only as temporary residents until they met the three requirements. Many of these people would never be in a position to satisfy the official criteria, but they are nevertheless *de facto* Surabayans. This policy
has not reduced inmigrants to Surabaya, but it has temporarily reduced official estimates of the rate of population growth.

The exclusion of seasonal and circular migrants from permanent registration and their omission from kartu keluarga means this survey of population registration data provides a biased sample of the city's de facto population. Some observers (Hugo, 1978: 11; McDonald, personal communication) consider that the 1971 census enumeration was also biased in favour of 'permanent' migrants as against seasonal or circular migrants in urban areas. One reason for the sample bias was the combined de jure/ de facto basis of the 1971 enumeration which appears to have caused confusion among enumerators (Hugo, 1978: 11). Another reason for the underenumeration of 'temporary residents' was the widespread practice among circular and temporary migrants in urban areas of returning to their village for the census. Data from the 1971 census revealed a smaller than expected proportion of males in the young adult age groups in urban areas, a finding consistent with suggestions of bias against short-term migrants, since a significant proportion of seasonal and circular migrants are young males (Hugo, 1978: 109-14, 134). Clearly, sample bias is not a problem confined to population registration data in Indonesia, and provides the limitations of the data are taken into careful consideration in any analysis, it provides an invaluable source of information on birthplace and last place of residence unobtainable from any other source. These data were essential in establishing the most suitable sample methodology for the enumeration and questionnaire surveys undertaken in this study.
HOUSEHOLD ENUMERATION SURVEY AND QUESTIONNAIRE SURVEY OF RECENT (1969-74) AND SENIOR (PRE-1969) IMMIGRANTS

The questionnaire survey which provided the bulk of the detailed data on which this study is based consisted of two major parts. A household enumeration survey, and a questionnaire survey of individual senior and recent immigrants resident in Old Surabaya in 1974.

The purpose of the enumeration survey was to identify the lifetime immigrant population within the 27 Rukun Tetangga (RT) selected by the sample design (Appendix 1.5). After the immigrant population had been identified, a sample of senior and recent individual immigrants were selected. Individual immigrants were interviewed in the second stage of the questionnaire survey. In order to identify the sub-populations which could be individually sampled and interviewed, the household enumeration survey had to provide data on three subjects. First, the household enumeration survey had to enumerate the de facto population of the selected sub-areas of the city. Second, it had to obtain information on the birthplace of the population enumerated, in order to differentiate the Surabayan-born segment of the population from the lifetime immigrant population. Third, it had to obtain information on the age of first entry to Surabaya for each lifetime immigrant, so that child migrants (aged less than 15 at time of migration), whose knowledge of the reasons and background of the move to Surabaya would be seriously restricted, could be eliminated from the questionnaire survey.

The first step taken by enumerators on entering a selected enumeration area was to identify in the field the boundaries of that area. As the RT was a conveniently-sized administrative unit to act as the basic unit of enumeration (refer Appendix Table 1.1); and since it had the added advantage that it could be readily identified in the field, the RT was chosen as the unit of enumeration. On first

(1) The reasons for limiting the enumeration and questionnaire surveys to Old Surabaya are elaborated in Appendix 1.5.
entering a selected RT, the enumerators accompanied the Kepala RT on an inspection of the boundaries of his RT. This overcame the problem of underenumeration in peripheral areas arising from uncertainty over boundaries, a problem which arose in the 1971 census enumeration where census enumeration blocks, not readily identified in the field, were chosen as the basic unit of enumeration.

The enumerators' second step was to visit each household and administer Questionnaire Form A (refer Appendix 1.4) to the household head. Enumerators were requested to insert on Form A the address of the household and to map adjoining buildings and households (including temporary structures which acted as places of residence for households). The purpose of mapping all adjoining structures was to provide a check on the completeness of the enumeration. It was also to ensure that residents of non-permanent or mobile structures, usually sited in the selected RT, were included in the enumeration. Enumerators inserted the following information about each household member on Form A:

1) Name
2) Sex
3) Relationship to household head
4) Relationship to family head
5) Marital status
6) Year of birth
7) Age last birthday
8) Place of birth (in as much detail as possible)

(1) Households were defined as the usual place of residence of persons who cooked or ate from the same kitchen or eating place and resided together. The household could consist of persons living together as a family in a permanent structure or, if a household's usual place of residence (that is for sleeping and eating) was a footpath or a becak (pedicab) in the RT being enumerated, then this also qualified as a household. It was hoped that the inclusion of these temporary structures would result in an enumeration of the total de facto population of each RT, an enumeration which would include permanent, seasonal and circular immigrants. Persons temporarily visiting other places on social calls and children temporarily away at school were included as members of a household provided they usually ate or slept in that household. Persons visiting or working in a particular household who usually resided elsewhere, were not included as members of that household.
ix) Whether place of birth was a town or a village
x) Year of first entry to Surabaya (in order to reside)
xii) Number of years ago first entered Surabaya (in order to reside)
xii) Age at first entry.

The information included on Form A was used to compile a list of the total population of each selected RT. These enumerated populations were then sub-divided into five groups:

i) Surabayan-born residents;

ii) Lifetime inmigrants who entered Surabaya for the first time before 1969 at the age of 15 years or more (senior adult inmigrants);

iii) Lifetime inmigrants who entered Surabaya for the first time before 1969 at the age of less than 15 years (senior child inmigrants);

iv) Lifetime inmigrants who entered Surabaya for the first time in 1969 or since, at the age of 15 years or more (recent adult inmigrants);

v) Lifetime inmigrants who entered Surabaya for the first time in 1969 or since, at the age of less than 15 years (recent child inmigrants).

The senior (pre-1969) adult inmigrants (aged at least 15 at time of migration to Surabaya) and the recent (1969-74) adult inmigrants were then viewed as two sub-populations representative of all adult inmigrants resident in Old Surabaya in 1974. These sub-populations formed the sample frame for the detailed questionnaire survey of senior and recent inmigrants.

Apart from providing the sub-populations for the second part of the questionnaire survey, the household enumeration survey was an invaluable source of data on birthplace, duration of residence and age at first entry for 3944 lifetime inmigrants in Surabaya. It also provided basic age and sex data on 4053 Surabayan-born residents. Overall, the household enumeration survey obtained data on 1585 households and 7997 individuals.
Systematic sampling beginning with a randomly chosen individual on the enumeration list was used to select the individual inmigrants to be interviewed in each RT. A 25 per cent sample was taken from the senior adult inmigrant sub-population, since the registration survey indicated that this sampling fraction should select between 300 and 400 senior inmigrants, the maximum which could be interviewed with the resources available. The first respondent was randomly selected from among the first four on the enumerator's list with the aid of a random numbers table. Every fourth individual on the list was then selected for an interview until the list was completed. This process was repeated by each interviewer in each of the 27 selected RT. An identical process was used to select the sample of recent adult inmigrants to be interviewed, except that in this instance a sampling fraction of 50 per cent was used.

The larger sampling fraction among recent inmigrants was chosen to provide approximately the same sized sample of recent and senior inmigrants, because if equal variance for the two sub-populations is assumed, sampling error will depend on sample size. The registration survey indicated there were approximately twice as many senior adult inmigrants in the total lifetime inmigrant population as recent adult inmigrants. Three hundred and ninety-three senior adult inmigrants and 420 recent adult inmigrants were interviewed as a result of these sampling methods. On return from the field it was realised that different sampling fractions complicated the analysis of migration trends over time, and in order to eliminate this problem and to minimise the huge task of coding all the questionnaires, it was decided to use only half of the recent adult inmigrant interview schedules and reduce the sampling fraction to 25 per cent of the enumerated population. Therefore this study is based on detailed interviews with 25 per cent of the senior and recent adult inmigrants enumerated within 27 selected RT in Old Surabaya during 1974.

Questionnaires B and C were administered to selected senior and recent inmigrants, respectively. Time- and place-specific information was obtained about the demographic, socio-economic and occupational characteristics of each inmigrant.
senior adult inmigrants was briefer than Questionnaire C, and concentrated more on the post-arrival changes experienced by inmigrants. Questionnaire C contained more questions about conditions in the previous place of residence and probed the motives of migrants. Both questionnaires were long and detailed, but rarely was the entire questionnaire relevant to a particular respondent. The administration of Questionnaire B took approximately an hour, and Questionnaire C approximately an hour and a half.

Local interviewers, all of whom were senior undergraduate students at either Airlangga University or Gadjah Mada University, administered all questionnaires (A, B, and C) after training and several trial runs. During the initial survey in the Gubeng area, I accompanied each interviewer to at least one interview. During the remainder of the survey I accompanied the interviewer on three or more occasions. The interviewer conducted the actual interview alone, however, since my presence hampered rapport between respondent and interviewer, and produced stilted answers. Interviews were conducted in Bahasa Indonesia, but the interviewers were also native speakers of Javanese, Madurese, Chinese or Arabic and where necessary, translations or explanations were made in these languages.
APPENDIX 1.4

Questionnaires Use in the Enumeration Survey and the Questionnaire Surveys of Senior (Pre-1969) and Recent (1969-74) Immigrants with Translated Abstracts
QUESTIONNAIRE A

ADMINISTERED TO ALL HOUSEHOLD HEADS
IN EACH ENUMERATION UNIT

(For an abstract of Questionnaire A refer to Appendix 1.3)
<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>(Masukkan Nomor Daftar Pertanyaan Rumah Tangga Ini dalam Peta Induk dan dalam Laporan Perkembangan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dimana alamat rumah tangga ini? Jalan/Gang/Nomor:</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Ada berapa rumah tangga didalam bangunan ini? Berapa:</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Adakah bangunan lain dibelakang atau disamping bangunan ini yang tidak termasuk dalam peta induk?</td>
<td>Ya / Tidak</td>
</tr>
<tr>
<td>4.</td>
<td>Adakah tukang becak atau gelandangan yang biasanya tinggal di sekitar bangunan ini? Nama:</td>
<td>Ya / Tidak</td>
</tr>
<tr>
<td>5.</td>
<td>Daftarkan semua anggota dari rumah tangga ini; mulai dari anda sendiri sebagai kepala rumah tangga, lalu isteri dan anak, baru komedian anggota rumah tangga yang lain.</td>
<td></td>
</tr>
</tbody>
</table>

**CATATAN:**


2) Dalam Daftar Ini Harus Terdaftar Semua Orang yang Biasanya Berdiam (tidak dan Minum) di Rumah Tertangga Ini dan Tidak Hanya Makan Bersamaan Apal Rukun di Rumah Tertangga Ini.
ABSTRACT OF QUESTIONNAIRE B
ADMINISTERED TO SENIOR (PRE-1969) IMMIGRANTS

I SAMPLE REQUIREMENTS

Address, born in Surabaya Municipality, when first came to Surabaya to live, age last birthday, age at time of migration, usually reside in this RT.

II PERSONAL DETAILS OF RESPONDENT

A. At Time of Survey
   - age last birthday
   - number of siblings alive and dead
   - sex and marital status
   - number of ever born children
   - level of educational attainment
   - ethnic origin
   - language used in the home
   - religion
   - occupational details: activity, status, employer, workforce in enterprise of employment, system of salary payment, average income cash and goods, if not working weeks spent looking for work
   - housing details

B. Birthplace of Respondent
   - place of birth: details
   - urban/rural

C. Migration History
   - particulars of each migration (of at least 6 months duration) made by respondent from birth until first entry to Surabaya
   - details included: year of move, age at move, duration of residence, features of place of residence and reasons for move

D. General and Personal Situation in Last Place of Residence
   - location of last place of residence
   - problems prompting move
   - occupational details in last place of residence: activity, status, employer, workforce in enterprise of employment
- first member of household to move to Surabaya, reason for move
- reasons for respondent deciding to move to Surabaya
- reasons for leaving previous place of residence
- reasons for choosing Surabaya as destination
- job promised prior to migration?
- accommodation promised prior to migration?
- level of educational attainment at time of departure
- marital status
- attitudes toward situation in previous place or residence
- assessment of own economic status in previous place of residence

E. Situation on Arrival in Surabaya

- job on arrival same as that engaged in at time of survey
- activity and status of occupation on arrival
- income from all occupations on arrival compared to income from all occupations prior to migration
- housing details on arrival: location, advantages and disadvantages
- history/changes in that first place of residence since colonial times

F. Changes in Personal Situation of Respondent Since First Arrival

- number of times moved
- ever lived and worked outside Surabaya since first arrival, details of migrations outside Surabaya
- place of origin: location, visits, timing of visits, costs, reasons for visits, family members resident in place of origin, feel member of society in place of origin?
- sending or taking of gifts/money to place of origin
- ownership of land or house by respondent in place of origin
- number of persons dependant on income of respondent at time of survey
- ever plan to return to place of origin to live?
- help to other immigrants
- intended duration of residence in Surabaya
- self-assessment of degree of permanency in Surabaya
- official documents in possession of respondent
- comparison of standard of living in previous place of residence and Surabaya
- advantages and disadvantages of life in Surabaya
- assimilation/acculturation to urban life
- personal possessions, debts, accumulation of savings
- activities and action space in Surabaya
- attitudes towards those living permanently in rural areas
- level of educational attainment required for children
**Kecamatan** : ..................... R.W. : .......... Kode Urut Daerah :  
**Ling./Desa** : ..................... R.T. : .......... Questionnaire:

D A F T A R B - ORANG YANG SUDAH LAMA NASUK SURABAYA.

I - KOPERLUNGAN SAMPLE.

1. Alamat Responden : Jalan/Gang/Hormor : .................................................

2. Nomor urut responden dari Daftar A : ----

3. Apakah anda lahir dalam Kotamadya Surabaya (batas pada saat ini) ?
   a. Ya (----)
   b. Tidak (----)

(LALAU JAWABAN TERSUBUT ALALAH "Ya" JANGAN DILANJUTKAN QUESTIONNAIRE INI)

4. Kapan anda masuk Kotamadya Surabaya untuk pertama kali untuk berdiam disini ?
   a. Tahun : ________
   b. Jualah tahun yang lalu : ________

(LALAU JAWABAN 4-b ADALAH 5 TAHUN ATAU KURANG DARI 5 TAHUN YANG LALU
   JANGAN DILANJUTKAN QUESTIONNAIRE INI DAN MASUKKAN DAFTAR C).

5. Pada hari ulang tahun terakhir berapakah umur anda ? Tahun : ________

   Tahun : ________

(LALAU JAWABAN 6 ADALAH 15 TAHUN ATAU KURANG DARI 15 TAHUN YANG LALU
   JANGAN DILANJUTKAN QUESTIONNAIRE INI DAN MASUKKAN DAFTAR C).

7. Apakah anda biasanya berdiam (tidur dan hidup) di Rumah Tetangga ini dan
tidak hanya selalu berkerja atau bekerja di R.T. ini ?
   a. Ya (----)
   b. Tidak (----)

(LALAU JAWABAN 7 ALALAH "Tidak" JANGAN DILANJUTKAN QUESTIONNAIRE INI).

C. TATAH P. JAWABAN:
   UAH NASIONAL UTAMA PERTAMA KALI NASUK K.M.S. : - Tahun : _______
   TAHUN WAKTU NASIONAL NASUK K.M.S. UNTUK KURTAHA KALI: Tahun : _______
   TAHUN LAHIR RESPONDEN : - Desa/Xota : .................................
   TAHUN TINGGAL TERAHIT SEBELUM RESPONDEN NASUK K.M.S. : - Desa/Xota : .................................

Tanda tangan responden : .................................
Tanda tangan enumerator : .................................

Jam mulai : ............. Jam selesai : ............. Tanggal:.............
Dokumentasi Dari Responden (Orang yang Sudah Lalu Makan)

1. ii. UNTUK (SAAT INI)
   
   1. a. Pada hari ulang tahun terakhir berapakah umur anda? Tahun 
   
      (lihat Daftar A) 
   
   b. Kakak anda berapa orang? 
      (Yang pernah lahir) 
      (Yang masih hidup) 
      (Yang sudah meninggal) 
   
   c. Kakak anda yang masih hidup tinggal dimana? 
      (Berapa orang) 
      (Tinggal di rumah ini) 
      (Tinggal di rumah lain di K.M.S.) 
      (Diluar K.M.S. ditempat responden dulu) 
      (Ditempat lain di luar K.M.S.) 
   
   d. Adik anda berapa orang? 
      (Yang pernah lahir) 
      (Yang masih hidup) 
      (Yang sudah meninggal) 
   
   e. Adik anda yang masih hidup tinggal dimana? 
      (Berapa orang) 
      (Tinggal di rumah ini) 
      (Tinggal di rumah lain di K.M.S.) 
      (Diluar K.M.S. ditempat responden dulu) 
      (Ditempat lain di luar K.M.S.) 
   
2. a. Jenis kelamin responden: 
      
      Laki - laki 1 (..) 
      Perempuan 2 (..) 
      
   b. Apakah anda sudah menikah? 
      
      Belum pernah nikah (..) 
      Nikah (..) 
      Duda mati (..) 
      Janda mati (..) 
   
   (KELAMIN JAWABAN 2-6 ADALAH "Belum pernah nikah", LAMPUTAK KE PERTANYAAN NOMOR 4). 
   
   c. Apakah perkawinan ini yang pertama kali? Ya 1 (..) 
      
   d. Kapan anda menikah dengan istri/suami yang sekarang? Tahun 
   
   e. Berapa umur istri/suami yang sekarang (H.U.T. terakhir)? Tahun 
   
   f. Istri/suami anda tinggal dimana? 
      
      Tinggal bersama disini 1 (..) 
      Tinggal terpisah di K.M.S. 2 (..) 
      Tinggal terpisah diluar K.M.S. 3 (..) 
      Sudah meninggal 4 (..) 
   
3. a. Berapa jumlah anak anda? (Jumlah yang pernah lahir), Orang 
   
   b. Berapa anak anda yang sudah meninggal, Orang 
   
   c. Sobutken anak2 anda yang pernah lahir menurut urutan di bawah ini:

<table>
<thead>
<tr>
<th>No.</th>
<th>URUT</th>
<th>TAHUN Lahir</th>
<th>KELAMIN</th>
<th>TEMPAT LAHIR</th>
<th>TEMPAT TINGGAL SE-KARANG</th>
<th>ANAK YANG MENINGGAL</th>
<th>MEMURUT UMUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Sebutkan jenis sekolah dan tingkat pendidikan tertinggi yang anda capai:

<table>
<thead>
<tr>
<th>Jenis dan tingkat:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

5.a. Dimana anda, isteri/suami anda, Ibu anda dan ayah anda dilahirkan:

<table>
<thead>
<tr>
<th>Desa</th>
<th>Kecamatan</th>
<th>Kabupaten</th>
<th>Kodya</th>
<th>Prop.</th>
<th>Lain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.b. Anda merasa berasal dari mana ? (daerah dan suku)

5.c. Isteri/Suami anda merasa berasal dari mana ?

5.d. Bahasa daerah apakah yang anda pergunakan sehari-hari dalam usaha?

6. Apakah agama atau kepercayaan anda?

<table>
<thead>
<tr>
<th>Ilyan</th>
<th>Katholik</th>
<th>Protestan</th>
<th>Budha</th>
<th>Hindu</th>
<th>Khong Hoe Coe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(...)</td>
<td>2(...)</td>
<td>3(...)</td>
<td>4(...)</td>
<td>5(...)</td>
<td>6(...)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ____________________________

7.a. Apakah jenis pekerjaan utama anda pada waktu ini ?

<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.b. Apakah jenis pekerjaan lain yang anda punyai ?

<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Kalau jawaban 7-a dan 7-b sama, ARAAH:
1) "Pekerjaan" atau "nyonya rumah saja", LAMUJUKI PADA NO A-9.
2) "(Lain punya pekerjaan) LAMUJUKI KE PUYANAN NOMOR A-9-a)."

c. Untuk siapa anda bekerja ? Pekerjaan Utama:

<table>
<thead>
<tr>
<th>(nama perusahaan/kantor)</th>
</tr>
</thead>
</table>

7.c. Berapa jumlah orang yang bekerja untuk perusahaan/kantor itu ?

<table>
<thead>
<tr>
<th>(pekerjaan utama saja)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responden/Keluarga responden saja</td>
</tr>
<tr>
<td>Keluarga pesilik dan responden</td>
</tr>
<tr>
<td>Keluarga pesilik dan kurang dari 5 orang lain</td>
</tr>
<tr>
<td>Keluarga pesilik dan 5 - 10 orang lain</td>
</tr>
<tr>
<td>Lebih dari 10 orang yang bukan keluarga pesilik</td>
</tr>
</tbody>
</table>

7.d. Berapa hari/pekerjaan anda dalam satu minggu yang lalu ?

<table>
<thead>
<tr>
<th>Hari</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

7.e. Bagaimana sistem penggajian/penghasilan anda ?

<table>
<thead>
<tr>
<th>Hari</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

7.f. Durasi masa pekerjaan anda pada waktu di atas (7-f) ?

a. Yang tunai ____________________________
(Kalau penghasilan dalam bentuk barang, harap dinilai dalam rupiah
dengan memakai harga setempat). b. Barang dalam bentuk

- Tempat tinggal 1 (••)
- Makanan makan 2 (••)
- Beras dari kantor/tempat kerja 3 (••)
- Barang lain dari kantor/tempat kerja 4 (••)

c. Jumlah harga barang Rp. ..............................................

5. Sudah berapa lama anda menggang pekerjaan yang sekarang ini? (pokoknjaan utama saja)

- Tahun ..................................
- Bulan ..................................

6. Berapa penghasilan anda rata-rata dari pekerjaan lain untuk waktu yang sama yang tertulis diatas (7-f)?

a. Uang tunai Rp. ..............................................

b. Jumlah harga barang Rp. ..............................................

7. Apakah jenis tempat tinggal anda pada waktu sekarang?

- Rumah biasa 1 (••)
- Hotel/Lamun 2 (••)
- Gubuk 3 (••)
- Bocak 4 (••)
- Gergong K.A. 5 (••)

Kalau lain, harap ditulis ..............................................

8. Apakah jenis tempat tinggal anda pada waktu sekarang?

- Milik sendiri 1 (••)
- Milik kepala rumah tangga 2 (••)
- Sewa 3 (••)
- Kontrak 4 (••)
- Rumah atau instansi pemerintah/Swasta - sewa 5 (••)
- Rumah atau instansi pemerintah/Swasta - gratis 6 (••)
- Milik orang lain-gratis 7 (••)

Kalau lain, harap ditulis ..............................................

9. Bagaimana status tempat tinggal anda?

- Milik sendiri 1 (••)
- Milik kepala rumah tangga 2 (••)
- Sewa 3 (••)
- Kontrak 4 (••)
- Rumah atau instansi pemerintah/Swasta - sewa 5 (••)
- Rumah atau instansi pemerintah/Swasta - gratis 6 (••)
- Milik orang lain-gratis 7 (••)

Kalau lain, harap ditulis ..............................................

10. Sertifikat apa saja yang diberikan oleh Kotamadya kepada pemilik atas rumah ini?

- Agendom tanah 1 (••)
- Agendom bangunan 2 (••)
- S.I.P. (Surat izin penempatan) 3 (••)
- Tidak ada 4 (••)

Kalau lain, harap ditulis ..............................................

11. Jika anda mempunyai, berapa anda membayar per bulan untuk:

a. Pemupukan : Rp. ..............................................

b. Makanan dan pemanasan : Rp. ..............................................

c. Kalau anda membayar berapa per bulan Rp. ..............................................

12. Jika anda mempunyai, berapa anda membayar per bulan untuk:

a. Pemupukan : Rp. ..............................................

b. Makanan : Rp. ..............................................

13. Jika anda mempunyai, berapa anda membayar per bulannya untuk:

a. Pemupukan : Rp. ..............................................

b. Makanan : Rp. ..............................................

14. Siapa pemilik tanah bangunan ini?

Kepala rumah tangga 1 (••)
- Pemilik rumah 2 (••)
- Kantor 3 (••)
- Kotapraja 4 (••)
- Instansi pemerintah lain 5 (••)

Kalau lain, harap ditulis ..............................................
15. Jenis bahan bangunan untuk:
   a) Dinding Laut
      Bambu 1(***), Kayu 2(***), Batu-bata 3(***), Beton 4(***).
   b) Lantai
      Tanah 1(***), Ubin 2(***), Sosora 3(***), Kayu 4(***).
   c) Atap
      Genteng 1(***), Song 2(***), Plastik 3(***), Kayu 4(***).

16. Apakah ada kamar mandi dalam rumah ini?  
   Ya 1(***), Tidak 2(***).

17. Mengapa anda pilih tempat tinggal ini? 
   (misalnya: perumahan murah, tersedianya tanah, tempat tinggal kauarg/taman, dokter tempat kerja, lain2)

B. TEMPAT LAHIR.

1. Di mana tempat lahir anda?  Desa 1(***), Kec. 2(***), Kab. 3(***), Prop. 4(***), Lain 5(***).

2. Apakah tempat kelahiran anda tempat yang sama dimana orang tua anda berasal? 
   Ya 1(***), Tidak 2(***).

3. Kalau tidak, dimana tempat tinggal biasa orang tua anda lahir?  Desa 1(***), Kec. 2(***), Kab. 3(***), Prop. 4(***), Lain 5(***).

3. Apakah definsi tempat yang biasa orang tua anda tinggal? 
   (Penerangan listrik di rumah? 1(***); Rumah sakit/poliklinik 2(***); Sekolah Negeri 3(***); Bank Umum 4(***); Bioskop 5(***); Toserba 6(***); Kantor Telp dan Telegraf dan Pos 7(***); Kantor pemerintah 8(***); Kantor pemerintah kecamatan 9(***); Jumlah __ Kota __ Desa __

C. SEJARAH PERPINDAHAN.

1. a. Ingatlah tempat tinggal biasa orang tua anda kembali ke tempat tinggal selama 6 bulan atau lebih?  Tahun ___.

   Umur anda ___.

   b. Berapa lama anda sudah tinggal di tempat tinggal tersebut kembali ke tempat tinggal?  Tahun ___.

   Bulan ___.

   c. Komangkah anda pindah?  Desa ___, Kec. ___, Kab. ___, Kodya ___, Prop ___, Lain ___.

   d. Apakah definsi tempat tinggal baru?  (Listrik 1(***); RS/P 2(***); SMP 3(***); Bank 4(***); Bioskop 5(***); Toserba 6(***); Telp dan Telegraf dan Pos 7(***); Kol./Pong 8(***); Kant. Kb 9(***).  Jumlah ___.

   Desa 1(***), Kota 2(***).
502

5

e. Siapa yang ikut serta dengan anda?
- Tidak seorangpun 1(*)
- Suami/isteri/anak 2(*)
- Ayah/Ibu 3(*)
- Kakak/adik 4(*)
- Teman2 dari desa 5(*)

Kalau lain, harap ditulis

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penerik):

Pemindahan nomor 2.

2. a. Kapan anda pindah dari desa/kota (0-1-0)...
ko kota/desa lain dimana anda tinggal selama enam bulan atau lebih?

   Tahun  
   Umur anda  

b. Kategori anda pindah berapa lama anda sudah tinggal disana (0-1-0)?

   Tahun  
   Bulan  

c. Kapan anda pindah? Desa  
   Kab.  
   Kota  
   Prop.  

   Lain  

d. Apakah definisi tempat tinggal baru: Desa/kota/pedesaan?
   Lintas 1(*); RS/P 2(*); SMP 3(*); SMK 4(*); Dinas 5(*); Tempat
   tambahan 6(*); Telp dan Telepon dan Pos 7(*); Go. 8(*); Kantor, 9(*)

   Desa 1(*)
   Kota 2(*)

   Jumlah  

e. Siapa yang ikut serta dengan anda?
   Tidak seorangpun 1(*)
   Suami/isteri/anak 2(*)
   Ayah/Ibu 3(*)
   Kakak/adik 4(*)
   Teman2 dari desa 5(*)

Kalau lain, harap ditulis

(DAPILAH LEBIH SAMPIL RESPONDEH MASUK KOTAK KUNING SURABAYA UNTUK PERTAMA KALI).
Porpindahan nomor

3. a. Kapankah anda pindah dari desa/kota tersebut tadi
toko desa/kota lain di mana anda tinggal selama 6 bulan atau lebih?
   
   Tahun
   Umur anda

b. Kotika anda pindah, berapa lama anda sudah tinggal disana?
   
   Tahun
   Bulan

c. Komakah anda pindah? Desa _______ Kota ____________

Kab. _______ Kodya _______ Prop. _______ Lain _______

d. Apakah definisi tempat tinggal baru: desa/podacan atau kota? (Listrik 1();
   RS/P 2(); SHP 3(); Bank 4(); Bioskop 5(); Toserba 6(); Telp dan Telg
   dan Pos 7(); Gel./Pong 8(); Kant.Kb. 9();

Desa 1()
Jumlah Kota 2()

 e. Siapa yang ikut serta dengan anda?

Tidak seorangpun 1();
Suami/istri/anak2 2();
Ayah/Ibu 3();
Kakak/Adik 4();
Teman2 dari desa 5();

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penarik):

(DAFTARLAH TERUS SAMPAI RESPONDEN MASUK KOTAMADYA SURABAYA UNTUK PERTAMA KALI)
1. Dimana kediaman anda terakhir (untuk selama 6 bulan atau lebih) sebelum anda pindah ke Surabaya untuk pertama kali? (lihat bagian C) Dosa : ....................................
   Kec. ......................................
   Kab. ......................................
   Prop. ......................................
   Lain2 ......................................

2. Apakah ada kesulitan berar di desa / kota anda mengetukn untuk meninggalkan tempat tinggal itu? Banjir 1(••)
   Bahaya kilaparan 2(••)
   Kurang cukup tanah 3(••)
   Banjark penganguran 4(••)
   Soal pribadi keluarga 5(••)
   Iklim kurang panjang 6(••)
Lain2 : ......................................

Kalau lain, harap ditulis

3. a. Selama 6 bulan sebelum anda pindah ke Surabaya untuk pertama kali adakah keluarga lain yang juga meninggalkan desa/kota anda?
   a. Pindah dari tempat itu.
      Tidak ada keluarga lain 1(••)
      Sedikit keluarga lain (0-5) 2(••)
      Banyak keluarga lain (6-10) 3(••)
      Banyak sekali keluarga lain (11+) 4(••)
   b. Keluarga banyak orang pindah, mengapa?
      a. Menurut pendidikat anda dari golongan manakah orang yang meninggalkan desa/kota anda?
         Orang yang berada 1(••)
         Orang yang tidak mampu 2(••)
         Orang yang tidak punya tanah 3(••)
         Orang yang berpendidikan 4(••)
         Pemuda / Pemudi 5(••)
   b. Kalau lain, harap ditulis

4. a. Apakah jenis pekerjaan utama anda sebelum anda meninggalkan desa/kota dulu untuk ke Surabaya?
   Bidang ................................. Status .................................
   b. Apakah jenis pekerjaan lain yang anda punay pada waktu itu?
      (Kedua) Bidang Status .................................
      (Ketiga) Bidang Status .................................

(KALAU JAWABAN D-3-a dan D-4-b ADALAH :
  i) "Bososoklah atau " seorang nyonya rumah saja", LANJUTKAN KE PERTANYAAN NOMOR D-5.
  ii) "tidak punya pekerjaan", LANJUTKAN KE PERTANYAAN NOMOR E-4.
   o. Untuk siapa anda bekerja pada waktu itu? (noma perusahaan atau kantor) Pekerjaan Utama;

<table>
<thead>
<tr>
<th>Respons/pensiun responden saja</th>
<th>1(••)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keluarga pemilikan dan responden</td>
<td>2(••)</td>
</tr>
<tr>
<td>Keluarga pemilikan dan kurang dari 5 orang lain</td>
<td>3(••)</td>
</tr>
<tr>
<td>Keluarga pemilikan dan 5-10 orang lain</td>
<td>4(••)</td>
</tr>
<tr>
<td>Lebih dari 10 orang yang bukan keluarga pemilikan</td>
<td>5(••)</td>
</tr>
</tbody>
</table>

Kalau lain, harap dites.

5.a. Siapa orang pertama dari rumah tangga anda yang pindah ke Surabaya?

<table>
<thead>
<tr>
<th>Responden 1(••)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Istri/Suami 2(••)</td>
</tr>
<tr>
<td>Anak 3(••)</td>
</tr>
<tr>
<td>Ayah 4(••)</td>
</tr>
<tr>
<td>Ibu 5(••)</td>
</tr>
<tr>
<td>Kakak 6(••)</td>
</tr>
<tr>
<td>Adik 7(••)</td>
</tr>
</tbody>
</table>

Kalau lain, harap dites.

b. Mengapa orang ini (5.a) yang pertama pindah?

o. Kalau anda hanya mengikuti salah satu anggota dari rumah tangga anda ke Surabaya, apakah anda masih akan pindah kalau orang tersebut tidak datang?

Ya 1(••)
Tidak 2(••)


<table>
<thead>
<tr>
<th>Alasan Utama:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alasan Kedua:</td>
</tr>
<tr>
<td>Alasan Ketiga:</td>
</tr>
</tbody>
</table>

b. Mengapa anda meninggalkan desa/kota dulu? (Faktor pendorong):

c. Mengapa anda memilih kota Surabaya sebagai tempat tujuan anda? (Faktor pendorong)

d. Kalau anda sudah memutuskan untuk pindah dari tempat tinggal di Surabaya karena sesuatu hal, apakah anda tetap pindah dari desa/kota anda?

Ya 1(••)
Tidak 2(••)

o. Kalau ya, misalnya komentar?

f. Mengapa anda tidak mau pindah ke Ibukota Propinsi wilayah anda?

(Kalau bukan dari Jawa Timur)

g. Mengapa anda tidak pindah ke Jakarta?
7. Waktu anda pindah, apakah terutama karena mau meninggalkan keadaan didesa/kota dulu atau karena anda ingin tinggal di Surabaya?

<table>
<thead>
<tr>
<th>Preferensi</th>
<th>Uraian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanya karena mau meninggalkan desa/kota dulu</td>
<td>1(••)</td>
</tr>
<tr>
<td>Terutama karena mau meninggalkan desa/kota dulu tetapi juga karena ingin tinggal di Surabaya</td>
<td>2(••)</td>
</tr>
<tr>
<td>Hanya karena ingin tinggal di Surabaya</td>
<td>3(••)</td>
</tr>
</tbody>
</table>

8.a. Adakah orang atau perusahaan/kantor yang menjanjikan pekerjaan kepada anda di Surabaya sebelum anda meninggalkan desa/kota dulu?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Tidak</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

8.b. Kalau ya, siapa?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakak yang sudah tinggal di Surabaya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Keluarga lain yang sudah tinggal di Surabaya</td>
<td>2(••)</td>
</tr>
<tr>
<td>Teman dari tempat tinggal dulu anda yang sudah tinggal di Surabaya</td>
<td>3(••)</td>
</tr>
<tr>
<td>Perusahaan/kantor di Surabaya</td>
<td>4(••)</td>
</tr>
</tbody>
</table>

8.c. Apakah orang itu masih tersedia waktu anda datang?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Tidak</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

8.d. Apakah orang itu membantu kepindahan anda ke Surabaya?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Tidak</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

9.a. Sebelum anda pindah apakah anda diberi janji bahwa anda akan mendapat tempat tinggal di Surabaya?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Tidak</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

9.b. Kalau ya, oleh siapa?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakak yang sudah tinggal di Surabaya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Keluarga lain yang sudah tinggal di Surabaya</td>
<td>2(••)</td>
</tr>
<tr>
<td>Teman dari tempat tinggal dulu anda yang sudah tinggal di Surabaya</td>
<td>3(••)</td>
</tr>
<tr>
<td>Perusahaan/kantor di Surabaya</td>
<td>4(••)</td>
</tr>
</tbody>
</table>

9.c. Apakah tempat tinggal itu masih tersedia waktu anda tiba di Surabaya?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ya</td>
<td>1(••)</td>
</tr>
<tr>
<td>Tidak</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

10. Sobutkan jenis sekolah dan tingkat pendidikan tertinggi yang anda capai sebelum masuk ke Surabaya untuk pertama kali.

Jenis dan tingkat:

Kalau terakhir yang andaocolonikan: ____________________________

11. Apakah anda sudah menikah ketika anda belum pindah ke Surabaya?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belum pernah nikah</td>
<td>1(••)</td>
</tr>
<tr>
<td>Nikah</td>
<td>2(••)</td>
</tr>
<tr>
<td>Duda mati</td>
<td>3(••)</td>
</tr>
<tr>
<td>Janda mati</td>
<td>4(••)</td>
</tr>
<tr>
<td>Cerai/Perkawinan pisah ranjang</td>
<td>5(••)</td>
</tr>
</tbody>
</table>

12. Bagaimana anda menilai taraf kehidupan materi anda sendiri dibandingkan dengan kebanyakan orang didesa atau kota pada waktu sebelum anda pindah ke Surabaya?

<table>
<thead>
<tr>
<th>Uraian</th>
<th>Jawaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jauh dibawah kebanyakan orang</td>
<td>1(••)</td>
</tr>
<tr>
<td>Dibawah kebanyakan orang</td>
<td>2(••)</td>
</tr>
<tr>
<td>Sedang</td>
<td>3(••)</td>
</tr>
<tr>
<td>Lebih baik</td>
<td>4(••)</td>
</tr>
<tr>
<td>Jauh lebih baik</td>
<td>5(••)</td>
</tr>
</tbody>
</table>
13. Pada waktu anda magh berdirian di tempat tinggal terakhir sebelum di Surabaya:

a. Apakah anda puas dengan pekerjaan anda (lihat D-4-a)?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

b. Apakah anda puas dengan perumahan anda?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

c. Apakah fasilitas pendidikan bagi keluarga anda cukup memuaskan?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

d. Apakah anda puas dengan taraf kesehatan anda?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

e. Apakah hati anda merasa tenteram?

<table>
<thead>
<tr>
<th>Tertekan</th>
<th>kurang; tenteram; tenteram; tenteram sekali</th>
</tr>
</thead>
</table>

14. a. Dari seluruh keluarga anda serta keluarga isteri/suami anda, siapakah yang tinggal di desa/kota dulu sebelum ke Surabaya pada waktu anda tinggal disana?

a. Keluarga anda

<table>
<thead>
<tr>
<th>Orang tua</th>
<th>Jumlah kakak</th>
<th>Jumlah adik</th>
<th>Jumlah orang</th>
</tr>
</thead>
</table>

b. Keluarga Jsteri/Suami anda

<table>
<thead>
<tr>
<th>Orang tuany</th>
<th>Jumlah kakaknya</th>
<th>Jumlah adiknya</th>
<th>Jumlah orang</th>
</tr>
</thead>
</table>

b. Sebelum anda meninggalkan desa/kota anda untuk pindah ke Surabaya, apakah anda pernah tinggal atau bekerja selama 3 bulan atau lebih di tempat lain?

<table>
<thead>
<tr>
<th>Ya 1(...)</th>
<th>Tidak 2(...)</th>
</tr>
</thead>
</table>

c. Kenapa ya, mengapa?

<table>
<thead>
<tr>
<th>tadak</th>
<th>J-ray:</th>
<th>Sekali-sekali</th>
<th>Sering</th>
</tr>
</thead>
</table>

d. Adakah anda ikut serta dalam kegiatan sosial masyarakat di tempat dulu sebelum ke Surabaya?

<table>
<thead>
<tr>
<th>tidak pernah</th>
<th>J-ray:</th>
<th>Sekali-sekali</th>
<th>Sering</th>
</tr>
</thead>
</table>

e. Dari seluruh keluarga anda serta keluarga isteri/suami anda, siapa tinggal di luar desa/kota dulu sebelum Surabaya pada waktu anda tinggal disana?

a. Keluarga anda

<table>
<thead>
<tr>
<th>Orang tua</th>
<th>Jumlah kakak</th>
<th>Jumlah adik</th>
<th>Jumlah orang</th>
</tr>
</thead>
</table>

b. Keluarga Isteri/Suami anda

<table>
<thead>
<tr>
<th>Orang tuanya</th>
<th>Jumlah kakaknya</th>
<th>Jumlah adiknya</th>
<th>Jumlah orang</th>
</tr>
</thead>
</table>
E. KEADAAN KETIKA BARU TIDAK DI SURABAYA

1. a. Waktu anda baru tiba di Surabaya, apakah pekerjaan anda yang pertama sama dengan yang anda pegang saat ini? 
   
<table>
<thead>
<tr>
<th>Ya</th>
<th>Tidak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

   b. Apakah jenis pekerjaan anda pada waktu itu? 
   
<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
</table>

   Pokokrafan Utama: 
   
<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
</table>

   Bidang lain: 
   
<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
</table>

   c. Bagaimana penghasilan dari semua pekerjaan itu, apakah lebih banyak dari penghasilan semua pekerjaan di kota/desa dulu? 
   
<table>
<thead>
<tr>
<th>Jauh lebih banyak</th>
<th>lebih banyak</th>
<th>Sama saja</th>
<th>Kurang banyak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
</tr>
</tbody>
</table>

2. a. Apakah tempat tinggal pertama anda di Surabaya sama dengan tempat tinggal yang anda pilih? 
   
<table>
<thead>
<tr>
<th>Ya</th>
<th>Tidak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
</tr>
</tbody>
</table>

   (KALAU JAWABAN 2-a ADALAH "Ya" LAKJUTKAN KE PERTANYAAN NOMOR 3-c)

   b. Apakah jenis tempat tinggal anda yang pertama di Surabaya? 
   
<table>
<thead>
<tr>
<th>Rumah biasa</th>
<th>Hotel/Loewen</th>
<th>Gubuk</th>
<th>Becak</th>
<th>Gerbong K.A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
<td>5(••)</td>
</tr>
</tbody>
</table>

   Kalau lain, hitap ditulis ________________________________

   c. Berapa lama anda berdiam di tempat tinggal yang pertama? 
   
<table>
<thead>
<tr>
<th>Tahun</th>
<th>Bulan</th>
</tr>
</thead>
</table>

   d. Bagaimana status tempat tinggal anda yang pertama di Surabaya? 
   
<table>
<thead>
<tr>
<th>Milik sendiri</th>
<th>Sewa</th>
<th>Kontrak</th>
<th>Rumah atau instansi pemerintah/Swasta—sangat</th>
<th>Rumah atau instansi pemerintah/Swasta—gratis</th>
<th>Milik orang lain gratis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
<td>5(••)</td>
<td>6(••)</td>
</tr>
</tbody>
</table>

   Kalau lain, hitap ditulis ________________________________

   e. Sertifikat apa saja yang diberikan oleh Kotamadya kepada pemilik atau rumah itu? 
   
<table>
<thead>
<tr>
<th>Agendom tanah</th>
<th>Agendon bangunan</th>
<th>S.I.P.(Surat Izin pemupatan)</th>
<th>Tidak ada</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
</tr>
</tbody>
</table>

   Kalau lain, hitap ditulis ________________________________
Dengan siapa anda tinggal di tempat itu?

Kalau lain, harap ditulis.

Jenis bahan bangunan itu untuk:

a. Dinding/ Jauh
   Bambu 1
   Kayu 2
   Papan 3
   Beton 4

b. Lantai
   Tanah 1
   Ubin 2
   Seng 3
   Daun 4

Kalau lain, harap ditulis.

c. Atap
   Plastik 1
   Kayu 2
   Beton 3
   Metal 4

Kalau lain, harap ditulis.

Apakah ada kamar mandi dalam rumah itu?

Ya 1
Tidak 2

Siapa pemilik tanah bangunan itu?

Pemilik rumah 1
Ketapraja 2
Instansi pemerintah lain 3

Kalau lain, harap ditulis.

Dimana tempat tinggal pertama anda di Surabaya?

Jalan/Gang/Nomor:

R.T./R.H.:

Kalau lain, harap ditulis.

Menyebabkan anda memilih tempat itu (lihat B-3-a) sebagai kodiaman pertama anda di Surabaya (misalnya: dekat tempat pertama yang anda capai dengan kendaraan ke Surabaya; tersedia tanah dan perumahan; tempat tinggal keluarga atau teman).

Alasan 1.

Alasan 2.

Kountungan apa yang diberikan oleh tempat itu kepada anda dibandingkan dengan tempat 2 lain?

Dekat tempat pertama yang anda capai dengan kendaraan ke Surabaya 1
Tersedia tanah dan perumahan 2
Tempat tinggal keluarga/taman 3
Dekat dengan pengangkutan 4
Perumahan murah 5
Dekat dengan tempat kerja 6

Kalau lain, harap ditulis.

Kendaraan apa yang anda pakai ketika pindah ke Surabaya untuk pertama kali di tahun?

Korota api 1
Bis 2
Truk 3
Kapal laut 4

Kalau lain, harap ditulis.

Pada waktu itu, anda turun dimana di Surabaya? (Misalnya nama stasiun bis)

Daerah penggunaan tanah didalam tempat tinggal anda: yang pertama kotaka anda baru tiba? (misalnya: sawah perumahan, sawah dar)


5. Apakah anda/orang tua anda tahu sejarah daerah tersebut? (lihat D-3-a),
   a. Siapa pemilik tanahnya waktu jaman Belanda? (misalnya: Kotamadya, swasta, dsb)
   b. Bagaimana penggunaan tanahnya waktu jaman Belanda?
      (misalnya: sawah, perumahan Belanda/kampung)
   c. Perubahan apa yang terjadi waktu jaman Jepang?
   d. Perubahan apa yang terjadi dimasa revolusi?
   e. Perubahan apa yang terjadi sesudah revolusi?
      (misalnya: pembangunan kompon, dsb)
   f. Keterang2 lain:

6. Perubahan apa yang terjadi sejak anda tinggal di daerah itu?
   a. Perubahan penggunaan tanah?
      (misalnya: sawah, perumahan Belanda/kampung)
   b. Pembangunan kampung?
   c. Pembangunan/pembangunan rumah liar?
   d. Bertambah/berkurangnya golongan/pengamis?
   e. Bertambah/berkurangnya kios/warung/gerebak penjualan?
   f. Keterang2 lain:

7. Berapa orang berasal dari desa/kota anda yang dulu dan berapa orang dari suku
   anda yang tinggal di kompon yang pertama (lihat B-3-a) ketika anda baru tiba?
   a. Dari desa/kota anda (yang dulu)
      Tidak ada 1(••) Beberapa 2(••) Banyak 3(••) Banyak sekali 4(••)
   b. Dari suku anda

F. KEADAAN PERSEORANGAN SEJAJIK RESPONDEN TIDAK DI K.N.S. UNTUK PERMUHA KALI

1. Sejak anda pindah ke Surabaya untuk pertama kali di tahun. . . borapa kali anda
   pindah rumah sebelum batas:
   a. Kecamatan Kali
   b. Lingkungan/desa Kali
   c. R.M. Kali
   d. R.T. Kali

2.a. Sejak anda pindah ke Kotamadya Surabaya untuk pertama kali di tahun
   . . . borapa kali anda pernah tinggal di luar Kota
   (KALAU JAWABAN F-2-a ADALAH "tidak" LANJUTKAN KE FERTANYA
   KALAU JAWABAN F-2-a ADALAH "tidak"
   Tidak 2(••)

b. Kalau ya borapa kali sejak anda manak K.N.S. untuk pertama kali?

3.a. Daftarlah tempat2 utama diluar Kotamadya Surabaya dimana anda tinggal
   untuk bekerja atau menemui pekerjaan. Tulis borapa kali anda tinggal disana
   untuk bekerja atau menemui pekerjaan sejak anda pindah ke Surab ya untuk pertama
   kali.
   Tempat
   1. Desa
   2. Desa
4. Apakah waktu perpindahan ini ada hubungan dengan musim pertanian?  
   Ya 1(***), Tidak 2(***).  

5a. Kalau ya, pada bulan apa dan musim apa anda biasanya pindah dari Surabaya untuk bokerja? (beri bulan dan angka pada tempat yang tersedia dan tambahkan musim pertanian yang sesuai).  
      Pengolahan tanah 1(***), Tanam 2(***), Menyiapkan 3(***), Panen 4(***), Kosong 5(***).  

b. Pada bulan apa dan musim apa anda biasanya kembali ke Surabaya?  
      Pengolahan tanah 1(***), Tanam 2(***), Menyiapkan 3(***), Panen 4(***), Kosong 5(***).  

6. Mengapa anda bokerja atau mencari pekerjaan di luar Surabaya?  
   a. Sojak permutaan tahun 1973, pernahkah anda tinggal dan bokerja atau mencari pekerjaan di luar K.M.S. untuk selama 5 hari atau lebih?  
      Ya 1(***), Tidak 2(***).  
   (KALAU JAWABAN ADALAH "TIDAK" LANJUTKAN KE FERTANYA E-8-e)  
   b. Selama bulan apa anda bokerja di Surabaya? (beri satu bulan pada nomor yang tersedia).  
      03. Maret 07. Juli 11. November 15. Maret  
   Jumlah kali: ___  

7. a. Dimana tempat bokerja anda pada waktu tersebut?  
   Nomor bulan  
   ___ Desa ___ Kec ___ Kab./Kota ___  
   b. Pokerjaan anda yang anda lakukan saat itu?  
   Nomor bulan  
   Bidang ___ Status ___  
   ___ Bidang ___ Status ___  
   ___ Bidang ___ Status ___  
   c. Untuk berapa lama anda bokerja di tempat tersebut?  
   Nomor bulan  
   Barapa Niaga ___  
   d. Mengapa perlu anda bokerja di tempat tersebut selama tahun 1973/1974?  
   Alasan 1.  
   Alasan 2.  
   8. a. Memutus angkatan anda, dimana tempat asal anda?  
   a. Tempat lahir: Desa/kota 1(***).  
   b. Tempat terakhir sebelum Surabaya: Desa/kota 2(***).  
   c. Tempat lahir: Desa __ Kec ___ Kab. ___ Prop. ___ Lain ___ 3(***).  
   d. Kalau dari tempat lain (E-8-c) mengapa anda menganggap tempat itu sebagai tempat asal anda?  
   Alasan.
512

15

o. Berapa kali sejak formulan tahun 1973 anda pulang mengunjungi:
   a. Tempat lahir anda;
   b. Tempat sebelum K.M.S.
   c. Tempat asal anda (kalau bukan a atau b):
   (PENYETAN NOMOR F-9 MENUNJUK PADA" tempat yang anda anggap sebagai tempat asal" F-8-a).

9.c. Berapa sering anda biasanya mengunjungi tempat asal anda? (lihat F-8-a)
   Satu atau lebih kali bulanan 1("
   Sekali selama 2-3 bulan 2("
   Dua kali setahun 3("
   Sekali setahun 4("
   Kurang dari sekali setahun 5("

b. Kapan biasanya anda mengunjungi tempat asal?
   Pada musim pengolahan tanah 1("
   Pada musim panen 2("
   Hari besar di desa 3("
   Pernikahan/kematian dalam keluarga anda 4("
   Idul Fitri 5("

Kalau lain, harap ditulis

o. Faktor2 apa yang mempengaruhi berapa sering dan kapan anda berkunjung
   ke tempat asal anda? (misalnya: simpangan uang, musim pertanian,
   kejadian2 di tempat asal).

   Faktor Utama: ____________________________
   Faktor Kedua: ____________________________
   Faktor Ketiga: ____________________________

Kalau lain, harap ditulis

f. Apakah anda masih memang anggota masyarakat tempat asal anda?
   Ya 1("
   Tidak 2("

10. Kalau istri dan/atau anak anda tetap tinggal di tempat di Surabaya:
   a. Mengapa mereka belum pindah ke Surabaya untuk tinggal bersama anda?
      Alasan: ____________________________
   b. Dapatkah anda memberi nafkah ke Surabaya untuk menutupi biaya
      hidup di Surabaya?
      Ya 1("
      Tidak 2("

11. a. Apakah anda biasanya mencari pemberian atau uang/hotomat di Surabaya?
      Ya 1("
      Tidak 2("

   b. Berapa kali selama 12 bulan terakhir?
   a. Berapa rata2 uang dari pemberian atau uang keluarga di Surabaya?
      a. Uang tunai Rp. ____________
      b. Juga barang Rp. ____________
   c. Juga barang Rp. ____________

   d. Biasanya jumlah terbesar diterima dari mana?
      a. Tempat terakhir sebelum Surabaya: Desa/kota ____________ 1("
      b. Tempat asal anda (lihat F-8-a) kalau bukan tempat terakhir sebelum Surabaya: Desa/kota ____________ 2("
      c. Tempat lain: Desa/kota ____________ 3("

   e. Kejadian siapa pemberian/ uang ini biasanya diterima?
      (misalnya: istri/suami; anak; adik; kakak; ayah; ibu)

   f. Biasanya dipergunaan untuk apa?
12. a. Apakah anda biasanya membawa uang atau pemberian ke tempat di luar Surabaya? Ya 1(____) Tidak 2(____)
   b. Berapa kali selama 12 bulan terakhir?
   c. Berapa rata2 jumlah uang dan/atau ongkos pemberian yang anda membawa tiap kali? Rp.___
      a. Uang tunai 1(____) b. Uang tunai 2(____)
      c. Jumlah harapan Rp.___

13. a. Apakah anda biasanya jumlah terbosor dibawa kompani? Ya 1(____) Tidak 2(____)
   b. Tempat terakhir sobolon Surabaya; Das/kota ____________
   c. Tempat asal anda (lihat E.2-a) kalau bukan tempat terakhir sobolon Surabaya; Das/kota ____________
   d. Tempat lain; Das; Kota ____________

14. a. Apakah anda memiliki atau mempunyai hak/atau untuk mempergunakan tanah atau rumah di luar Kotamadya Surabaya?
   b. Kalau ya, berapa luas dan berapa bush?
      a. T.A.N., L. H. Jonis/misalnya sawah) ____________
      b. R U, M, L, R. b. Bush ____________
      c. Das ____________
      d. Kodya ____________

15. a. Kalau anda punya rumah di luar Surabaya, apakah anda memiliki/membeli sobolon rumah di luar pensiun? Ya 1(____) Tidak 2(____)
   b. Kalau ada punya, rumah di luar Surabaya, apakah anda merencanakan untuk membantu/membeli sobolon rumah di luar pensiun?
   c. Kalau tidak, kapen anda membayar untuk membantu rumah itu?
   d. Mencoba anda membayar/membeli rumah tersebut?

16. a. Apakah anda pernah mendengar salah satu dari auadara-auadara (dari tempat asal atau tempat lain).
   b. Kalau ya, bora apa? sudah anda dorong untuk memutuskan pinick sejak anda masuk Surabaya untuk pertama kali?
   c. Moroka datang dari doerah mana?
      a. Tempat asal responden 1(____)
      b. Tempat dulu responden 2(____)

17. a. Bagaimana anda membantu moroka untuk memutuskan pinick ke Surabaya?
      a. Monawarkan tempat tinggal, Membiri uang 1(____)
      b. Monawarkan pekerjaan 2(____)

Kalau lain, harap ditulis ____________

Kolom lain, harap ditulis ____________
17. Berapa lama lagi anda berniat untuk menetap disini sekarang?

- 1 bulan 1
- 2 - 3 bulan 2
- 4 - 12 bulan 3
- 1 - 5 tahun 4
- 6 - 10 tahun 5
- Sampai pensiun 6
- Selama hidup 7

Kalau lain, harap ditulis


a. Penduduk tetap K.M.S. untuk selamanya hidup
b. Penduduk tetap K.M.S. untuk seumur waktu pensiun
c. Penduduk tetap K.M.S. tetapi mungkin akan pindah lagi selama waktu korja
d. Penduduk musiman (2-3 bulan) pulang ke desa untuk pekerjaan musiman (dimulai dari)
e. Penduduk warga K.M.S. yang secara tetap kembali ke rumah dan kembali dipindah lak luar K.M.S.

Kalau lain, harap ditulis

19. a. Waktu pensiun, apakah anda berniat untuk menetap diluar K.M.S.? Ya / Tidak
b. Kalau ya, dimana? Desa ____________________________
   Kec. ____________________________
   Kab./Kota ________________

20. Surat apa yang anda miliki?
   a. Kartu penduduk K.M.S. 1
   b. Kartu penduduk dari tempat lain 2
   c. Surat jalan dari desa 3
   d. Surat pindah dari desa 4
   e. Surat jalan yang diperpanjang 5

Kalau lain, harap ditulis

21. Kalau dibanding dan dengan kehidupan anda di desa/kota dahulu, apakah kehidupan di desa/kota dahulu lebih baik dalam:
   a. H a n t o r a
   b. R o m a n i
   - Jauh lebih baik 1
   - Lebih baik 2
   - Sama saja 3
   - Kurang baik 4
   - Sangat kurang baik 5

22. Menurut pendapat anda, apakah lebih ekonomis untuk menghidupi istri dan anak2 di Surabaya atau di tempat tinggal terakhir sebelum masuk K.M.S.?
   - Jauh lebih murah di tempat dul... 1
   - Lebih murah... 2
   - Sama saja 3
   - Lebih murah di Surabaya 4

23. Sobutkan 3 at ma ! hal yang membuat hidup di Surabaya menyenangkan (misalnya: adanya banyak hiburan, keamanan, kebebasan perseorangan):
   1. ____________________________
   2. ____________________________
   3. ____________________________

24. Keuntungan/ketidaks-untungan terpenting; apakah yang di miliki Surabaya dibandingkan dengan kota desa terakhir anda selama menetap di Kota Surabaya?
   a. Keuntungan?
   Utama : ____________________________
   Kedua : ____________________________
   Ketiga : ____________________________
   - Keadalan okonomi 1
   - Keadalan rumah tangga 2
   - Penulisan 3
   - Hiburan 4
   - Diajaya hidup 5

   b. Ketidaks-untungan?
   Utama : ____________________________
   Kedua : ____________________________
   Ketiga : ____________________________
   - Jaminan sosial (tidak berujud uang) 7
   - Lain2: ____________________________
25. Apakah kehidupan anda di Surabaya seperti yang anda harapkan sebelum anda masuk K.H.S. untuk pertama kali?
   - Jauh lebih baik 1(••)
   - Lebih baik 2(••)
   - Seperti yang diharapkan 3(••)
   - Kurang baik 4(••)
   - Sangat kurang baik 5(••)

26. a. Berapa toman dekat yang anda punyai di Surabaya? .............................................. Orang
   - Beberapa 1(••)
   - Banyak 2(••)
   - Sangat banyak 3(••)
   - Sangat banyak sekali 4(••)

b. Berapa di antara yang dari suku anda? ................................................................. Orang
   - Beberapa 1(••)
   - Banyak 2(••)
   - Sangat banyak 3(••)
   - Sangat banyak sekali 4(••)

c. Berapa di antara yang dari tempat asal anda? ..................................................... Orang
   - Beberapa 1(••)
   - Banyak 2(••)
   - Sangat banyak 3(••)
   - Sangat banyak sekali 4(••)

27. Berapa orang yang berasal dari desa/kota dulu anda dan berapa orang yang dari suku anda bermuda ditempat tinggal anda yang sekarang ini?
   a. Orang dari tempat dulu anda.
      - Tidak ada 1(••)
      - Beberapa 2(••)
      - Banyak 3(••)
      - Sangat banyak sekali 4(••)
   b. Orang dari suku anda.
      - Tidak ada 1(••)
      - Beberapa 2(••)
      - Banyak 3(••)
      - Sangat banyak sekali 4(••)

28. Kalau sekarang anda berkunjung ke tempat tinggal yang dulu sebelum Surabaya, apa kecnan utama anda? .........................................................

29. Barang2 yang anda punya sebelum sekarang:
   (kalau punya, sebutkan berapa buahnya).
   - Bomo: Buah
   - Oplot: Buah
   - Goerobak sapi/kuda: Buah
   - Dokar/koreta kuda: Buah
   - Goerobak dorong jualan: Buah
   - Goerobak dorong barang: Buah
   - Becak: Buah
   - Sepeda motor: Buah
   - Mobil/taksi: Buah
   - Jam tangga: Buah
   - Jam boker: Buah
   - Kamera/kodak: Buah
   - Potromax: Buah
   
   Pada saat ini apakah anda mempunyai hutang uang?
   - Ya 1(••)
   - Tidak 2(••)

30. a. Apakah hutang ini merupakan sesuatu yang berarti?
   - Sangat berarti 1(••)
   - Berarti 2(••)
   - Sedang 3(••)
   - Kecil 4(••)
   - Sangat kecil 5(••)

31. a. Kira-kira berapa organisasi sosial (perseuntai/perkumpulan) anda ikuti sekarang?
   - Jumlah organisasi

b. Dari beberapa organisasi yang anda ikuti itu, umumnya bergantung apa?
   - Pongajian/agama 1(••)
   - Promuka 2(••)
   - Hansip 3(••)
   - Arisan 4(••)
   - Olah raga 5(••)
   - Kebudayaan/konsumsi 6(••)
   - Koperasi (produksi, konsumsi, kredit dah) 7(••)
   - Profesi/fungsi/mil 8(••)
   - Daerah 9(••)

Kalau lain, harap ditulis
32. a. Apakah anda sering mendengarkan radio?
   - Sohari 2-3 kali seminggu
   - Sekali seminggu
   - Sekali 2 bulan
   - Tidak pernah

32. b. Acara apa yang paling anda gemari?
   - Kroncong
   - Musik dohab
   - Musik Barat/tamu 2 pop.
   - Agama
   - Wayang
   - Acara padaatan
   - Olahraga
   - Corita/sandiwa/ludruk
   - Siaran borita

   Kalau lain, harap ditulis.

33. Apakah anda sering melihat:
   a. Televisi
      - Sohari 2-3 kali seminggu
      - Sekali seminggu
      - Sekali 2 bulan
      - Tidak pernah

33. b. Bioskop
   - Sohari 2-3 kali seminggu
   - Sekali seminggu
   - Sekali 2 bulan
   - Tidak pernah

34. Kalau ada anggota keluarga yang sakit keras, siapa yang anda panggil untuk menolong?
   - Dokter
   - Dukun
   - Sama saja

35. Dimana anda pergi ke pasar mana?
   a. Pasar
   b. Pasar

36. Dimana tempat ini?
   a. Kantor Gubernur (Jl. Pahlawan)
   b. Hotel Mirama (Jl. Laut Darmo)
   c. Pabrik Palmboom (Jl. Grosir)
   d. Sosialis K.A.Kota (Jl. Sumur)

37. Menurut pendapat anda, orang macam apa yang tinggal didosa untuk selama hidup?
   - Orang yang tidak mampu
   - Orang yang borada
   - Orang yang punya tanah luas
   - Orang yang tidak berpendidikan
   - Orang yang tua

   Kalau lain, harap ditulis.

38. Bagaimana pendapat anda tentang tingkat pendidikan yang harus diaplik oleh orang anak laki/laki perempuan?
   a. Orang yang laki-laki
   b. Orang perempuan

39. a. Apakah rumah bagian Anda untuk menyimpan sebahan dari penghasilan yang anda perolah ini?
   b. Kalau ya, berapa sebahan?
   c. Simepan ini dipergunakan untuk apa?
   d. Apakah jumlah uang yang dapat anda simpan menuntukan jangka waktu anda untuk bokerja/tinggal di Surabaya?
   e. Kalau ya, bagaimana.
ABSTRACT OF QUESTIONNAIRE C
ADMINISTERED TO RECENT (1969-74) IMMIGRANTS

I  SAMPLE REQUIREMENTS

as in Questionnaire B.

II  PERSONAL DETAILS OF RESPONDENT

A. At Time of Survey

as in Questionnaire B.

B. Birthplace of Respondent

as in Questionnaire B.

C. Migration History

as in Questionnaire B.

D. General and Personal Situation in Last Place of Residence

- location
- distance from capital of kecamatan and accessibility
- economic prosperity of village/town compared to other
  villages/towns in the same kecamatan
- problems prompting move
- details of factories or industries in previous place
  of residence
- respondent's assessment of the attitudes of residents
  toward certain categories of outmigrants moving to
  Surabaya
- attitudes of village to Surabaya
- occupational details in last place of residence:
  activity, status, employer, workforce in
  enterprise of employment, system of salary
  payment, average income cash and goods, period
  of time in that job, seasonal influences,
  dependents, savings, if unemployed weeks looking
  for work
- ownership or rental rights to land, type and area of
  land, changes to land rights prior to migration
- housing details, possessions
- debts
- information and knowledge about Surabaya before
  migration
- aspirations which could be achieved by migration
- level of educational attainment
- marital status
- first member of household to move to Surabaya, reason for move
- details of decision to move
- choice of Surabaya as the destination
- general reasons for moving
- reasons for leaving last place of residence
- attitudes toward situation in previous place of residence

E. Move to Surabaya

- transport, costs, who paid for move
- job or accommodation arranged before departure

F. Situation on First Arrival

- job on arrival same as that engaged in at time of survey
- activity and status of occupation on arrival
- employer, workforce in enterprise of employment, system of salary payment, average income cash and goods
- if not working weeks spent looking for work
- housing details

G. Working Migrations Outside Surabaya

- ever lived and worked outside Surabaya since first arrival, details: number of times, place of work, type of work, seasonal influence, reasons
- working migrations in last 12 months

H. Visits to Previous Residence/Place of Origin

- definition of place of origin
- frequency of visits in last 12 months
- timing of visits, costs
- family members in place of origin, feel member of society in place of origin?
- sending or taking of gifts/money to place of origin
- ownership of land or house in place of origin
- ever plan to return to place of origin to live?
- help to other immigrants

I. Individual Attitudes of Respondent (At Time of Survey)

- intended duration of residence in Surabaya
- self-assessment of degree of permanency in Surabaya
- official documents in possession of respondent
- comparison of standard of living in previous place of residence and Surabaya
- advantages and disadvantages of life in Surabaya
- assimilation/acculturation to urban life
- personal possessions, debts
- activities and action space in Surabaya
- attitudes towards those living permanently in rural areas
- level of educational attainment required for children
1. Alamat Responden : Jalan/Gang/Nomer : ........................................

2. Nomor urut responden dari Daftar A : __________

3. Apakah anda lahiri di Kota Surabaya (balas pada saat ini)?
   a. Ya : 1();
      Tidak : 2();

4. Apakah anda biasanya berdam (tidur dan hidup) di R.T. tetangga ini dan tidak hanya selalu berkunjung atau bekerja di R.T. ini?
   a. Ya : 1();
      Tidak : 2();

5. Kapanlah anda pulang Kota Surabaya untuk pertama kali untuk berdam di sini?
   a. Tahun : __________
   b. Jam mulai : __________
   c. Jam selesai : __________

6. Pada hari ulang tahun terakhir berapakah uang anda? Tahun : __________

7. Berapakah anak di rumah anda? (tidak termasuk anak laki-laki, balas pada saat ini)
   a. Tahun : __________

8. Apakah anda biasanya berdam (tidur dan hidup) di R.T. ini dalam 15 tahun terakhir?
   a. Ya : 1();
      Tidak : 2();

II - KETERANGAN UNTUK TEPAYANG ANAK ORANG YANG BAHU.

1. (Balas pada saat ini)

2. (Balas pada saat ini)
Kode Urut Daerah: ____ Nomor Questionnaire: 3 / ______/________/_____/00

III - DATA PRIBADI DARI RESPONDEN ( ORANG YANG BARU MASUK ).
A) UMUM ( SAAT ANI ).

1. a. Pada hari ulang tahun terakhir berapakah umur anda? Tahun ___
   (lihat Deter A)

b. Kakak anda berapa orang?
   (yang pernah lahir)
yang masih hidup ___
yang sudah meninggal ___

c. Kakak anda yang masih hidup tinggal dimana?
   (Berapa orang)
   Tinggal di rumah ini 1
   Tinggal di rumah lain di K.M.S. 2
   Diluar K.M.S.ditempat responden dulu 3
   Ditempat lain di luar K.M.S. 4

2. a. Adik anda berapa orang?
   ( yang pernah lahir )
yang masih hidup ___
yang sudah meninggal ___

b. Ayah anda berapa orang?
   ( yang pernah lahir )
   Yang masih hidup ___
   Yang sudah meninggal ___

c. Ayah anda yang masih hidup tinggal dimana?
   (Berapa orang)
   Tinggal di rumah ini 1
   Tinggal di rumah lain di K.M.S. 2
   Ditempat lain di luar K.M.S. 3
   Ditempat lain di luar K.M.S. 4

3. a. Jantung kelamin responden:
   Laki-laki 1(••)
   Perempuan 2(••)

b. Apakah anda sudah menikah?
   Belum pernah nikah 1(••)
   Nikah 2(••)
   Duda mati 3(••)
   Janda mati 4(••)
   Pernikahan pisah ranjang/ cera 5(••)
   (KALAU JAWABAN 2-b ADALAH "Belum pernah nikah", LAMPUKAN KE PERTANYAAN NO.4).

   o. Apakah pernikahan ini yang pertama kali?
      (untuk suami dan isteri kedua-kedunya)
      Ya 1(••)
      Tidak 2(••)

d. Kapan anda menikah dengan isteri/suami yang sekarang?
   Tahun ___

e. Berapa umur isteri/suami yang sekarang (H.U.T. terakhir)?
   Tahun ___

t. Isteri/suami anda tinggal dimana?
   Tinggal bersama disini 1(••)
   Tinggal terpisah di K.M.S 2(••)
   Tinggal terpisah diluar K.M.S 3(••)
   Sudah meninggal 4(••)

   Orang ___

b. Berapa anak anda yang sudah meninggal? (Daftarlah dibawah)
   Orang ___

c. Sebutkan anak2 anda yang pernah lahir menurut urutan di bawah ini:

<table>
<thead>
<tr>
<th>No. Urut</th>
<th>TAHUN LAHIR</th>
<th>KALAHAN</th>
<th>TEMPAT LAHIR</th>
<th>TEMPAT TINGGAL SEKARANG</th>
<th>ANAK YANG MENGINGGAL MENGHIU RUT UMUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>P</td>
<td>KMS</td>
<td>LUAR</td>
<td>KMS</td>
<td>LUAR</td>
</tr>
<tr>
<td>TAHUN</td>
<td>BULAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Sebutkan jenis sekolah dan tingkat pendidikan tertinggi yang anda capai:

Jenis dan tingkat: ____________________________

Kelas terakhir yang anda selesaikan:

5. a. Dimana anda, istri/suami anda, Ibu anda dan Ayah anda dilahirkan:

<table>
<thead>
<tr>
<th>Desa</th>
<th>Kecamatan</th>
<th>Kabupaten</th>
<th>Kodya</th>
<th>Prop.</th>
<th>Lain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ibu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suami</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.Y.P.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. b. Anda merasa berasal dari mana?(dorah dan suku)
   c. Istri/Suami anda merasa berasal dari mana?
   d. Bapak/Istrian anda merasa berasal dari mana?

6. Apakah agama atau kepercayaan anda?
   - Islam 1
   - Katholik 2
   - Protestant 3
   - Budha 4
   - Hindu 5
   - Khong Hoe Coe 6

Kalau lain, harap ditulis

7. a. Apakah jenis pekerjaan utama anda pada waktu ini?
   Bidang: ____________________________ Status: ____________________________
   b. Apakah jenis pekerjaan lain yang anda punya?
   Bidang: ____________________________ Status: ____________________________

   (Kalau jawaban 7-a dan 7-b adalah:
   i) "Bersekolah" atau "nyanyi rumah saja", lanjutkan ke pertanyaan nomor 12-
   ii) "Tidak punya pekerjaan", lanjutkan ke pertanyaan nomor 11-

   c. Untuk siapa anda bekerja?Pekerjaan Utama :
   (Nama perusahaan/kantor)

   d. Berapa jumlah orang yang bekerja untuk perusahaan/kantor itu?
   (Pekerjaan utama saja)
   Responden/Keluarga responden saja: 1
   Koluarga pemilik dan responden: 2
   Koluarga pemilik dan kurang dari 5 orang lain: 3
   Koluarga pemilik dan 5-10 orang lain: 4
   Lebih dari 10 orang yang bukan keluarga pemilik: 5

   Kalau lain, harap ditulis

   e. Berapa hari kerja anda dalam satu minggu yang lalu?
   (Pekerjaan utama saja)
   Hari: ____________________________

   f. Berapa banyak sistem penggajian/penangguhan anda?
   (Pekerjaan utama saja)
   Bulanan: 1
   2 Mingguan: 2
   Mingguan: 3
   Hari: 4

   g. Berapa penghasilan anda setiap dari pekerjaan utama
   untuk waktu distas (7-f)?
   a. Uang tunai Rp. ____________________________
   (kalau penghasilan dalam bentuk barang, harap ditulis dalam rupiah
dengan memakai harga setempat)
   b. Barang dalam bentuk
   Tempat tinggal: 1
   Makanan masak: 2
   Barang dari kantor/tempat kerja: 3
   Barang lain dari kantor/tempat kerja: 4

   c. Jumlah barang barang Rp. ____________________________
523

b. Sudah berapa lama anda memegang pekerjaan yang sekarang ini? (pekerjaan utama saja)

i. Berapa penghasilan anda rot2 dari pekerjaan lain untuk waktu yang sama yang tertulis di atas (g-h)? Rp. 


8. Apakah pekerjaan utama anda terpengaruh oleh musim panen?

b. Kalau ya, berapa hari rata2 anda bekerja dalam sebulan pada musim:

a. Pengolahan tanah
b. Tanam

c. Menyiang

d. Panen

9. a. Pada saat ini jumlah berapa orang lain yang tidak bekerja, hidupnya tergantung dari penghasilan anda? Orang

b. Berapa diantaranya tinggal di Surabaya? Orang

b. Berapa diantaranya tinggal di luar Surabaya? Orang

d. Apakah jumlah penghasilan dari semua pekerjaan yang anda lakukan bekerja, cukup untuk penghidupi mereka? Cukup

10. a. Apakah mungkin bagi anda untuk menyimpan sebagian dari penghasilan yang anda peroleh ini? Ya


c. Simpanan ini dipergunakan untuk apa?

d. Apakah jumlah uang yang dapat anda simpan menentukan jangka waktu anda untuk bekerja tinggal di Surabaya? Ya

11. a. Kalau pada waktu ini anda tidak bekerja, sudah berapa minggu anda mencari pekerjaan? Minggu

b. Berapa mingguan anda bekerja dalam waktu 6 bulan terakhir? Minggu

12. Apakah jenis tempat tinggal anda pada waktu sekarang?

Kalo lain, harap ditulis

13. Bagaimana status tempat tinggal anda?

Kalo lain, harap ditulis

14. Sertifikat apa saja yang diberikan oleh Kotamadya kepada pemilik atau rumah ini?

Kalo lain, harap ditulis
15. Kalau anda menumpang, berapa anda membayar per bulan untuk:
   a). Perumahan: Rp....
   b). Makan dan perumahan: Rp....
   c). Kalau anda makan di luar, berapa per bulannya untuk:
      a). Perumahan: Rp....
      b). Makan: Rp....

16. Kalau tidak menumpang tetapi sewa atau kontrak, berapa anda membayar per bulannya untuk:
   a). Perumahan: Rp....
   b). Kontrak: Rp....

17. Siapa pemilik tanah bangunan ini?
   Kepala rumah tangga 1(....)
   Pemilik rumah 2(....)
   Kantor 3(....)
   Kotapraja 4(....)
   Instansi pemerintah lain 5(....)

Kalau lain, harap ditulis ____________________________

18. Jenis bahan bangunan untuk:
   a) Dinding luar
      1. Banbu 1(....)
      2. Kayu 2(....)
      3. Beton 4(....)
   b) Dinding
      1. Tancap 1(....)
      2. Ubin 2(....)
      3. Semen morgh 3(....)
      4. Daun tanam 4(....)
      5. Kayu 5(....)
   c) Atap
      1. Genting 1(....)
      2. Song 2(....)
      3. Plastik 3(....)

Kalau lain, harap ditulis ____________________________

19. Apakah ada kamar mandi dalam rumah ini?
   a. Ya 1(....)
   b. Tidak 2(....)

20. Apakah tempat tinggal anda yang sekarang ini sama dengan yang anda diami waktu pertama kali masuk Surabaya tahun ___
   (KALAU JANJARAN 20 ADALAH "Ya", LANJUTKAN KE PERTANYAAN E-1):

21. Jarak anda pindah ke Surabaya untuk pertama kali di tahun ___ berapa kali anda pindah tempat tinggal melewati bata:
   a. Kecamatan Kali....
   b. Lingkungan/desa Kali....
   c. R.W. Kali....
   d. Rukun Tetangga Kali....

22. Mengapa anda pilih tempat tinggal ini (misalnya: perumahan murah, Tersediannya tenang, tempat tinggal keluarga/taman, dekat tempat kerja, lain)

B. TEMPAT LAHIR

1. Dimana tempat lahir anda? Desa....
   Kab....
   Kodya....
   Prop....
   Lain....

2. Apakah tempat kelahiran anda tempat yang sama dengan orang yang biasanya tinggal ketika anda lahir?
   a. Ya 1(....)
   b. Tidak 2(....)

3. Kalau tidak, nama tempat tinggal biasa anda waktu anda lahir? Desa....
   Kab....
   Kodya....
   Prop....
   Lain....

3. Apakah definisi tempat ini: desa atau kota?
   (Penerangan lihat di rumus 1(....); Rumah sakit/poliklinik 2(....); Sekolah negeri serendah-rendahnya 3(....); Bank Umum 4(....); Bioskop 5(....); To-serba 6(....); Kantor Telp dan Telegraf dan Pos 7(....); Sebuah daerah dan/atau pengemis 8(....); Kantor pemerintah serendah-rendahnya 9(....); kalau suatu daerah administrasi punya 7 faktor atau lebih dalam daerah kota.
   a. Desa 1(....)
   b. Kota 2(....)
   Jumlah....
C. SEJARAH PERPINDAHAN

i) DAFTARlah tiap2 desa atau kota dimana anda pernah tinggal selama 6 bulan atau lebih mulai dari tempat kelahiran anda.

ii) DAFTARlah terus sampai responden pertama kali masuk k.m.s.

iii) Hanya menyatakan tempat tinggal yang tetap; jangan mengasukkan kunjungan ke luar kota atau terkait.

Perpindahan nomor 1.

1.a. Ingatlah tempat tinggal biasa orang tua anda ketika anda lahir. Kapankah anda pindah untuk pertama kali dari tempat itu ke tempat lain dimana anda tinggal selama 6 bulan atau lebih?

   Umur anda ___________ Tahun ___________

b. Berapakah anda sudah tinggal di tempat tinggal tersebut ketika anda pertama kali?

   Tahun ___________ Bulan ___________

   Kemanakah anda pindah? Desa ___________ Kec. ___________ Kab. ___________ Kodya ___________ Prop. ___________ Lain ___________.

d. Apakah definisi tempat tinggal baru: daerah pedesaan atau kota? (Listrik 1(.)); RS/P 2(.)); SMP 3(.)); Bank 4(.)); BioSkop 5(.)); Toserba 6(.)); Telp dan Telg dan Pos 7(.)); Gel./Peng 8(.)); Kantor Kb.9(.)); Desa 1(.)); Kota 2(.)); Lain ___________.

   Jumlah ___________.

e. Siapa yang ikut serta dengan anda?

   Tidak seorangpun 1(.); Suami/Isteri/Anak 2(.); Ayah/Ibu 3(.); Kakak/Adik 4(.); Teman2 dari desa 5(.); Jumlah ___________.

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penentik):

Perpindahan nomor 2.

2.a. Kapankah anda pindah dari desa/kota (C-1-c) ke kota/desa lain dimana anda tinggal selama enam bulan atau lebih?

   Umur anda ___________ Tahun ___________

b. Kapankah anda pindah dari desa/kota (C-1-c) ke kota/desa lain dimana anda tinggal selama enam bulan atau lebih?

   Tahun ___________ Bulan ___________

c. Kapankah anda pindah? Desa ___________ Kec. ___________ Kab. ___________ Kodya ___________ Prop. ___________ Lain ___________.

d. Apakah definisi tempat tinggal baru: daerah pedesaan atau kota? (Listrik 1(.)); RS/P 2(.)); SMP 3(.)); Bank 4(.)); BioSkop 5(.)); Toserba 6(.)); Telp dan Telg dan Pos 7(.)); Gel./Peng 8(.)); Kantor Kb.9(.)); Desa 1(.)); Kota 2(.)); Lain ___________.

   Jumlah ___________.

e. Siapa yang ikut serta dengan anda?

   Tidak seorangpun 1(.); Suami/Isteri/Anak 2(.); Ayah/Ibu 3(.); Kakak/Adik 4(.); Teman2 dari desa 5(.); Jumlah ___________.

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penentik):

(DAFTARlah terus sampai responden masuk kotamadya surabaya untuk pertama kali).
Perpindahan nomor.

3. a. Kapankah anda pindah dari desa/kota tersebut tadi (C-2-c) ke desa/kota lain dimana anda tinggal selama 6 bulan atau lebih?

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Umur anda</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Ketika anda pindah, berapa lama anda sudah tinggal di tempat ini?

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Kemanakah anda pindah? Desa ___________________________ Kota ___________________________ Kec. ___________________________ Prop. ___________________________ Lain ___________________________

d. Apakah definisi tempat tinggal baru: daerah pedesaan atau kota? (Listrik 1(••) RS/P 2(••); SMP 3(••); Bank 4(••); Bioskop 5(••); Toserba 6(••); Telp dan Telg dan Pos 7(••); Gel./Peng 8(••); Kant.Kb. 9(••).

<table>
<thead>
<tr>
<th>Desa</th>
<th>Jumlah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kota</th>
<th>Jumlah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. Siapa yang ikut serta dengan anda? Tidak seorangpun 1(••) Suami/isteri/anak 2(••) Ayah/Ibu 3(••) Kakak/Adik 4(••) Teman2 dari desa 5(••)

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penarik):

(DAPATILAH TERUS SAMPAI RESPONDEN MASUK KOTAMADYA SURABAYA UNTUK PERTAMA KALI)

Perpindahan nomor.

4. a. Kapankah anda pindah dari desa/kota tersebut tadi (C-3-c) ke kota/desa lain dimana anda tinggal selama 6 bulan atau lebih?

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Umur anda</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Ketika anda pindah, berapa lama anda sudah tinggal di tempat ini?

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Kemanakah anda pindah? Desa ___________________________ Kota ___________________________ Kec. ___________________________ Prop. ___________________________ Lain ___________________________

d. Apakah definisi tempat tinggal baru: daerah pedesaan atau kota? (Listrik 1(••) RS/P 2(••); SMP 3(••); Bank 4(••); Bioskop 5(••); Toserba 6(••); Telp dan Telg dan Pos 7(••); Gel./Peng 8(••); Kant.Kb. 9(••).

<table>
<thead>
<tr>
<th>Desa</th>
<th>Jumlah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kota</th>
<th>Jumlah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. Siapa yang ikut serta dengan anda? Tidak seorangpun 1(••) Suami/isteri/anak 2(••) Ayah/Ibu 3(••) Kakak/Adik 4(••) Teman2 dari desa 5(••)

f. Mengapa anda pindah ke tempat lain? (Faktor pendorong dan penarik):

(DAPATILAH TERUS SAMPAI RESPONDEN MASUK KOTAMADYA SURABAYA UNTUK PERTAMA KALI)
D) KEADAAN UMUM DAN Pribadi Di TEMPAT TINGGAL TERAKHIR SEBELUM SURABAYA (KEDIAMAN DULU)

1. Dimana kediaman anda terakhir (untuk selama 6 bulan atau lebih) sebelum anda pindah ke Surabaya untuk pertama kali?
   (lihat bagian C). Dese : ________________________________
   Kec. ____________________________
   Kodya ____________
   Prop. ____________
   Lain ____________

2. Berapa kilometer jauhnya kota/desa tersebut dari Ibu kota kecamatannya?
   Kilometer ____________

3. Ingatlah keadaan desa/kota itu sebelum anda pindah.
   Apakah jenis angkutan terbaik yang dapat masuk pada waktu itu?
   Supada/Sopoda motor 1(____)
   Gerobak kuda atau sapi/dokar 2 (____)
   Jeep 3(____)
   Mobil/opelet/truk 4(____)
   Bis 5(____)
   Kereta api 6(____)
   Tidak ada (berjalan kaki) 7(____)

4. Apakah ada banyak golongan atau orang yang tidakh puning tawar di desa/kota ketika anda meninggalkan tempat itu?
   Tidak ada 1(____)
   Sedikit 2(____)
   Banyak 3(____)
   Banyak sekali 4(____)

5. Menurut pendapat anda, bagaimana kesejahteraan ekonomi di desa/kota anda dibandingkan dengan desa/kota lain di kecamatan? _______ ________ ________ ________
   Desa yang terkemuar 1(____)
   Lebih miskin dari desa rata-rata 2(____)
   Sodang 3(____)
   Kurang miskin dari desa rata2 4(____)
   Kurang sekali miskin dari desa rata2 5(____)

6. Apakah ada kesulitan besar di desa/kota ketika anda menonton untuk meninggalkan tempat tinggal itu?
   Banjir 1(____)
   Hama 2(____)
   Gangguan keamanan 3(____)
   Kurang cukup tanah 4 (____)
   Iklair kering yang panjang 5(____)
   Banyak pengunguran 6(____)
   Sedikit pengunguran 7(____)
   Perubahan keadaan 8(____)
   Fasilitas pendidikan yang tidak mencukupi 9(____)
   Tidak ada 10(____)

Kolom lain, harap ditulis ________

7. Ada pabrik2 apa di desa/kota anda ketika anda meninggalkan desa itu (yang masih berjalan)?
   Tidak ada 1(____)
   Penggilingan beras 2(____)
   Penggilingan tobu/pabrik gula 3(____)
   Beberapa pabrik modern 4(____)
   Banyak pabrik modern 5(____)

Kolom lain, harap ditulis ________

8. Selama 6 bulan sebelum anda pindah ke Surabaya untuk pertama kali adakah keluwargaan lain yang juga meninggalkan desa/kota anda?
   a. Pindah dari tempat itu:
      Tidak ada keluarga lain. 1(____)
      Sedikit keluarga lain (1-5) 2(____)
      Banyak keluarga lain (6-10) 3(____)
      Banyak sekali keluarga lain (11+)
   B. Pindah ke Surabaya:
      1(____)
      2(____)
      3(____)
      4(____)
b. Kalau banyak orang pindah, mengapa?

c. Menurut pendapat anda dari golongan manakah orang yang meminggalkan desa/kota anda?

<table>
<thead>
<tr>
<th>Orang yang berada</th>
<th>Orang yang tidak mampu</th>
<th>Orang yang tidak punya tanah</th>
<th>Orang yang berpendidikan</th>
<th>Pemuda/ Pemudi</th>
</tr>
</thead>
</table>

Kalau lain, harus ditulis.

9. Menurut pendapat anda, waktu anda masih berdiam tinggal terakhir sebelum Surabaya, bagaimana sikap masyarakat desa/kota terhadap kepindahan orang2 setempat seperti tersebut dibawah ini ke Surabaya: (beri tanda pada garis yang tersedia)

c. Suami, istri dan anak2 mereka.

d. Pria yang pindah sendiri dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

e. Pria yang pindah sendiri tanpa pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

d. Anak sekolah yang pindah untuk bercerita lagi dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

f. Orang laki-laki yang sudah kawin pindah untuk bercerita lagi dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

g. Wanita yang sudah kawin pindah sendiri dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

h. Gadis yang pindah sendiri dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

i. Gadis yang pindah sendiri tanpa pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

j. Wanita yang sudah kawin pindah sendiri untuk bercerita lagi dengan pengawas di Surabaya.

<table>
<thead>
<tr>
<th>Tidak</th>
<th>Kurang</th>
<th>Netral</th>
<th>Senang</th>
<th>Senang sekali</th>
</tr>
</thead>
</table>

10. Menurut pendapat anda, bagaimana pendangan banyak orang di desa/kota anda tentang kota Surabaya? (bori noor yang eekot). Sependet 1; Cenderung sependet 2; Netral 3; Cenderung tak sependet 4; Tak sependet 5;

   a. Ramai beban dan modern
   b. Banyak kesempatan bokerja
   c. Tareh kehidupan yang lebih baik
   d. Orang Surabaya bersikap dingin
   e. Biaya hidup terlalu mahal
   f. Terlalu besar dan menghinggakan
   g. Dapat dijumpai banyak gedung yang dapat diubah konsumen.
   h. Lantara kebiasaan yang lebih boker untuk perkebunan pribadi

Kalau lain, harap dituliskan:

11. a. Apakah jenis pekerjaan utama anda pilih dan anda menikahkennya desa/kota
dulu untuk ke Surabaya?

   (Kotak) Bidang ___________ Status ___________

   (Kotiga) Bidang ___________ Status ___________

   (Kotiga) Jumlah L-11-b (can L-11-b Ancal):
   i) " bersekolah " atau "setiap nyataan suka saja", L1JU11AD KE BOR-1-1

   ii) " titik punya pekerjaan ", L1JU11AD KE PERKORAKAI HONOR L-14-a.

   b. Apakah jenis pekerjaan lain yang anda punayai para waktu itu?

   (Kotiga) Bidang ___________ Status ___________

   (Kotiga) Bicang ___________ status ___________

   (Kotiga) Bidang ___________ Status ___________

   (Kotiga) Jumlah L-11-c (can L11-c Ancal):
   i) " bersekolah " atau "setiap nyataan suka saja", L1JU11AD KE BOR-1-1

   ii) " titik punya pekerjaan ", L1JU11AD KE PERKORAKAI HONOR L-14-a.

   c. Untuk bapa anda bekerja pada waktu itu? (tina perusahaan atau kantor)

   Pekerjaan Utama:

   a. Borapakah jumlah orang yang bekerja untuk perusahaan atau kantor itu?

   (pekerjaan utana saja).

   Keluarga / Keluarga responden saja 1(....)

   Keluarga penduk / Keluarga responden 2(....)

   Keluarga penduk dan kurang dari 5 orang lain 3(....)

   Keluarga penduk dan 5 - 10 orang lain 4(....)

   Keluarga penduk dan lebih dari 10 orang 5(....)

   Kalau lain, harap ditulis:

   e. Bagaimana sisiin penggajian/pencaharian anda. Cari Kerina 1(....)

   2 mingguan 2(....)

   3 bulanan 3(....)

   4 bulanan 4(....)

   f. Borapa penghasilan anda rota? dari

   pekerjaan utama untuk waktu yang sama yang tertulis diatas (L-11-e) ?

   (Kalu penghasilan calai bentuk barang harap ditulis dalam rupiah
dengan benakai harga sotopep).

   a. Bang tunai Rp._________

   b. Barang dalam bentuk Rp._________

   c. Jumlah lain barang Rp._________

   g. Sudah borapa lama anda awal penggajian pekerjaan utama tersebut sebelum

   anda menikahkennya desa/kota itu untuk pindah ke Surabaya? Bulan __________

   h. Borapa penghasilan anda rota? dari pekerjaan lain untuk

   waktu yang sama yang tertulis diatas (L-11-e) ?

   a. Bang tunai Rp._________

   b. Jumlah lain barang Rp._________
10. Apakah pekerjaan anda (pekerjaan utama) terpengaruh oleh musim pertanian?

Ya 1( )
Tidak 2( )

(KALAU JAWABAN ADALAH "tidak" LANJUTKAN KE D-11-a).

13.a. Selama 6 bulan sebelum anda pindah ke Surabaya berapa orang yang tidak bekerja yang hidupnya tergantung dari penghasilan anda?

Orang ___________

b. Apakah jumlah penghasilan dari semua pekerjaan yang anda lakukan selama 6 bulan sebelum anda meninggalkan desa/kota itu (untuk pindah ke Surabaya), cukup untuk menghidupi mereka (orang yang tersebut diatas)?

Lebih dari cukup 1( )
Cukup 2( )
Kurang dari cukup 3( )
Jauh kurang cukup 4( )

13.b. Apakah jumlah penghasilan dari semua pekerjaan yang anda lakukan selama 6 bulan sebelum anda pindah ke Surabaya cukup untuk menghidupi orang yang tersebut diatas?

Ya 1( )
Tidak 2( )

c. Apakah mungkin bagi anda untuk menyimpan sedikit dari penghasilan yang anda peroleh ini?

Ya ___________
Tidak ___________

d. Apakah keinginan untuk mendapat uang tunai sebagai hasil kerja berperan dalam keputusan anda untuk pindah ke Surabaya?

Lebih dari cukup 1( )
Cukup 2( )
Kurang dari cukup 3( )
Jauh kurang cukup 4( )

14.a. Kalau anda waktu sebelum pindah ke Surabaya anda tidak bekerja, sebanyak berapa minggu anda mencari pekerjaan?

Minggu ___________

b. Berapa lama anda bekerja selama 6 bulan terakhir sebelum anda meninggalkan desa/kota itu untuk pindah ke Surabaya?

Minggu ___________

15.a. Apakah anda memiliki atau punya hak (atas/untuk mempergunakan) tanah (misalnya: sawah, tegal, pekarangan, kolam) selama 6 bulan sebelum anda pindah ke Surabaya?

Ya 1( )
Tidak 2( )

(KALAU JAWABAN D-15-a ADALAH "tidak" LANJUTKAN KE D-18-a)

b. Kalau ya, berapa luasnya? (dalam meter persegi; 1 ha = 10.000 m², 1 bau = 7.096 m²)

| TANAH | TANAH GARAPAN | TANAH BUKAN | JUMLAH | JUMLAH SAMAH
|--------|---------------|--------------|--------|----------------|
|        | yang dimiliki| yang disewa  | GARAPAN-TANAH | SAMAH EKUIVALEN
| Sawah irigasi |               |             |        |                |
| Sawah tidak hujan |               |             |        |                |
| Pekarangan |               |             |        |                |
| Kebun |               |             |        |                |
| Ladan tegal |               |             |        |                |
| Tamba/kolam ikan |               |             |        |                |

| (dalam m²) | (dalam m²) | (dalam m²) | (dalam m²) | (dalam m²) |

16. Apakah ada perubahan yang terjadi dalam status anda sebelum pemilik/penyewa tanah yang mengambilkan keinginan anda untuk meninggalkan tanah tersebut?

Tidak ada 1( )
Diambil/dibeli/disewa oleh pemerintah 2( )
Dibeli/disewa oleh swasta 3( )
Dirinta kembali oleh pemiliknya 4( )
Dijualan/disewaan kepada orang lain 5( )

Kalau lain, harap ditulis ___________

17. Apakah yang anda lakukan dengan tanah ini waktu anda pindah ke Surabaya?

Dijual 1( )
Disewakan kepada orang lain 2( )
Dikembalikan kepada pemiliknya 3( )
Masih dipunyai 4( )
Diberikan kepada keluarga 5( )

Kalau lain, harap ditulis ___________
18.a. Bagaimana status tempat tinggal anda sebelum anda meninggalkan desa/kota itu?

<table>
<thead>
<tr>
<th>Milik sendiri</th>
<th>Sown</th>
<th>Kontrak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1(••)</td>
<td></td>
</tr>
</tbody>
</table>

Rumah atau instansi pemerintah/Swasta - Sown 4(••)

<table>
<thead>
<tr>
<th>Milik orang lain - gratis</th>
</tr>
</thead>
<tbody>
<tr>
<td>5(••)</td>
</tr>
</tbody>
</table>

Rumah atau instansi pemerintah/Swasta - gratis 6(••)

Kalau lain, harap ditulis

b. Jenis bahan bangunan tempat tinggal itu untuk:

<table>
<thead>
<tr>
<th>Bambu</th>
<th>Tanah</th>
<th>Genting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td></td>
<td>1(••)</td>
</tr>
</tbody>
</table>

Kontrak atau instansi pemerintah/Swasta - scw 4(••)

<table>
<thead>
<tr>
<th>Rumah atau instansi pemerintah/Swasta - gratis</th>
</tr>
</thead>
<tbody>
<tr>
<td>5(••)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis

c. Apakah ada kamar mandi dalam rumah itu?

<table>
<thead>
<tr>
<th>Ya 1(••)</th>
<th>Tidak 2(••)</th>
</tr>
</thead>
</table>

d. Barang-barang kepunyaan anda ketika di desa/kota dulu:

<table>
<thead>
<tr>
<th>Bemo</th>
<th>Oplot</th>
<th>Gerobak sapi/kuda</th>
<th>Dokar/Kereta kuda</th>
<th>Gerobak dorong jualan</th>
<th>Gerobak dorong barang</th>
<th>Becak</th>
<th>Sopoda</th>
<th>Sepeda-motor</th>
<th>Mobil/taksi</th>
<th>Jam tangan</th>
<th>Jam wisker</th>
<th>Jam dinding</th>
<th>Kamera/Kodak</th>
<th>Brjek</th>
<th>Lampu petromix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuda</td>
<td>Uangga</td>
<td>Radio</td>
<td>Mesin jahit</td>
<td>Kips angin listrik</td>
<td>T.V.</td>
<td>Kasaet/tape</td>
<td>Phonograph</td>
<td>Almiri es</td>
<td>AC</td>
<td>Lampung padi</td>
<td>Sopi</td>
<td>Korbou</td>
<td>Kambing/dombe</td>
<td>Bobi</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis

20. Bagaimana anda menilai taraf kehidupan masyarakat anda sendiri dibandingkan dengan kebanyakan orang di desa/kota sebelum anda pindah ke Surabaya?

<table>
<thead>
<tr>
<th>Jauh dibawah kebanyakan orang</th>
<th>Dibawah kebanyakan orang</th>
<th>Lebih baik</th>
<th>Jauh lebih baik</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
</tr>
</tbody>
</table>

21.a. Apakah anda sering mendengarkan radio, di desa/kota anda?

<table>
<thead>
<tr>
<th>Schari2 /2-3 kali seminggu</th>
<th>sekali seminggu</th>
<th>Sekali 2-3 bulan</th>
<th>Tidak pernah</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(••)</td>
<td>2(••)</td>
<td>3(••)</td>
<td>4(••)</td>
</tr>
</tbody>
</table>
12

b. Acara apa yang paling anda gemari?
   a. Terbaik __
   b. Kedua __
   c. Ketiga __

Kronong/Musik daerah 1(●)
Musik Barat/lagu pop 2(●)
Agama 3(●)
Wayang 4(●)
Acara Pedesaan 5(●)
Olah raga 6(●)
Gerita/sandiwa/ludruk 7(●)
Siaran berita 8(●)

Kalau lain, harap ditulis ____________________________

22. a. Selama anda berdiam di desa/kota itu, pernahkah anda mendengar kabar2 tentang kehidupan di Surabaya? Ya 1(●) Tidak 2(●)

b. Melalui perantaraan apa?
   Keluarga yang tinggal di Surabaya 1(●)
   Teman2 yang tinggal di Surabaya 2(●)
   Keluarga/teman yang dulu di Surabaya tetapi pulang ke desa/kota 3(●)
   Radio 4(●)
   T.V. 5(●)
   Surat kabar/majalah 6(●)

Kalau lain, harap ditulis ____________________________

c. Kabar2 tersebut tentang apa di Surabaya?

23. Sebelum anda tinggal di Surabaya untuk pertama kali:
   a. Berapa kali anda pernah berkunjung ke Surabaya? Ya 1(●) Tidak 2(●)
   b. Kapan anda mengunjungi kota ini untuk pertama kali? Tahun __
   c. Kapan kunjungan anda terakhir ke kota ini? Tahun __

24. Sebelum anda pindah ke Surabaya, sudah tahukah anda:
   a. Daerah dimana anda akan tinggal? Ya 1(●) Tidak 2(●)
   b. Tempat dimana anda akan bekerja? Ya 1(●) Tidak 2(●)
   c. Berapa harga 1 kilo beras di Surabaya? Ya 1(●) Tidak 2(●)
   d. Berapa rupiah ongkos naik bemo di Surabaya? Ya 1(●) Tidak 2(●)
   e. Terminal bis Wonokromo? Ya 1(●) Tidak 2(●)
   f. Berapa kilometer jarak dari desa/kota anda ke kota Surabaya? Kilometer __
25.a. Sebelum anda pindah ke Surabaya, dalam hal apa anda menganggap Surabaya lebih baik dari pada tempat tinggal yang dulu? 1

2. ___________________________________________ 3.

b. Dalam hal apa Surabaya anda anggap lebih buruk?
1. ___________________________________________

2. ___________________________________________

26.a. Tadi anda berkata bahwa anda meninggalkan tempat duluan untuk pindah ke Surabaya ditahun
b. Berapa umur anda ketika itu? (lihat daftar A) Tahun ____________
c. Bulan apa anda pindah? Bulan ____________
d. Kalau tempat dulu didesa, anda pindah waktu musim apa?
   Masa kosong 1(••)
   Masa pengolahan tanah 2(••)
   Masa tanam 3(••)
   Masa menyiang 4(••)
   Masa panen 5(••)

27. Sebutkan jenis sekolah dan tingkat pendidikan tertinggi yang anda capai sebelum masuk Surabaya untuk pertama kali?

<table>
<thead>
<tr>
<th>Jenis sekolah dan tingkat</th>
<th>Tahun</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28. Apakah anda sudah menikah ketika anda belum pindah ke Surabaya?
   Belum pernah nikah 1(••)
   Nikah 2(••)
   Duda mati 3(••)
   Janda mati 4(••)
   Cerai/Perkawinan pishan ranjang 5(••)

29. Berapa jumlah anggota keluarga yang sudah berdomisili di Surabaya sebelum anda sendiri pindah?

<table>
<thead>
<tr>
<th>Keluarga</th>
<th>Surani/Isteri</th>
<th>Adik</th>
<th>Ayah/Ibu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30.a. Sicip orang pertama dari rumah tangga anda yang pindah ke Surabaya?

<table>
<thead>
<tr>
<th>Responden</th>
<th>1(••)</th>
<th>2(••)</th>
<th>3(••)</th>
<th>4(••)</th>
<th>5(••)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Mengapa orang ini (30-a) yang pertama pindah?

<table>
<thead>
<tr>
<th>Alasan</th>
<th>1(••)</th>
<th>2(••)</th>
<th>3(••)</th>
<th>4(••)</th>
<th>5(••)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Kalau anda hanya mengikuti salah satu anggota dari rumah tangga anda ke Surabaya, apakah anda masih akan pindah ke sini kalau orang tersebut tidak datang?
   Ya 1(••)
   Tidak 2(••)

d. Apakah anda sendiri yang menentukan untuk pindah, atau orang lain?
   Diputuskan sendiri 1(••)
   Orang lain 2(••)

e. Kalau anda hanya setuju dengan keputusan orang lain bagi copindahan anda (JAWAB tersebut ADALAH" orang lain"), siapa yang membuat keputusan itu?
   Suami 1(••)
   Isteri 2(••)
   Ayah 3(••)
   Ibu 4(••)
   Kakak 5(••)
   Adik 6(••)

Kalau lain, harap ditulis
31. Berapa lama sebelum anda betul2 pindah ke Surabaya pada bulan ............... tahun ...........(lihat D-26-6-C) anda akhirnya memutuskan untuk pindah? 
   Nggga __ __ 

32.a. Apakah ada sesuatu yang terjadi dikota/desa anda kotika itu yang membantu anda akhirnya memutuskan untuk pindah? 
   Ya 1(...) 
   Tidak 2(...) 

b. Kalau ya, apa? 

32.b. Apakah anda pernah berpikir untuk pindah dari desa atau kota dimana anda berdiri sebelum akhirnya anda memutuskan tentang keputusan itu? 
   Nggga __ __ 

33.a. Apakah anda pemilik berpikir untuk pindah ke Surabaya, apakah anda membicarakan tentang keuntungan dan ketidak-untungan keputusan terkait dengan orang lain? 
   Ya 1(...) 
   Tidak 2(...) 

b. Kalau ya, berapa lama sebelum anda memutuskan untuk pindah? 
   Minggu __ 

34.a. Dalam jangka waktu kota dan seorang akan memutuskan untuk pindah ke Surabaya, apakah anda juga membicarakan tentang keputusannya dan ketidak-untungan keputusan terkait dengan orang lain? 
   Ya 1(...) 
   Tidak 2(...) 

b. Kalau ya, dengan siapa? 

35.a. Dalam jangka waktu kota dan seorang akan memutuskan untuk pindah ke Surabaya, apakah anda juga membicarakan tentang tempat tujuan lain selain Surabaya? 
   Ya 1(...) 
   Tidak 2(...) 

b. Kalau ya, tempat tujuan lain mana yang anda pikirkan? 
   1. ____________________________ 

2. ____________________________ 
3. ____________________________ 

35.b. Sebelum memilih Surabaya, apakah anda berusaha untuk mendapat keterangan tentang Surabaya? 
   Ya 1(...) 
   Tidak 2(...) 

b. Kalau ya, dengan cara apa? 


Alasan Utama : ____________________________

Alasan Kedua : ____________________________

Alasan Ketiga : ____________________________

37.a. Bagaimana kunjungan keinginan anda untuk menelusuri desa/kota tempat tinggal anda dulu? 
   Sangat kurt 1(...) 
   Kur 2(...) 
   Tidak peduli 3(...) 

b. Kalau JAWABAN (37-A) ADALAH "kurt" atau"sangat kurt" mengapa? 

Alasan Utama : ____________________________

Alasan Kedua : ____________________________

Alasan Ketiga : ____________________________

38.a. Apa yang anda harap untuk terpenuhi dengan kopindahan anda dari desa/kota itu? 
   1. ____________________________

2. ____________________________

3. ____________________________
b. Apakah hal itu tak dapat terpenuhi di desa?  
   Ya 1(...)  
   Tidak 2(...)  

c. Kalau tidak, mengapa?  

---

d. Kalau ya, mengapa anda masih tetap memutuskan untuk pindah?  

---

39.a. Ragaimana keinginan anda untuk tinggal di Surabaya ketika anda memutuskan untuk pindah?  
   Sangat kuat 1(...)  
   Kuat 2(...)  
   Tidak peduli 3(...)  
   Tidak ingin tinggal di Surabaya 4(...)  

b. Mengapa anda akhirnya memutuskan Surabaya sebagai tempat tujuan?  
   Alasan Utama :  
   Alasan Kedua :  
   Alasan Ketiga:  

c. Mengapa anda tidak mau pindah ke Ibu Kota Propinsi wilayah anda?  
   (Kalau bukan dari Jawa Timur).  

d. Mengapa anda tidak pindah ke Jakarta?  

40.a. Kalau anda sudah tahu bahwa anda tidak dapat tinggal di Surabaya karena sesuatu hal, apakah anda tetap pindah dari desa/kota anda?  
   Ya 1(...)  
   Tidak 2(...)  

b. Kalau ya, misalnya kemana?  

---

c. Mengapa anda mau pindah ke Ibu Kota Propinsi wilayah anda?  
   (Kalau bukan dari Jawa Timur).  

d. Mengapa anda tidak pindah ke Jakarta?  

41. Harapan2 utama opakah yang anda punyai tentang kehidupan anda dimasa mendatang di Surabaya?  

42.a. Ketika anda telah memutuskan untuk pindah dan mencoretkan pada kolom/teman dekat, siapa yang kurang setuju dan mencoba untuk memrubah keputusan/pondirian anda?  
   Tidak sorrangpun 1(...)  
   Ayah/Ibu 2(...)  
   Isteri/Suami 3(...)  
   Kakak 4(...)  
   Adik 5(...)  
   Teman dekat 6(...)  

Kalu lain, horop ditulis  

b. Siapa yang menyokong keputusan anda dan membantu kepind-han anda?  
   Tidak sorrangpun 1(...)  
   Ayah/ Ibu 2(...)  
   Isteri/Suami 3(...)  
   Kakak 4(...)  
   Adik 5(...)  
   Teman dekat 6(...)  

Kalu lain, horop ditulis  

43. Pada waktu anda masih berdiam di tempat tinggal terakhir sebelum Surabaya;  
   a. Apakah anda puas dengan pokorjan anda (lihat D-4-a)?  
      tidak puas  
      kurang puas  
      p u a s  
      puas sekali  

   b. Apakah anda puas dengan perumahan anda?  
      tidak puas  
      kurang puas  
      p u a s  
      puas sekali
o. Apakah fasilitas pendidikan bagi keluarga anda cukup memuaskan?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

d. Apakah anda puas dengan taraf kohidupan anda?

<table>
<thead>
<tr>
<th>tidak puas</th>
<th>kurang puas</th>
<th>puas</th>
<th>puas sekali</th>
</tr>
</thead>
</table>

e. Apakah hati anda merasa tenteram?

<table>
<thead>
<tr>
<th>tertekan</th>
<th>kurang tenteram</th>
<th>tenteram</th>
<th>tenteram sekali</th>
</tr>
</thead>
</table>

44. a. Dari seluruh keluarga anda serta keluarga isteri/suami anda, siapakah yang tinggal di desa/kota dulu sebelum ke Surabaya pada waktu anda tinggal di sana?

<table>
<thead>
<tr>
<th>a. Keluarga anda</th>
<th>b. Keluarga isteri/Suami anda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orang tua</td>
<td>Orang tua</td>
</tr>
<tr>
<td>Jumlah kakak</td>
<td>Jumlah kakak</td>
</tr>
<tr>
<td>Jumlah adik</td>
<td>Jumlah adik</td>
</tr>
<tr>
<td>Jumlah orang</td>
<td>Jumlah orang</td>
</tr>
</tbody>
</table>

b. Sebelum anda meninggalkan desa/kota anda untuk pindah ke Surabaya, apakah anda pernah tinggal atau bekerja selama 3 bulan atau lebih di tempat lain?

Ya 1(••)  
Tidak 2(••)

c. Kalau ya, mengapa?

| 1(••) | 2(••) |

d. Apakah anda ikut dalam kegiatan sosial masyarakat di tempat duluth bermukim ke Surabaya?

<table>
<thead>
<tr>
<th>tidak pernah</th>
<th>Jarang</th>
<th>Sekali-sekali</th>
<th>sering</th>
</tr>
</thead>
</table>

e. Dari seluruh keluarga anda serta keluarga isteri/suami anda, siapakah yang tinggal di desa/kota dulu sebelum Surabaya pada waktu anda tinggal di sana?

<table>
<thead>
<tr>
<th>a. Keluarga anda</th>
<th>b. Keluarga isteri/Suami anda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orang tua</td>
<td>Orang tua</td>
</tr>
<tr>
<td>Jumlah kakak</td>
<td>Jumlah kakak</td>
</tr>
<tr>
<td>Jumlah adik</td>
<td>Jumlah adik</td>
</tr>
<tr>
<td>Jumlah orang</td>
<td>Jumlah orang</td>
</tr>
</tbody>
</table>

45. Waktu anda akhirnya pindah dari desa, perasaan utama apa yang ada pada anda?

Penah berharap tentang masa depan di Surabaya 1(••)  
Kecuma karena harus meninggalkan desa, tetapi tahu tidak ada jalan lain 2(••)  
Sangat senang karena dapat meninggalkan desa 3(••)
E. PERPINDAHAN KE SURABAYA.

1. Kendaraan apa yang anda pakai ketika pindah ko Surabaya untuk pertama kali di tahun ...?
   
   Kalau lain, harap ditulis

2. Pada waktu itu, anda turun dimana di Surabaya? (Misalnya nama stasiun bis)
   
   Kalau lain, harap ditulis

3. Berapa bnya perjalanan anda tersebut?
   
   Ongkos untuk responden saja; Rp

4. Siapa membiayai perpindahan anda?
   
   Anggota keluarga inti tempat tinggal dulu
   
   Anggota keluarga inti di Surabaya
   
   Teman dekat di Surabaya
   
   Perusahaan

5. Siapa yang menentukan tanggal perpindahan anda?
   
   Sendiri
   
   Keluarga di tempat tinggal dulu
   
   Keluarga di Surabaya
   
   Perusahaan

6. Adakah orang atau perusahaan/kantor yang menjanjikan pekerjaan kepada anda di Surabaya sobalwa anda meninggalkan desa/kota dulu?
   
   Ya
   
   Tidak

7. Apakah tempat tinggal itu masih tersedia waktu anda tiba di Surabaya?
   
   Ya
   
   Tidak

F. KEADAAN WAKTU PERTAMA KALI DATANG

1. Waktu anda baru tiba di Surabaya, apakah pekerjaan anda yang pertama akan dengan yang anda pegang sebelum ini?
   
   Ya
   
   Tidak

2. Apakah jenis pekerjaan anda pada waktu baru tiba di Surabaya?
   
   Bidang
   
   Status
iii) Pokokan Katigga:

<table>
<thead>
<tr>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>(KALAU JAWABAN F-2-a ADALAH &quot;bersokolah&quot; atau &quot;nyonya rumah saja&quot;, LANJUTKAN KE PERTANYAN NOMOR F-5).</td>
<td></td>
</tr>
</tbody>
</table>

b. Untuk siapa anda bekerja? Pokokan utama: 

<table>
<thead>
<tr>
<th>(nama perusahaan/kantor)</th>
</tr>
</thead>
</table>

- (nama perusahaan/kantor) 

- (nama perusahaan/kantor) 

o. Berapakah jumlah orang yang bekerja untuk perusahaan atau kantor itu? (pokokan utama saja) 

<table>
<thead>
<tr>
<th>Responen saja</th>
<th>Keluarga responden saja</th>
<th>Keluarga pemilik dan responden</th>
<th>Keluarga pemilik dan kurang dari 5 orang lain</th>
<th>Keluarga pemilik dan 5-10 orang lain</th>
<th>Lebih dari 10 orang yang bukan keluarga pemilik</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(•)</td>
<td>2(•)</td>
<td>3(•)</td>
<td>4(•)</td>
<td>5(•)</td>
<td>6(•)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis.

3.a. Bagaimana sistem penggajian/penghasilan anda dari pokokan utama pada waktu itu?

- Harii 1(•)
- Minggun 2(•)
- Wanita 3(•)

b. Berapa penghasilan anda rata-rata dari pokokan utama untuk waktu yang sama yaitu pada waktu di atas (F-3-c)?

<table>
<thead>
<tr>
<th>Uang tunai</th>
<th>Uang tuni</th>
<th>Kualitas barang</th>
</tr>
</thead>
</table>

Kalau penghasilan dalam bentuk barang, bernilai.

- Rp. 

- Rp. 

- Rp. 

3.c. Berapakah jumlah penghasilan anda rata-rata dari pokokan lain untuk waktu yang sama tertulis di atas (F-3-c)?

<table>
<thead>
<tr>
<th>Uang tunai</th>
<th>Uang tuni</th>
<th>Kualitas barang</th>
</tr>
</thead>
</table>

Kalau penghasilan dalam bentuk barang, bernilai.

- Rp. 

- Rp. 

- Rp. 

4.a. Berapa minggu yang anda butuhkan untuk menjalani pokokan utama di Surabaya?

- Minggu 1(•)
- Minggu 2(•)
- Minggu 3(•)

b. Siapa yang membantu hidup anda sebelum anda menjalani pokokan utama?

- Sosial 1(•)
- Keluarga di daerah ini 2(•)
- Orang dekat 3(•)

Kalau lain, harap ditulis.

5. Apakah tempat tinggal anda di Surabaya sama dengan yang sekarang ini?

- Ya 1(•)
- Tidak 2(•)

(KALAU JAWABAN 5 ADALAH "Ya", LANJUTKAN KE P-11-c)

6. Apakah jenis tempat tinggal anda yang portama di Surabaya?

<table>
<thead>
<tr>
<th>Rusch biasa</th>
<th>Hotel/losnon</th>
<th>Gubuk</th>
<th>Dooek</th>
<th>Gerbon: K. L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(•)</td>
<td>2(•)</td>
<td>3(•)</td>
<td>4(•)</td>
<td>5(•)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis.

7. Berapa lama anda berdiam/ditatap tinggal yang portama?

- Tahun _ _ _

8. Dimana tempat kediaman tersebut?

<table>
<thead>
<tr>
<th>Jalan/Gang/Nomer</th>
<th>R.T./R.</th>
<th>Lingkungan/desa</th>
<th>Kecamatan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Dengan siapa anda tinggal ditempat itu?

<table>
<thead>
<tr>
<th>Sendiri</th>
<th>Anak</th>
<th>Isteri/Suami</th>
<th>Kakak</th>
<th>Adik</th>
<th>Ayah/Ibu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
<td>3(…)</td>
<td>4(…)</td>
<td>5(…)</td>
<td>6(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..

10.a. Bagaimana status tempat tinggal anda yang pertama di Surabaya?

<table>
<thead>
<tr>
<th>Milik sendiri</th>
<th>Sown</th>
<th>Kontrak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
<td>3(…)</td>
</tr>
</tbody>
</table>

Rumah atau instansi pemerintah/Swasta - sown........ 4(…)

Rumah atau instansi pemerintah/Swasta-gratis 5(…)

Milik orang lain-gratis 6(…)

Kalau lain, harap ditulis ………………………………………………………………..

b. Sertifikat apa saja yang diberikan oleh Kotamadya kepada pemilik atau rumah itu?

<table>
<thead>
<tr>
<th>Eigondom tanah</th>
<th>Eigondom bangunan</th>
<th>S.I.P. (Surat izin pemupukan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
<td>3(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..

c. Jenis bahan bangunan itu untuk :

<table>
<thead>
<tr>
<th>a. Dinding, atap</th>
<th>b. Lantai</th>
<th>c. Atap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambu 1(…)</td>
<td>Tanah 1(…)</td>
<td>Genteng 1(…)</td>
</tr>
<tr>
<td>Kayu 2(…)</td>
<td>Dinding 2(…)</td>
<td>Seng 2(…)</td>
</tr>
<tr>
<td>Batu - Batu 3(…)</td>
<td>Semen merah 3(…)</td>
<td>Daunzan 3(…)</td>
</tr>
<tr>
<td>Beton 4(…)</td>
<td>Kayu 4(…)</td>
<td>Plastik 5(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..

d. Apakah ada kamar mandi dalam rumah itu?

<table>
<thead>
<tr>
<th>Ya</th>
<th>Tidak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..

e. Siapa pemilik tanah bangunan itu?

<table>
<thead>
<tr>
<th>Responsan</th>
<th>Pemilik rumah</th>
<th>Kotapraga</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
<td>3(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..

11.a. Mengapa anda memilih tempat itu(lihat F.8) sebagai kediaman pertama anda di Surabaya?(misalnya: dekstempat pertama yang anda capai dengan kendaraan ko Surabaya; tersedia tanah dan perumahan; tempat tinggal kluarga atau teman)

<table>
<thead>
<tr>
<th>Alasan 1.</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alasan 2.</th>
<th></th>
</tr>
</thead>
</table>

b. Keuntungan apa yang diberikan oleh tempat itu kepada anda dibandingkan dengan tempat lain?

<table>
<thead>
<tr>
<th>Deket tempat pertama yang anda capai dengan kendaraan ko Surabaya</th>
<th>Tersedianya tanah dan perumahan</th>
<th>Tempat tinggal kluarga/teman</th>
<th>Deket don dan pengangkutan</th>
<th>Perumahan murah</th>
<th>Deket dengan tempat kerja</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(…)</td>
<td>2(…)</td>
<td>3(…)</td>
<td>4(…)</td>
<td>5(…)</td>
<td>6(…)</td>
</tr>
</tbody>
</table>

Kalau lain, harap ditulis ………………………………………………………………..
12. Berapa orang borong dari desa/kota anda yang dulu dan berapa orang dari suku anda yang tinggal di kampung yang pertama (lihat Pe-3) ketika anda baru tiba?
   a. Dari desa/kota anda
      Tidak ada 1(•)
      Beberapa 2(•)
      Banyak 3(•)
      Banyak sekali 4(•)
   b. Dari suku anda
      1(•)
      2(•)
      3(•)
      4(•)

13. Kalau anda monumenc, borong anda membayar per bulannya untuk
   a) Pernah : Rp.
   c) Kalau anda, rekan diamping borong per bulanya Rp.

14. Kalau tidak memenuhi pucat atau kontrak, borong anda membayar per bulannya untuk :
   a) Pernah : Rp.

6. PERPINDAHAN DARI SURABAYA UNTUK BEKERJA.
1. a. Sejak anda pindah ke Kotamadya Surabaya untuk pertama kali di tahun... Apakah anda pernah tinggal di luar Kotamadya Surabaya ?

   (KALAU JAWABAN G-1-4 ADALAH "Tidak" LAMJUTKAN KE PERTANYAN KOKEN 7-9) b. Kalau ya, berapa kali sejak anda masuk K.M.S. untuk pertama kali ? Kali ...


   Tempat 1. Bidang ... Kec. ... Kb/Kodya ... Status ...
   Tempat 2. Bidang ... Kec. ... Kb/Kodya ... Status ...
   Tempat 3. Bidang ... Kec. ... Kb/Kodya ... Status ...

3. Apakah jenis pekerjaan anda biasanya dilakukan di tempat2 ini ? (lihat G-2)

4. Apakah waktu perpindahan2 ini ada hubungan dengan musim pertanian ? Ya 1(•)

5a. Kalau ya, pada bulan apa dan musim apa anda biasanya pindah dari Surabaya untuk bekerja? (bori bulan dan musim pindah yang tersedia dan tanda musim pertanian yang sesuai).

   a. Bulan : ...
   b. Musim diliur K.M.S. : Pernyataan tanah 1(•)

   Tanam 2(•)
   Menyiang 3(•)
   Pancn 4(•)
   Kocong 5(•)

   b. Pada bulan apa dan musim apa anda biasanya kembali ke Surabaya?

   a. Bulan : ...
   b. Musim diliur K.M.S. : Pernyataan tanah 1(•)

   Tanam 2(•)
   Menyiang 3(•)
   Pancn 4(•)
   Kocong 5(•)

6. Mengapa anda bekerja atau mencari pekerjaan di luar Surabaya ...

7. a. Sejak pertama tahun 1973, pernahkah anda tinggal dan bekerja atau mencari pekerjaan di luar K.M.S. untuk selama 5 hari atau lebih? Ya 1(•)

   (KALAU JAWABAN ADALAH "tidak" LAMJUTKAN KE BAGIAN H) b. Selama bulan apa anda bekerja di luar Kotamadya Surabaya? (bori tanah pada nomor yang tersedia).
<table>
<thead>
<tr>
<th>Tanggal</th>
<th>Bulan</th>
<th>Tanggal</th>
<th>Bulan</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Januari</td>
<td>01. Januari</td>
<td>05. Mei</td>
<td>05. Mei</td>
</tr>
<tr>
<td>02. Februari</td>
<td>06. Juni</td>
<td>09. September</td>
<td>09. September</td>
</tr>
<tr>
<td>03. Maret</td>
<td>07. Juli</td>
<td>11. Oktober</td>
<td>15. Maret</td>
</tr>
</tbody>
</table>

Jumlah kali:

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Tempat</th>
<th>Nomor bulan</th>
<th>Tempat</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Pekerjaan</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Bidang</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Berapa Minggu</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Alasan:</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Alasan</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nomor bulan</th>
<th>Alasan</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

Alasan 1._________________ _____________________
Alasan 2._________________ _____________________

Alasan 1._________________ _____________________

H. KUNJUNGAN KE TEMPAT DULU / TEMPAT ASAL.

1.a. Menurut anggapan anda, dimana tempat asal anda?
   a. Tempat lahir : Desa/kota: ___________________ 1(...) 
   b. Tempat terakhir sebelum Surabaya: Desa/kota: ___________________ 2(...) 
   c. Tempat lain : Desa: ___________________ Kec. ___________________ Kb./Kodya: ___________________ Prop. ___________________ 3(...) 

b. Kalau dari tempat lain (H-1-c-o) mengapa anda menganggap tempat itu sebagai tempat asal anda? Alasan _____________________ 4(...) 

c. Berapa kali sejak permulaan tahun 1973 anda telah mengunjungi:
   a. Tempat lahir anda: ____
   b. Tempat sebelum K.N.S. ____

(PERTANYAAN NOMOR F-9 MENUNJUK PADA "tempat yang anda anggap sebagai tempat asal " H-7-c). 

<table>
<thead>
<tr>
<th>Berapa sering anda biasanya mengunjungi tempat asal anda?</th>
<th>Setu atau lebih kali sebulan 1(...)</th>
<th>Sekali selama 2-3 bulan 2(...)</th>
<th>Dan kali setahun 3(...)</th>
<th>Sekali setahun 4(...)</th>
<th>Kurang dari sekali setahun 5(...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Lihat H-1-c).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Kapan biasanya anda mengunjungi tempat asal?

Kalu lain, harap ditulis

b. Pada musim pengolahan tanah 1(***)
   Pada musim panen 2(***)
   Hari besar di desa 3(***)
   Pernikahan/kematian dalam keluarga anda 4(***)
   Idul Fitri 5(***)

Kalau lain, harap ditulis

c. Faktor2 apa yang menentukan berapa sering dan kapan anda berkunjung ke tempat asal anda?(misalnya: simpahan uang, musim pertanian,keadaan2 di tempat asal)

Faktor Utama
Faktor Kedua
Faktor Ketiga

Kalau lain, harap ditulis

d. Berapa biasanya ongkos jalan yang anda keluarkan untuk pulang ke tempat asal anda? (atau jalan untuk seorang)
   Rp. _______ _______ _______

e. Siapa anggota keluarga anda yang masih tinggal di tempat asal anda?
   Tidak ada 1(***)
   Istri/Suami 2(***)
   Anak 3(***)
   Ayah/Ibu 4(***)
   Kakak/Aidak 5(***)

Kalau lain, harap ditulis

f. Apakah anda masih mengurus anggota masyarakat tempat asal anda?
   Ya 1(***)
   Tidak 2(***)

3. Kalau istri dan/atau anak anda tetap tinggal di tempat di luar Surabaya (tempat asal/tempat lain):

   a. Mengapa mereka belum pindah ke Surabaya untuk tinggal bersama anda?
      Alasan

   b. Depetkah anda memberi naftkah kalau mereka pindah untuk menetap di Surabaya?
      Ya 1(***)
      Tidak 2(***)

4. Apakah anda biasanya mengirim bantuan atau uang ke tempat di luar Surabaya?

   a. Kalau istri dan/atau anak dan/atau orang yang anda kirim tiap kali?
      Uang tunai Rp. _______ _______ _______
      Jenis barang ________

   b. Berapa kali selama 12 bulan terakhir?
      Kali _______

   c. Jumlah barang Rp. _______ _______ _______

   d. Biasanya jumlah terbesar dikirim ke mana?
      a. Tempat terakhir sebelum Surabaya:Desa/kota _______ _______ _______
      b. Tempat asal anda (lihat H-1-a) kalau bukan tempat terakhir sebelum Surabaya: Desa/kota _______ _______ _______
      c. Tempat lain :Desa _______ Kec. _______ Kodyc. _______ Prop. _______ Lain _______

   e. Kepada siapa bantuan/uang ini biasanya dikirimkan?
      (misalnya: Istri/suami; anak; adik; kakak; Ayah; Ibu) _______ _______ _______

   f. Biasanya uang ini dipergunakan untuk apa?
      _______ _______ _______

5. Apakah anda biasanya membawa uang atau bantuan ke tempat di luar Surabaya?

   a. Ya 1(***)
   Tidak 2(***)

   b. Berapa kali selama 12 bulan terakhir?
      Kali _______
c. Berapa rata2 jumlah uang dan/atau ongkos pemberian yang anda membawa tiap kali?
   a. Uang tunai Rp. ______________
   b. Jenis barang: ______________
   c. Jumlah barang: Rp. ______________

d. Kalau ya, biasanya jumlah terbesar dibulan kena?
   a. Tempat terakhir sebelum Surabaya: Desa/Kota. ______________
   b. Tempat asal anda (lihat H-1-c) kalau bukan tempat terakhir sebelum Surabaya: Desa/Kota. ______________
   c. Tempat lain: Desa. ______________ Kec. ______________

Kb. ______________ Kodya. ______________ Prop. ______________ Lain ______________

Kalau anda masih tinggal di Surabaya, apakah anda, biasanya uang inii diborokan?
   (misalnya: istri/suami; anak; adik; kakak; Ayah; Ibu) ______________

f. Biasanya dipergunakan untuk apa?

6. a. Apakah anda memiliki atau mempunyai hak(atas/untuk mem-
penggunakan) tanah atau rumah di luar Kotamadya Surabaya?
   Ya ______________
   Tidak ______________
   b. Kalau ya, berapa luas dan berapa bush?
      a. TANAH
         Jenis(misalnya sawah) ______________ Luas(m2) ______________ Bush ______________
      b. RUIAH
         Desa ______________ Kec. ______________

Kb. ______________ Kodya. ______________ Kec. ______________

Kalau anda punya rumah di luar Surabaya, apakah anda telah memiliki rumah tersebut sebelum anda masuk K.M.S. untuk pertama kali?
   Ya ______________
   Tidak ______________

d. Kalau tidak, kapan anda mempunyai atau membeli rumah itu?
   Tahun ______________

e. Mengapa anda mempunyai/membeli rumah tersebut?

f. Kalau anda belum punya rumah di luar Surabaya, apakah anda merencanakan untuk membangun/membeli sebuah rumah sebelum pensiun?
   Ya ______________
   Tidak ______________

7. Pernahkah anda merencanakan untuk kembali monetep ditempat asal?
   Ya ______________
   Tidak ______________

8. a. Apakah anda pernah mendorong salah satu dari Saudara-saudara /teman2 anda untuk memutuskan pindah ke Surabaya?(dari tempat asal atau tempat2 lain)
   Ya ______________
   Tidak ______________
   b. Kalau ya, berapa orang sudah anda dorong untuk memutuskan
      pindah sejak anda masuk ke Surabaya untuk pertama kali?
      Orang__

o. Mereka datang dari daerah mana?
   Tempat asal responden: ______________
   Tempat dulu responden: ______________

Kalau lain, harap ditulis.

d. Bagaimana anda membantu mereka untuk memutuskan pindah ke Surabaya?
   Mencarikan tempat tinggal 1(...)
   Memberi uang 2(...)
   Mensosikan pekerjaan 3(...)
   Menawarkan pekerjaan 4(...)

Kalau lain, harap ditulis.

I. SIKAP PERSEROANAN (PADA SAAT INI)

1. Berapa lama lagi anda berharap untuk menetap di Surabaya sekarang?
   1 bulan 1(...)
   2-3 bulan 2(...)
   1-2 bulan 3(...)
   1-5 tahun 4(...)
   6-10 tahun 5(...)
   Sampai pensiun 6(...)
   Selama hidup 7(...)

Kalau lain, harap ditulis
2. Bagaimana anda menganggap diri, kalau sebagian penduduk Kotamadya, Surabaya sekarang ini?(beri tanda pada jawaban yang sesuai).
   a. Penduduk tetap K.M.S.untuk seumur hidup
   b. Penduduk tetap K.M.S. sampai waktu pensiun
   c. Penduduk tetap K.M.S. tetapi mungkin akan pindah lagi selama waktu kerja
   d. Penduduk musiman (2-3 bulan) pulang ke desa untuk pekerjaan musiman (disawah dsb)
   e. Penduduk sementara K.M.S. yang secara tetap kembali ke rumah dan keluarga ditempat luar K.M.S.

3. a. Waktu dipensiun, apakah anda berniat untuk menetap di luar K.M.S.?
   b. Kalau ya, dimana? Desa __________ Kec. __________ Kb/Kodya __________

4. Surat apa yang anda miliki?
   a. Kartu penduduk K.M.S.
   b. Kartu penduduk dari tempat lain
   c. Surat jalan dari desa
   d. Surat pindah dari desa
   e. Surat jalan yang dipperpanjang

5. Kalau dibandingkan dengan kehidupan anda di desa/kota dahulu, apakah kehidupan dikota ini lebih baik dalam:
   a. Materi.
      Jauh lebih baik 1(...)
      Lebih baik 2(...)
      Sama saja 3(...)
      Kurang baik 4(...)
      Sangat kurang baik 5(...)
   b. Rohani,

6. Menurut pendapat anda, apakah lebih ekonomis untuk menghidupi isteri dan anak 2 di Surabaya atau ditempat tinggal terakhir sebelum masuk K.M.S.?
   a. Jauh lebih murah di tempat dulu 1(...)
   b. Lebih murah 2(...)
   c. Sama saja 3(...)
   d. Lebih murah di Surabaya 4(...)

7. Sebutkan 3 atau 4 hal yang membuat hidup di Surabaya menyenangkan (misalnya: adanya banyak hiburan, keamanan, kebebasan perseorangan):

8. Keuntungan/ketidak-untungan terpenting apakah yang dimiliki Surabaya dibandingkan dengan kediaman terakhir anda sebelum masuk Kotamadya Surabaya?
   a. Keuntungan:
      Utama: _____________________________
      Kedua: _____________________________
      Ketiga: _____________________________
   b. Ketidak-untungan:
      Utama: _____________________________
      Kedua: _____________________________
      Ketiga: _____________________________
      Lain: _____________________________

Kalau lain, harap ditulis._
9. Apakah kehidupan anda di Surabaya sejauh yang anda harapkan sebelum anda masuk K.M.S. untuk pertama kali?  
- Jauh lebih baik (1)  
- Lebih baik (2)  
- Seperti yang diharapkan (3)  
- Kurang baik (4)  
- Sangat kurang baik (5)  

10. a. Berapa teman dekat yang anda punya di Surabaya?  
   - Orang  

   b. Berapa diantaranya dari suku anda?  
   - Orang  

   c. Berapa diantaranya dari tempat asal anda?  
   - Orang  

11. Berapa orang yang berasal dari desa/kota dulu anda dan berapa orang yang dari suku anda yang tinggal di kampung anda sekarang ini?  
   a. Orang dari tempat dulu anda.  
   - Tidak ada (1)  
   - Beberapa (2)  
   - Banyak sekali (3)  
   b. Orang dari suku anda.  
   -  

12. Kalau sekarang anda berkunjung ke tempat tinggal yang dulu sebelah Surabaya, apa kesan utama anda?  

13. Barang2 kepunyaan anda pada waktu sekarang ini:  
   (kala punya, sebutkan berapa buahnya).  
   - Demo Buah  
   - Oplet Buah  
   - Gerobak sapi/kuda Buah  
   - Dokor/korota kuda Buah  
   - Gerobak dorong jualan Buah  
   - Gerobak dorong barang Buah  
   - Becak Buah  
   - Sepeda Buah  
   - Sepeda motor Buah  
   - Mobil/teksi Buah  
   - Jcn tangon Buah  
   - Jam beker Buah  
   - Jam dinding Buah  
   - Kamera/Kodak Buah  
   - Potomaz Buah  

14. a. Pada saat ini apakah anda mempunyai hutang uang?  
   - Ya (1)  
   - Tidak (2)  

   b. Apakah hutang ini merupakan sesuatu yang berarti?  
   - Sangat besar (1)  
   - Besar (2)  
   - Sedang (3)  
   - Kecil (4)  
   - Sangat kecil (5)  

15. a. Kira—kira berapa organisasi sosial (persatuan/perkumpulan) anda ikuti sekarang?  
   - Jumlah organisasi  

   b. Dari beberapa macam2 organisasi yang anda ikuti itu, umumnya borbentuk apa?  
   - Pengajian/ agama (1)  
   - Pramuka (2)  
   - Hapsip (3)  
   - Arisan (4)  
   - Olahraga (5)  
   - Kebudayaan / keagamaan (6)  
   - Kopertasi/produksi, konsumsi, kredit dll (7)  
   - Profesi /fungsionall (8)  
   - Doraah (9)  

   Kalau lain, harap ditulis  


16. a. Apakah anda sering mendengarkan radio ?
   Sahari²/2-3 kali seminggu ... 1(....)
   Sehari seminggu ......... 2(....)
   Sehari² sebulan ........... 3(....)
   setiap pernah ............. 4(....)

   b. Acara apa yang paling anda gemari ?
   Kromong/ Musik Keroncong 1(....)
   Musik Barat/lagu² pop .... 2(....)
   Agama ........................ 3(....)
   Wayang ........................ 4(....)
   Acara pendidikan ........... 5(....)
   Olahraga ........................ 6(....)
   Cerita/Sanjidara/ Tudruk ... 7(....)
   Siaran berita .................. 8(....)

Kalau lain, harap ditulis ____________________________

17. Apakah anda sering melihat :
   a. Televisi
      Sahari²/2-3 kali seminggu 1(....)
      Sehari seminggu ........ 2(....)
      Sehari² sebulan .......... 3(....)
      setiap pernah .......... 4(....)
   b. Bioskop

18. Biasanya anda pergi ke pasar mana ?
   a. Harian :
   b. Mingguan :

19. Biasanya tempat² ini ?

20. Menurut pendapat anda, orang mncara apa yang tinggal
dosisa waktu selama hidup.
   Orang yang tidur susu ........ 1(....)
   Orang yang berada ............ 2(....)
   Orang yang punya tanah luas .... 3(....)
   Orang yang tinggal berpendidikan ... 4(....)
   Orang yang tua .................. 5(....)

Kalau lain, harap ditulis ____________________________

21. Bagaimana pendapat anda tentang tingkat pendidikan yang harus
dicapai oleh orang anak laki² / anak perempuan ?

   a. Anak laki-laki
   tingkat ____________________________

   b. Anak perempuan
   tingkat ____________________________
Before the enumeration survey could begin it was necessary to develop a sample design which would ensure that the sample population enumerated would be statistically and geographically representative of lifetime immigrants resident in Surabaya during 1974. The development of an appropriate sample design was handicapped by several major difficulties: the large size of Surabaya Municipality, the need for a cluster sample, the choice of the most suitable enumeration unit, and the need to ensure that the sampling method provided a representative sample of the range of ethnic, demographic and socio-economic regions within Surabaya.

Surabaya Municipality had a total area of 29,178 ha and a total population of approximately 1.55 million in 1971. The design of a sampling procedure which would guarantee a representative sample of such a large and populous area was clearly a very difficult task. The problem was exacerbated by the need to conduct a cluster sample in order to minimise costs and time, and in order to maximise the completeness of the population enumeration within the selected areal units. Given the resources available to a sole researcher, it was impractical for me to attempt to survey the whole municipality. Consequently, I decided to exclude from the enumeration and questionnaire surveys the five semi-rural kecamatan that were incorporated into Kotamadya Surabaya in 1969. These five kecamatan: Karangpilang, Wonocolo, Tandes, Rungkut and Sukolilo had a relatively low population density (10 persons per ha compared to 198 persons per ha within the pre-1969 city boundaries); their inclusion would have increased survey costs. In addition, the five kecamatan lacked accurate maps of areal subdivisions below the kecamatan level which would have made cluster sampling very difficult in these areas. Because of the decision to exclude the five semi-rural kecamatan, the enumeration and questionnaire surveys conducted for this study were confined to that part of Surabaya included in the pre-1969 municipal boundaries referred to as 'Old Surabaya'. In 1971 Old Surabaya had an area of approximately 6720 ha and a population of 1.3 million which
comprised 23 per cent of the area and 81 per cent of the population of Kotamadya Surabaya.

After careful consideration the RT was chosen as the enumeration unit for the enumeration survey. The RT had two important advantages over other areal units. Unlike census blocks or other statistical units it was a functioning areal unit with readily identifiable boundaries familiar to most of its residents. This was an important consideration, since the choice of a functioning administrative unit should eliminate problems of under enumeration caused by uncertainty about census block boundaries, a widespread problem in the 1971 census (Husein, formerly of the Bagian Pendaftaran Penduduk, Kotamadya Surabaya, personal communication, 1973). Second, the RT was the smallest administrative unit in the city, a feature which allowed the enumeration survey to maximise the number of areal units sampled and provide maximum geographic coverage of Old Surabaya. Each RT had an average of 50-60 households within its boundaries, but the number varied enormously. Although many Kepala RT did not know the number of households, they had a good idea of the number of persons registered as kepala keluarga; this provided a useful check of enumeration data. Each household had only one 'head of household', but the same household may contain several persons registered as 'head of family'. For example, married sons living in the same household as their father were usually registered as 'head of family' and each had a separate kartu keluarga for his family, but the father remained 'head of household'.

For estimation purposes it was assumed there were 50 households per RT. Given the time and financial constraints of the study, it was decided that 1,500 was the maximum number of households which could be enumerated. In order to obtain 1,500 households, approximately 30 RT would have to be enumerated. A reconnaissance survey of several RT revealed large variations in the number of households, however; the number ranged from less than 30 to over 100 per RT. To standardise the minimum size of each population cluster, it was decided that if the number of households in a particular RT was less than 50 an additional RT within the same Rukun Warga (RW) (Kampung Association) would be randomly selected to boost the size of
the sample in that particular area\(^{(1)}\), on the statistical principle that clusters should be as heterogeneous as possible (Blalock, 1972: 523-4). The 'doubling up' in some areas resulted in a reduction in the number of clusters that could be enumerated, from the previous high of 30, to an approximate ceiling of 22 (refer Appendix Figure 1.1 and Appendix Table 1.3).

The third problem facing the sample design was the need to find an approach which would provide a representative sample of the range of ethnic, demographic, and socio-economic regions within the boundaries of Old Surabaya. It was decided that a systematic area sample, based on the intersections of a grid randomly placed on a map of the 'old city', would provide a sample representative of the geographic variation within Old Surabaya. The need to ensure that the sample population was geographically representative of the city was emphasised by the population registration data. These data indicated that the demographic and socio-economic heterogeneity of the population of Old Surabaya was reflected geographically at the lingkungan level of analysis (refer Chapter Two). The population registration survey also emphasised the ethnic heterogeneity of Surabaya's lifetime inmigrant population: ten of the 37 lingkungan had lifetime inmigrant populations dominated by non-Javanese born inmigrants (refer Appendix Table 1.4). A basic assumption of this study is that the ethnicity and place of origin of an individual inmigrant is a major independent variable in the explanation of migrant behaviour. The sample of lifetime inmigrants should be representative of the ethnic composition of the inmigrant population. Unfortunately, because some minority ethnic groups (such as rotok Chinese and Madurese) were concentrated in kampung of small areal extent but with high population densities, a sample design based solely on a systematic areal sample does not guarantee the ethnic representativeness of the sample population.

\(^{(1)}\) Because of a lack of information or incorrect data from the Kepala RT, or due to the particular character of some RT (for example one RT contained a large hostel for girls which had only one head of household for all the boarders), it was impossible, or undesirable, to add an additional RT in all cases (refer Appendix Table 1.3).
Appendix Figure 1.1
Location of sample areas (RW) and enumeration units (RT) 'Old Surabaya', 1974

LOCATION OF SAMPLE AREAS
(RUKUN WARGA)
AND
ENUMERATION UNITS
(RUKUN TETANGGA)

1. Gubeng Kertajaya
2. Jatipurwo
3. Gis
4. Kolodalam
5. Sidolopo
22. Sidolopo Kulon
6. Tambakrejo V
23. Tambakrejo III
7. Perak - Tosrowatan
24. Alun-Alun Perak
8. Rayowali
9. Oupak Baru
10. Pacarkembang
11. Wonokri
12. Kampung Melang
13. Argosuwo
14. Jark
15. Sreng Gurung
16. Undaan Penelih
25. Makam Penelih
17. Taman Simpang
18. Bantangan
26. Jenggolo
19. Batajan
20. Ngagel Tirto
21. Jetis Lama
27. Jetis Pertolongan

Sample areas (rukun warga) located at grid intersections
Grid intersections sited on non-urban land and ignored
Sample location where survey permission was refused

Sample areas (rukun warga) randomly selected
Randomly selected enumeration units (rukun tetangga) within sample areas

Enumeration unit identification number
Lingkungan boundaries
Boundary of Old city

Lingkungan excluded from the systematic areal sample because a majority of in-migrants are non-Java born:

Lingkungan where Madura-born form a majority of the in-migrant population
No ethnic group forms a majority of the in-migrant population

Source: (i) Unpublished maps Bagian Pendaftaran Penduduk, Kotamadya Surabaya
(ii) Population registration survey
### APPENDIX TABLE 1.3 Questionnaire totals per enumeration area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Gubeng Kertajaya</td>
<td>70</td>
<td>394</td>
<td>93</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Jatipuro</td>
<td>101</td>
<td>376</td>
<td>89</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>Gili</td>
<td>41</td>
<td>193</td>
<td>51</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Kilendalan</td>
<td>91</td>
<td>397</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Sidotopo</td>
<td>133</td>
<td>520</td>
<td>125</td>
<td>40</td>
</tr>
<tr>
<td>220</td>
<td>Sidotopo Kulon</td>
<td>86</td>
<td>342</td>
<td>73</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>Tambakrejo V</td>
<td>223</td>
<td>572</td>
<td>131</td>
<td>53</td>
</tr>
<tr>
<td>230</td>
<td>Tambakrejo X</td>
<td>59</td>
<td>184</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>Penkop - Tembantu</td>
<td>29</td>
<td>129</td>
<td>31</td>
<td>13</td>
</tr>
<tr>
<td>240</td>
<td>Alun-Alun Perak</td>
<td>209</td>
<td>139</td>
<td>31</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>Rajawali</td>
<td>75</td>
<td>318</td>
<td>63</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>Pancerkebang</td>
<td>71</td>
<td>300</td>
<td>48</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td>Wonokitri</td>
<td>69</td>
<td>376</td>
<td>67</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td>Kamasung Malang</td>
<td>93</td>
<td>409</td>
<td>73</td>
<td>18</td>
</tr>
<tr>
<td>13</td>
<td>Arganpurwo</td>
<td>97</td>
<td>577</td>
<td>102</td>
<td>26</td>
</tr>
<tr>
<td>14</td>
<td>Jarak</td>
<td>31</td>
<td>401</td>
<td>42</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>Simo Gumong</td>
<td>113</td>
<td>489</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Undan Peneich</td>
<td>363</td>
<td>150</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>230</td>
<td>Makan Peneich</td>
<td>383</td>
<td>180</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>Tenon Simpang</td>
<td>18</td>
<td>261</td>
<td>68</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>Bimbingan</td>
<td>28</td>
<td>193</td>
<td>311</td>
<td>83</td>
</tr>
<tr>
<td>260</td>
<td>Jenggolo</td>
<td>273</td>
<td>162</td>
<td>31</td>
<td>6</td>
</tr>
<tr>
<td>19</td>
<td>Brakjaya</td>
<td>86</td>
<td>380</td>
<td>185</td>
<td>27</td>
</tr>
<tr>
<td>20</td>
<td>Egag Tiro</td>
<td>75</td>
<td>371</td>
<td>86</td>
<td>22</td>
</tr>
<tr>
<td>21</td>
<td>Jeli Lema</td>
<td>48</td>
<td>243</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>270</td>
<td>Jeli Perangon</td>
<td>129</td>
<td>576</td>
<td>132</td>
<td>25</td>
</tr>
</tbody>
</table>

**Notes:**
1. Additional or supplementary RT to the RT with which it is grouped.
2. Total population enumerated on Questionnaire A, including children and non-migrants.
3. Total number of Questionnaire B analysed, excluding two questionnaires one from area 1 and one from area 4, which were not analysed because of unreliable and inconsistent data. A 25 per cent sample of the total senior adult Inmigrant sub-population.
4. Total 1969-74 adult lifetime immigrants (recent immigrants) enumerated on Questionnaire A.
5. Total number of Questionnaire C analysed, not the number of respondents interviewed. One questionnaire from area 16 was excluded due to unreliable and inconsistent data, but otherwise a 25 per cent sample of the total adult immigrant sub-population.

**Source:** Questionnaire survey.
APPENDIX TABLE 1.4 Lingkungan excluded from the systematic areal sample

<table>
<thead>
<tr>
<th>LINGKUNGAN</th>
<th>% lifetime immigrants born in Java</th>
<th>% lifetime immigrants born in Madura</th>
<th>% lifetime immigrants born in Outer Islands</th>
<th>% lifetime immigrants born overseas (mostly in China)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyamplungan</td>
<td>18.2</td>
<td>63.6</td>
<td>15.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Pabean Cantian</td>
<td>19.2</td>
<td>46.2</td>
<td>3.8</td>
<td>30.8</td>
</tr>
<tr>
<td>Srengganan</td>
<td>28.6</td>
<td>67.3</td>
<td>-</td>
<td>4.1</td>
</tr>
<tr>
<td>Sidodadi</td>
<td>32.4</td>
<td>50.0</td>
<td>-</td>
<td>17.6</td>
</tr>
<tr>
<td>Kampung Baru</td>
<td>35.1</td>
<td>62.2</td>
<td>-</td>
<td>2.7</td>
</tr>
<tr>
<td>Semampir</td>
<td>39.4</td>
<td>56.6</td>
<td>4.0</td>
<td>-</td>
</tr>
<tr>
<td>Bongkaran</td>
<td>42.3</td>
<td>42.3</td>
<td>-</td>
<td>15.4</td>
</tr>
<tr>
<td>Alun-Alun Contong</td>
<td>45.7</td>
<td>21.7</td>
<td>-</td>
<td>32.6</td>
</tr>
<tr>
<td>Krembangan Utara</td>
<td>47.5</td>
<td>42.5</td>
<td>5.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Ampel</td>
<td>47.8</td>
<td>-</td>
<td>43.5</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: Population registration survey.

To overcome this problem, the ten exceptional lingkungan which had a minority of Javanese-born persons in their lifetime immigrant populations (refer Appendix Table 1.4) were excluded from the systematic areal sample. Instead, these ten lingkungan were considered as an ethnically stratified sub-group and given proportional representation in the sample. These lingkungan contained 705 or 14 per cent of the 5,044 lifetime immigrants sampled in the population registration survey; they were allocated 14 per cent, or three of the 22 sample locations which were to be covered in the enumeration survey. Close inspection revealed that these 10 lingkungan consisted of two identifiable sub-groups, and so a second stage of proportional stratified sampling was necessary. The migrant populations of four of the ten lingkungan comprised a majority of Madurese-born immigrants (refer Appendix Table 1.4). These four lingkungan contained over half of the 705 lifetime immigrants sampled in the population registration survey, and so two of the three 'available' sample locations were allocated to these four lingkungan.
The remaining sample area was allocated to the other sub-group of six lingkungan, where no single ethnic group made up a majority of lifetime immigrants (refer Appendix Table 1.4).

The next step was to select the three RT to be sampled in the 10 lingkungan excluded from the systematic areal sample. No complete list or map of RT boundaries exists in Surabaya, but lists and maps of the administrative unit intermediate between the RT and the lingkungan, the Rukun Warga (RW), do exist. All the RW within the four Madurese lingkungan and all the RW within the six 'mixed' lingkungan were then separately listed, two RW being randomly selected from the Madurese list and one from the other list, with the aid of a random numbers table. These three RW offices were then visited and one RT within each was randomly selected as the RT to be enumerated.

Having selected the three RT to be enumerated in the lingkungan excluded from the systematic areal sample, 19 sample areas in the 27 lingkungan included in the systematic areal sample, had to be chosen. To choose these sample areas a square grid was placed randomly over a map of the municipality which showed lingkungan boundaries and the 10 lingkungan excluded from the systematic areal sample (refer Appendix Figure 1.1). The density of the grid was varied until the most suitable grid was arrived at, a grid which produced 26 grid intersections within the total area of the 27 relevant lingkungan. RW located at these grid intersection points in the 27 relevant lingkungan became potential sample areas (refer Appendix Figure 1.1). Of the 26 possible sample areas, seven were discarded: four in ricefields, one on a Perak dockside, one offshore, and another sited on the uninhabited edge of a drainage settling basin (refer Appendix Figure 1.1). All but one of the remaining potential sample areas became sites for subsequent enumeration surveys. The exception was the grid intersection site in Lingkungan Ujung which was located within the Surabaya Naval Base, entry to which was refused by the military.

The locations of the 18 other grid intersection points were then pinpointed on maps in the various lingkungan offices and the actual RW within which the map grid intersections occurred were
identified. The boundaries of each of these selected RW were mapped and a list was compiled of all the RT within each selected RW. One RT was randomly selected from each list, and this RT became the site of an enumeration survey. If the selected RT was known to contain less than 50 households, an additional supplementary RT was randomly selected within that RW and also enumerated. In this way 18 initial Rt were chosen, plus six supplementary RT, which when added to the three RT chosen from the 10 lingkungan dominated by non-Java born immigrants, provided the enumeration survey with 27 RT to be surveyed (refer Appendix Table 1.3 for details of selected RT and the total number of questionnaires administered in each).
APPENDIX 1.6

An Evaluation of Sample Bias in the Enumeration and Questionnaire Surveys

Comparison with a survey of Surabaya carried out in 1975 (McCutcheon, 1977) which is the only source of comparable data implies that there is a sample bias in favour of females in both the enumeration and questionnaire surveys carried out for this study. When the sample population included in the enumeration survey is examined and the proportion of males in each migrant category is compared to the proportion sampled in McCutcheon's survey, it is clear that, in all but the senior adult migrant category, there is a statistically significant difference in the proportion of males (Appendix Table 1.5). Indeed in each migrant category the enumeration survey population contains a higher proportion of females than McCutcheon's sample population. The difference was statistically significant for the recent adult migrants; where the null hypotheses that such a difference was merely due to chance sampling variation, could be rejected at the 0.001 level of significance (Appendix Table 1.5). This large bias in the recent migrant category is responsible for the statistically significant bias (p = 0.05, Appendix Table 1.5) in the total adult migrant proportion of males, since there is no statistically significant sexual biasing of the senior adult migrant category, the only other component summed to obtain the total adult migrant figures.

The reason for the bias in the enumeration survey in favour of females is that I was unable to obtain permission to include one of the randomly selected sample areas located in the Surabaya Naval Base, in the enumeration survey (refer Appendix Figure 1.1). Population registration data and 1971 census tabulations reveal that the Naval Base had an exceptionally high proportion of males born outside Surabaya, so its exclusion due to factors beyond my control resulted in a sex bias in the enumeration survey.
**APPENDIX TABLE 1.5 - Proportion of males in the adult immigrant population of Surabaya according to sample survey results**

<table>
<thead>
<tr>
<th>Migrant Category</th>
<th>McCutcheon's survey</th>
<th>Enumeration survey</th>
<th>Enum. Survey minus interviewed recent migrants</th>
<th>Interviewed recent migrants</th>
<th>Enum. Survey minus interviewed senior migrants</th>
<th>Interviewed senior migrants</th>
<th>Enum. Survey minus all migrants interviewed</th>
<th>All migrants interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All adult (1) migrants</td>
<td>0.475 (n=125)</td>
<td>0.426 (n=2347)</td>
<td>P₁ - P₂ = 0.049*</td>
<td>P₁ = 0.393 (n=1749)</td>
<td>P₁ - P₂ = 0.044*</td>
<td>0.475</td>
<td>0.475</td>
<td>0.475</td>
</tr>
<tr>
<td>Recent (2) adult migrants</td>
<td>0.467 (n=217)</td>
<td>0.295 (n=831)</td>
<td>P₁ - P₂ = 0.152***</td>
<td>P₁ = 0.397 (n=598)</td>
<td>P₁ - P₂ = 0.064*</td>
<td>0.467</td>
<td>0.467</td>
<td>0.467</td>
</tr>
<tr>
<td>Senior (3) adult migrants</td>
<td>0.505 (n=198)</td>
<td>0.497 (n=1516)</td>
<td>P₁ - P₂ = 0.008</td>
<td>0.506 (n=1123)</td>
<td>P₁ - P₂ = 0.033</td>
<td>0.505</td>
<td>0.505</td>
<td>0.505</td>
</tr>
</tbody>
</table>

Notes:  * p = < 0.05  
  *** p = < 0.001

(1) All lifetime immigrants aged 15 years or more at time of first entry to Surabaya.

(2) McCutcheon's survey carried out in February 1975 included as recent migrants all migrants who had entered the city in 1970 or since, whereas the enumeration and questionnaire surveys carried out for this study in mid to late 1974, included all migrants who had entered the city for the first time in 1969 or since. Therefore despite some differences due to the dates of the two surveys, both regarded recent migrants as migrants who come to the city during the 5 years prior to the survey dates (this is 5 years and one month for McCutcheon, and 5 years 5 months for my surveys).

(3) Senior or 'long-term' migrants as McCutcheon prefers to call them, were those who entered Surabaya prior to 1970 as far as McCutcheon was concerned, whilst I defined them as migrants who first entered Surabaya before 1969.

(4) McCutcheon's survey included the migrant population within Old Surabaya, plus migrants from three other urban kecamatan within New Surabaya, whereas my survey was confined to Old Surabaya.

Sources:  
1) McCutcheon, 1977; Table 3.14  
2) Enumeration and questionnaire surveys.
In Indonesian society, it is felt that young females alone in the city should be closely supervised. Surabaya contains a large number of institutions which provide supervised accommodation for young female inmigrants without family in the city. If defence establishments are excluded (since permission to carry out research in such establishments is almost impossible to obtain) then any areally stratified random cluster sampling method will have a greater chance of including clusters of young females, than young males. This is what happened in this study, and the systematic areal sample randomly chose two enumeration units which contained such institutions (enumeration units 8 and 17, Appendix Figure 1.1). Both institutions were privately run boarding-houses, which, as would be expected, contained abnormally high concentrations of young females nearly all of whom were recent inmigrants. In each case these institutions numerically dominated the particular rukun tetangga chosen as the enumeration unit. Another sample area randomly located by the grid intersections, (enumeration unit 14, Appendix Figure 1.1) was located in the 'red light' district of Surabaya. The Surabaya Municipality has deliberately localised prostitutes in a number of such locations throughout the city, in an attempt to more closely supervise their activities and to monitor health risks. Once again this enumeration unit contained a huge surplus of female adult migrants (13 males per 100 females) amongst its resident population, most of whom were recent inmigrants to the city. Thus factors beyond my control which were not foreseen prior to the commencement of the study, appear to have been responsible for a biasing in favour of female migrants in the enumeration survey.

The sample bias in favour of females in the enumeration survey has been carried through into the questionnaire surveys, since the enumeration survey established the sampling frames from which interviewees were selected. However, a potentially more serious problem is revealed if the sex compositions of the non-interviewed populations in the three migrant categories of the enumeration survey are compared to the sex compositions of populations interviewed (columns (2), (3) and (4), Appendix Table 1.5). In each case the interviewed population has a lower proportion of males than the population not interviewed. The recent
adult migrant population has the most biased sex composition with a difference in the proportion of males significant at the 0.05 level (column (2), Appendix Table 1.5). This large sex bias has affected the total migrant category. In contrast the sex composition of the senior immigrant population interviewed does not differ, in a statistical sense, from that of the population not interviewed (column (3)). The sex bias in the sample method cannot be readily explained. If the populations of recent migrants interviewed and non-interviewed are examined for each enumeration unit, then this apparent female bias in the interviewed sample is reversed in favour of males in an almost equal number of enumeration units.

The systematic sampling method used to select interviewees has been described in Appendix 1.3. A biased selection is possible if, contrary to instructions, interviewers did not select randomly the first respondent. Once individual enumerators began their sample in each enumeration unit they were committed to interview each second recent immigrant which they had previously listed in that enumeration unit. The inference here is that some enumerators may have preferred to begin with a female respondent if this was possible (that is, if either of the first two recent migrants listed was a female) since they may provide a quicker interview than working males.\(^{(1)}\) It is possible that sex bias may have been reinforced by a tendency for periodicity in the enumeration listings using a 50 per cent sampling fraction. The reason for this is that if a husband did qualify as a recent migrant then there is perhaps a better than usual chance that his wife, who will usually be the second person listed in that household will also be a recent migrant. With the children of young migrants perhaps being too young to qualify for an interview the next two respondents to qualify may also be a husband and wife, which would mean that the two wives would be interviewed. However, this slight periodicity would also apply

---

\(^{(1)}\) The sample was later reduced to a 25 per cent sample by taking a systematic 50 per cent sample of these initially interviewed, since the task of coding such a large sample was beyond the resources of this study (Appendix 1.3). Any bias must have occurred in this initial sample since the later sample began at the first interview schedule and selected each second schedule in their initial order until the last schedule was reached.
in reverse and unless there is an intentional bias at the beginning of the sampling method it should neutralise itself. In addition, if this intentional sex biasing did occur, why isn't it significant in the sample of senior immigrants interviewed (column (3), Appendix Table 1.5)?

The same opportunities for ignoring my instructions with regard to a random starting point were present when choosing the senior immigrants to be interviewed, and some periodicity may also have occurred, though the smaller sampling fraction of one in four may have minimised this factor. However, there is no statistically significant biasing in this sample. This fact, plus the almost equal incidence of biasing the other way in favour of males at the enumeration unit level, when choosing recent adult migrants to be interviewed, suggests that there was no intentional sex bias on the part of enumerators when conducting sampling for the questionnaire survey. Instead, it would appear that the small number of recent adult migrants listed by each enumerator per enumeration unit (1) resulted in a high number of random starts in relation to the number of recent migrants to be selected and interviewed. In contrast, twice the number of senior migrants could be reasonably expected per enumerator in each enumeration unit (Appendix 1.3). Thus even random coincidences such as all enumerators beginning with females in one enumeration unit may completely bias the proportion of males or females interviewed in that enumeration unit. In view of this explanation, the large swings in apparent sex bias from one enumeration unit to the next would appear to be due to random factors.

Finally, it should be emphasised that the most serious doubt about the reliability of the data sources of this study, is a statistically significant bias in favour of recent female migrants in the enumeration and interview surveys, in comparison to McCutcheon's findings. However, in the absence of comparable data about the sex composition of immigrants from other sources, it should not be assumed

(1) With 4 enumerators sometimes working concurrently in one enumeration unit they may frequently list only two or three recent adult migrants each. If this occurred it would mean that four random starts (one by each enumerator) were required in that enumeration unit merely to select and interview four or six recent adult migrants.
that McCutcheon's data are free from sample bias. Moreover, although an apparent sex bias may qualify the degree to which the sample populations in this study and the survey findings themselves are representative of all of Old Surabaya, it must be emphasised that this is not the aim of this study. The major objectives of this research are to examine and explain the origins and occupational mobility of inmigrants to Surabaya. In this context it is more important that the sample surveys of this study should be representative of the ethnic and socio-economic heterogeneity of the immigrant population rather than statistically representative samples of the total inmigrant population. The modified areally stratified random sample used for the enumeration survey ensured as far as possible that the sample population comprised the major ethnic and socio-economic groups of migrants, in comparison to this advantage a sex bias in one of the sample populations is of little consequence.
APPENDIX 2.1

Demographie Data Available for Old Surabaya in the 1970s

The population enumeration conducted for the 1971 Indonesian Census collected data which could be disaggregated to provide information about Old Surabaya, but age was coded into four broad categories (0-4, 5-14, 15-24 and 25 years and over) which were of little use in an analysis of the age and sex structure of the city's population (Indonesia, BPS, Series B, 1972). The census also included a sample survey, but except for Jakarta, tabulations of age-sex data for individual cities were not published (Indonesia, BPS, Series E, 1973). The East Java age-sex data were tabulated for all urban areas, all rural areas, and the province as a whole (Indonesia, BPS, Series E, No.13, 1973). Surabaya Municipality (New Surabaya) accounted for 42 per cent of the urban population of East Java; the 'old city' (pre-1969 boundaries) alone accounted for 36 per cent. Clearly, the age-sex data for the urban population of East Java (Figure 2.12a) are unlikely to provide an accurate picture of the situation in Old Surabaya. Information about Surabaya Municipality could be disaggregated from raw data sets from the sample survey, but it was impossible to disaggregate data for Old Surabaya alone.

Raw data from the 1971 sample census were made available by the Indonesian Central Bureau of Statistics (BPS) to the Department of Demography, ANU. The areal codes enabled data for Surabaya Municipality to be disaggregated from data for East Java, but further disaggregation to the kecamatan (sub-district) level was not possible. Despite a special request from Dr G.W. Jones (on behalf of the author) that codes should be provided to allow data for Old Surabaya to be distinguished from the data for Surabaya Municipality, BPS officials did not comply, on the grounds that the sampling procedure was not representative at the kecamatan level.
<table>
<thead>
<tr>
<th>Period of migration and occupational status upon arrival (Code)</th>
<th>Males</th>
<th>Occupational status prior to migration**</th>
<th>Females</th>
<th>Occupational status prior to migration**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OCC</td>
<td>OCC</td>
<td>OCC</td>
<td>OCC</td>
</tr>
<tr>
<td></td>
<td>MDO</td>
<td>LUC</td>
<td>AF SA</td>
<td>UL FT</td>
</tr>
<tr>
<td>1970-74 (&lt;=49 males; 147 females)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head govt. dept./private company (HPC)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-medium level clerks (LMC)</td>
<td>N</td>
<td>(10.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary ranks armed forces (AF)</td>
<td>(%)</td>
<td>(2.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled artisans (SA)</td>
<td>N</td>
<td></td>
<td></td>
<td>(2.6)</td>
</tr>
<tr>
<td>Unskilled labourers (UL)</td>
<td>N</td>
<td>(1.2)</td>
<td></td>
<td>(2.6)</td>
</tr>
<tr>
<td>Peddlers &amp; traders (PT)</td>
<td>N</td>
<td></td>
<td></td>
<td>(2.6)</td>
</tr>
<tr>
<td>Factory labourers (FL)</td>
<td>N</td>
<td></td>
<td></td>
<td>(2.6)</td>
</tr>
<tr>
<td>Farmers (F)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working (NW)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home duties (HD)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students (S)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980-89 (&lt;=49 males; 168 females)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head govt. dept./private company (HPC)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-medium level clerks (LMC)</td>
<td>N</td>
<td>(4.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary ranks armed forces (AF)</td>
<td>N</td>
<td>(3.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled artisans (SA)</td>
<td>N</td>
<td>(2.4)</td>
<td></td>
<td>(2.4)</td>
</tr>
<tr>
<td>Unskilled labourers (UL)</td>
<td>N</td>
<td>(1.2)</td>
<td></td>
<td>(2.4)</td>
</tr>
<tr>
<td>Peddlers &amp; traders (PT)</td>
<td>N</td>
<td></td>
<td></td>
<td>(1.2)</td>
</tr>
<tr>
<td>Factory labourers (FL)</td>
<td>N</td>
<td></td>
<td></td>
<td>(1.2)</td>
</tr>
<tr>
<td>Farmers (F)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working (NW)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home duties (HD)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students (S)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

562
<p>| Period of migration and occupational status upon arrival (Code) | Males | | | | | Females | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1950-59 (44 males; 71 females) | | | | | | 1950-59 (49 males; 42 females) | | | | | | |
| Head govt. dept./private company (HDC) | N | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Low-medium level clerks (LNC) | N | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Ordinary ranks armed forces (AF) | N | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) | (17.2) |
| Semi-skilled artisans (SA) | N | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) | (10.1) |
| Unskilled labourers (UL) | N | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) |
| Pedlars &amp; traders (PT) | N | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) | (2.4) |
| Factory labourers (FL) | N | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) | (6.9) |
| Farmers (F) | N | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) |
| Home duties (HD) | N | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) | (1.7) |
| Students (S) | N | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) | (10.3) |
| Pre-1950 (49 males; 42 females) | | | | | | | | | | | | | | | |
| Head govt. dept./private company (HDC) | N | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Low-medium level clerks (LNC) | N | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) | (10.2) |
| Semi-skilled artisans (SA) | N | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) |
| Unskilled labourers (UL) | N | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) | (1.0) |
| Factory labourers (FL) | N | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) |
| Farmers (F) | N | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) | (4.1) |
| Home duties (HD) | N | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) | (2.0) |
| Students (S) | N | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) | (8.2) |</p>
<table>
<thead>
<tr>
<th>Occupational status* upon arrival (Code)</th>
<th>Males</th>
<th></th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MGD</td>
<td>LMC</td>
<td>AF</td>
</tr>
<tr>
<td>All immigrants (N=230 males; 359 females)</td>
<td>(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head govt. dept/private company (HGD)</td>
<td>(5)</td>
<td>1</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Low-medium level clerks (LMC)</td>
<td>(5)</td>
<td>28</td>
<td>(10.4)</td>
</tr>
<tr>
<td>Ordinary ranks armed forces (AF)</td>
<td>(5)</td>
<td>1</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Semi-skilled artisans (SA)</td>
<td>(5)</td>
<td>10</td>
<td>(3.5)</td>
</tr>
<tr>
<td>Unskilled labourers (UL)</td>
<td>(5)</td>
<td>1</td>
<td>(0.9)</td>
</tr>
<tr>
<td>Factory labourers (FL)</td>
<td>(5)</td>
<td>1</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Farmers (F)</td>
<td>(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working (NW)</td>
<td>(5)</td>
<td>1</td>
<td>(0.6)</td>
</tr>
<tr>
<td>Home duties (HD)</td>
<td>(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students (S)</td>
<td>(5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
* The distribution of occupational status change has been shown by the absolute number of migrants experiencing a given change (N) and the percentage (%) of immigrants in a particular cohort (e.g. males who arrived in 1970-79) experiencing a given change.  
** Key to occupational status codes: HGD - head of government department/private company; LMC - low-medium level clerks; AF - Ordinary ranks armed forces; SA - Semi-skilled artisans; UL - Unskilled labourers; PT - Pedlars & traders; FL - Factory labourers; F - Farmers; NW - Not working; HD - Home duties; S - Students.  
Source: Questionnaire survey.
APPENDIX 6.2

A Note on the 'Directions' of Occupational Status Change

The discussion of occupational changes has highlighted the problem of what I mean by 'upward' or 'downward' changes in occupational status. According to the classifications adopted in this study a 'loss of status' or a 'downward change in occupational status' means a change from a higher income occupational category to a lower income category, since the relative hierarchical position of the individual status categories was determined by the median monthly income of its members in 1974 (Table 7.1). Therefore, despite the choice of a quantitative measure to determine the relative hierarchical position of each category, this classification, like all others, is in the final analysis subjective. I chose the discriminating variable. Moreover, activities included within each category were chosen according to a subjective evaluation of the occupational skill required to carry out the activity.

What I regard as a 'loss of status' may be contrary to the view of the immigrant involved. A migrant may consider the relative productivity of his labour (per hours worked) as the critical determinant of occupational status; I could not measure labour productivity. Another migrant may be prepared to trade off a loss of income per month in favour of a less strenuous occupation. For example, immigrants moving from a semi-skilled occupation such as bricklaying to petty peddling may perceive the change as a gain in status. I have classified it as a 'downward move'. Another immigrant may be prepared to trade off a loss of income per month against long-term chances of promotion and security of employment, which may be obtainable in a government job which initially offered less income per month than his previous occupation. Consequently, there is no reason to assume that my perception of the 'direction' of occupational status change conforms to the view of the immigrant involved.

(1) The sole exception was the armed forces category which was ranked below the low-medium level clerical category in occupational status despite its higher median income per month. The reason for this change was that the educational qualifications of the immigrants employed in the armed forces were lower than those of migrants employed as low-medium level clerks (Tables 7.1 and 7.2).
As a result of these considerations, it must be emphasised that when I speak of a 'loss of occupational status' or of an 'upward change' in occupational status, I am referring to occupational status changes defined by my subjective classification. I am not referring to an immigrant's perception of occupational status.
ALLIED GEOGRAPHICAL SECTION, (AGS), SOUTHWEST PACIFIC AREA, (SWPA)
1945 Special report number 71, Soerabaja area, East Java, General Headquarters, Southwest Pacific Area.

ANDREWS, F.M., MORGAN, J.N., SONQUIST, J.A. and KLEM, L.

ARMSTRONG, W.R. and McGEE, T.G.
1968 'Revolutionary change and the Third World city: A theory of urban involution', Civilizations, 18, 353-78.

ARMSTRONG, W.R. and McGEE, T.G.

BEALS, R.E., LEVY, M.B. and MOSES, L.N.

BIENEFELD, M.A.

BIENEFELD, M.A.

BLALOCK, H.M.

BOEKE, J.H.

BOOTH, A.

BREMAN, J.

BROMLEY, R.

BROOKFIELD, H.
1975 Interdependent development, Methuen, London.
BRUNER, E.M.  

BRUNER, E.M.  

BRUNER, E.M.  

BRUNER, E.M.  

BYERLEE, D.  

Caldwell, J.C.  

Castles, L.  
1967  'The ethnic profile of Djakarta',  Indonesia, 3, 153-204.

Cobban, J.L.  

Collier, W.L.  
1978  'Food problems, unemployment, and the green revolution in rural Java',  Prisma, 9, 38-52.

Collier, W.L., Gunawan Wiradi and Soentoro  

Collier, W.L. Soentoro, Gunawan Wiradi and Makali  
1974  'Agricultural technology and institutional change in Java', Food Research Institute Studies, Stanford University, 13(2), 169-94.

Connell, J.  
CONNELL, J., DASGUPTA, B., LAISHLEY, R., and LIPTON, M.  

CUNNINGHAM, C.E.  
1958  The postwar migration of the Toba Bataks to East Sumatra, Yale University, New Haven.

DAROESMAN, R.  

DAVIS, K.  

DICK, H.W.  

EDMUNDSON, W.C.  
1976 'Land, food, and work in East Java', New England Monographs in Geography, No.4, Department of Geography, University of New England, Armidale.

ELIZAGA, J.C.  
1966 'A study of migration to Greater Santiago (Chile)', Demography, 3(2), 352-77.

ELIZAGA, J.C.  

von FABER, G.H.  
1931a Oud Soerabaia: de geschiedenis van Indie's eerste koopstad van de oudste tijden tot de instelling van den gemeenteraad (1906) [Old Surabaya: the history of the Indies' principal commercial town from the oldest period until the establishment of a municipal council (1906)], Gemeente Soerabaia, Soerabaia.

von FABER, G.H.  
FEITH, H.  

FORBES, D.  
1978a 'Urban-rural interdependence: The trishaw riders of Ujung Pandang', in Rimmer, P.J., Drakakis-Smith, D.W. and McGee, T.G. (eds), Food, Shelter and Transport in Southeast Asia and the Pacific, ch.9, Department of Human Geography, Publication HG/12, ANU, Canberra.

FORBES, D.K.  

FRANK, A.G.  

FRANKLIN, S.H.  

FRIEDMANN, J.  

FRIEDMAN, J. and SULLIVAN, F.  

GALINDO, S.V. and GOLDBERG, D.  
1973 'The economic experience of migrants to Mexico City', Paper read at the meeting of the AAAS/CONACYT, mimeo.

GEERTZ, C.  
1963a Agricultural involution: The process of ecological change in Indonesia, University of California Press, Berkeley.

GEERTZ, C.  

GEERTZ, C.  

GEERTZ, C.  
1965 The social history of an Indonesian town, Massachusetts Institute of Technology Press, Cambridge, Massachusetts.

GEERTZ, H.  
van GINNEKAN, W.
1976 Rural and urban income inequalities in Indonesia, Mexico, Pakistan, Tanzania and Tunisia, ILO, Geneva.

GREEN, S.C.
1978 'Migrant adjustment in Seoul, Korea: employment and housing', International Migration Review, 12(1) 70-81.

HAGERSTRAND, T.

HARRIS, J.R. and TODARO, M.P.

HARRISS, B.
1978 'Quasi-formal employment structures and behaviour in the unorganised urban economy, and the reverse: Some evidence from South India', World Development, 6(9/10), 1077-86.

HART, K.

HARVEY, M.E. and RIDDELL, J.B.

HEEREN, H.J. (ed.)
1955 'The urbanisation of Djakarta', Ekonomi dan Keuangan Indonesia, 8(11), 696-736.

HEIDHUES Somers, M.F.

HENEVELD, W.

HERRICK, B.

HIGGINS, B.
1955 'The dualistic theory of underdeveloped areas', Ekonomi dan Keuangan Indonesia, 8(2), 58-78.
HIRSCHMAN, A.O.
1958    The strategy of economic development, New Haven, Connecticut.

HOSELITZ, B.F.

HUGO, G.J.

HUGO, G.J.
1975b    'Demographic research in Indonesia: A review', Working Papers in Demography, No.1, Department of Demography, Australian National University, Canberra.

HUGO, G.J.

HUGO, G.J.

HUGO, G.J. and TEMPLE, G.
1975    'Interprovincial migration in Indonesia, 1930-71', Department of Demography and Department of Economics, ANU, Canberra (mimeo).

IDRUS

IHALAUW, J. and WIDYA UTAMI
1975    'Klaten, Central Java', in International Rice Research Institute, Changes in rice farming in selected areas of Asia, 149-77, Manila.

ILO

INDONESIA, BPS
1963    Sensus penduduk 1961, angka² sementara pengolahan 1% sample diperluas [Population census 1961, preliminary figures processed from a 1% sample], Jakarta.

INDONESIA, BPS
INDONESIA, BPS  
1968 Perpindahan penduduk Indonesia: Djawa-Madura, Luar Djawa, 
ketjuali DCI Djakarta, Nusa Tenggara Timur, Maluku, Irian 
Barat [Migration of Indonesian population: Java - Madura, 
Outside Java, except for Djakarta, East Nusa Tenggara, 
Maluku, West Irian], Susenas, tahap kedua, Nov. 1964 - 
Feb. 1965, Jakarta.

INDONESIA, BPS  
1970 Perpindahan penduduk Djawa Madura [Migration of population 
in Java and Madura], Susenas, tahap ketiga, Sept. 1967 - 

INDONESIA, BPS  
1972 Sensus penduduk 1971, ankga^2 sementara, [Population 
census 1971, preliminary figures], Seri B, Nos. 1-3, 
Jakarta.

INDONESIA, BPS  
[Series E], Nos.1-26.

INDONESIA, BPS  
1975 Statistical Pocket Book of Indonesia, 1975, BPS, Jakarta.

JACKSON, J.C.  
1973 'Post-independence developments and the Indonesian city: 
Preliminary observations on the spatial structure of 

JACKSON, J.C.  
1978 'Trader Hierarchies in Third World Distributing Systems: 
The Case of Fresh Food Supplies in Kuala Lumpur', in 
Rimmer, P.J., Drakakis-Smith, D.W., and McGee, T.G. 
(eds.), Food, Shelter and Transport in Southeast Asia and 
the Pacific, ch.2, Department of Human Geography, 
Publication HG/12, ANU, Canberra.

JAY, R.R.  
1963 Religion and politics in rural Central Java, Yale 
University Southeast Asia Studies, New Haven.

JELLINEK, L.  
1977 'The pondok of Jakarta', Bulletin of Indonesian Economic 
Studies, 13(3), 67-71.

JELLINEK, L.  
1978 'Circular migration and the pondok dwelling system: A 
case study of ice-cream traders in Jakarta', in Rimmer, 
P.J., Drakakis-Smith, D.W. and McGee, T.G. (eds.), Food, 
Shelter and Transport in Southeast Asia and the Pacific, 
ch.5, Department of Human Geography, Publication HG/12, 
ANU, Canberra.
JONES, G.W.  
1975a 'The problem of urbanization in Indonesia', revised version of a working paper presented to the Musyawarah Antar Kotapraja Seluruh Indonesia ke-V (5th Discussion Between All Indonesian Municipalities), Surabaya (mimeo).

JONES, G.W.  

JONES, G.W.  
1976 'Religion and education in Indonesia', Indonesia, 22, 19-56.

JONES, G.W., McDONALD, P.R. and ISKANDAR, N.  
1975 Fertility levels and trends in Indonesia, mimeo.

KARSTEN, T.  

KEYFITZ, N.  

KOENTJARANINGRAT  

KOSINSKI, L.A. and PROthero, R.M. (eds.)  
1975 People on the move: Studies on internal migration, Methuen, London.

van der Kroef, J.M.  
1954 Indonesia in the modern World, Part I, Masa Baru, Bandung.

van der Kroef, J.M.  
1956 Indonesia in the modern World, Part II, Masa Baru, Bandung.

Lee, E.S.  

LEWIS, W.A.  

LIPSET, S.M.  
MANGALAM, J.J.

MAUDE, A.

MAUDE, A.
1979b 'How circular is Minangkabau migration?' mimeo.

MAZUMDAR, D.

MILLER, D.B.

MILONE, P.D.

MILONE, P.D.
1966b Urban areas in Indonesia: Administrative and census concepts, Institute of International Studies, University of California, Berkeley.

MISSEN, G.J.

MOSER, C.O.N.
1978 'Informal sector or petty commodity production: Dualism or dependence in urban development?', World Development, 6(9/10), 1041-64.

MOWAT, S.
1977 Education and the urban migrant: A comparative analysis of case studies in Bangkok, Manila and Jakarta, Unesco Regional Office for Education in Asia, Bangkok.

McCUTCHEON, L.

McCUTCHEON, L.
McGEE, T.G.  
1967  The Southeast Asian city: A social geography of the primate cities of Southeast Asia, Praeger, New York.

McGEE, T.G.  
1971  The urbanization process in the Third World: Explorations in search of a theory, G. Bell and Sons, London.

McGEE, T.G.  
1972  'Rural-urban migration in a plural society: A case study of Malays in West Malaysia', in D.J. Dwyer (ed.), The city as a centre of change in Asia, 108-24, Hong Kong University Press, Hong Kong.

McGEE, T.G.  

McGEE, T.G.  
1974  The persistence of the proto-proletariat: Occupational structures and planning for the future of Third World cities, mimeo, ANU, Canberra.

McGEE, T.G.  
1976  'Rural-urban mobility in South and Southeast Asia: Different formulations ... different answers?' Paper presented at a seminar on 'Human Migration: Patterns Implications and Policies' by Midwest Council of the American Academy of Arts and Sciences, mimeo.

McGEE, T.G.  
1978  'An Invitation to the 'Ball': Dress Formal or Informal?' in Rimmer, P.J., Drakakis-Smith, D.W., and McGee, T.G. (eds.), Food, Shelter and Transport in Southeast Asia and the Pacific, ch.1, Department of Human Geography, Publication HG/12, ANU, Canberra.

McGEE, T.G.  

McGEE, T.G. and YEUNG, Y.M.  

McNICOLL, G.  
1968  'Internal migration in Indonesia: Descriptive notes', Indonesia, 5, 29-92.

McNICOLL, G.  
1970  'Research in Indonesian demography: A bibliographic essay', Papers of the East-West Population Institute, No.6, Honolulu.

McNICOLL, G. and MAMAS, S.G.M.  
1973  'The demographic situation in Indonesia', Papers of the East-West Population Institute, No.28, Honolulu.
NAIM, M.

NAIM, M.
1974a 'Voluntary migration in Indonesia', Working Paper No.26, Department of Sociology, University of Singapore, Singapore.

NAIM, M.
1974b 'Migrasi di Indonesia' [Voluntary migration in Indonesia], unpublished paper presented to a seminar at the Institute of Population Studies, Gadjah Mada University, Yogyakarta (mimeo).

NETHERLANDS EAST INDIES (NEI), DEPARTMENT VAN LANDBOUW, NIJVERHEID EN HANDEL [DEPARTMENT OF AGRICULTURE, INDUSTRY AND TRADE].

NETHERLANDS EAST INDIES (NEI), STADSGEMEENTE SOERABAJA.

NETHERLANDS EAST INDIES (NEI), TOPOGRAPHISCH BUREAU.

NETHERLANDS EAST INDIES (NEI), TOWN PLANNING COMMISSION.


van NIEL, R.
1963 'The course of Indonesian history', in R.T. McVey (ed.), Indonesia, ch.7, Southeast Asia Studies, Yale University, New Haven.

OLSSON, G.
1965 'Distance and human interaction : A migration study', Geografiska Annaler, 47, 3-43.

PAAUW, D.S.
1963 'From colonial to guided economy', in R.T. McVey (ed.), Indonesia, ch.5, Southeast Asia Studies, Yale University, New Haven.
PALMER, I.
1977 'Rural poverty in Indonesia, with special reference to Java', in International Labour Office, Poverty and landlessness in rural Asia, ch.10, ILO, Geneva.

PAPANEK, G.F.

PARDOKO, R.H. and SUROSO, Z.
1971 'Fertility of Indonesian women in Surabaya Municipality', [Preliminary report based on a study conducted by Lembaga Kesehatan Nasional, Surabaya], Badan Kordinasi Keluarga Berencana Nasional, Surabaya.

PENNY, D.H. and SINGARIMBUN, M.

PENNY, D.H. and SINGARIMBUN, M.

PEPER, B.

PRYOR, R.J.
1969 'Laws of migration? The experience of Malaysia and other countries', Geographica, 5, 65-76.

PRYOR, R.J.
1975 'The migrant to the city in South East Asia - can, and should we generalise?', Institute of Australian Geographers, 13th Annual Conference, Wollongong University, Wollongong, mimeo.

PRYOR, R.J. (ed.)
1979 Migration and development in Southeast Asia, Oxford University Press, Kuala Lumpur.

QADDEER, M.A.

RACZYNISKI, D.
1972 'Migration, mobility, and occupational achievement: The case of Santiago, Chile', International Migration Review, 6(2), 182-98.

RAFFLES, T.S.
RAVENSTEIN, E.G.  

RAVENSTEIN, E.G.  

REID, A.J.S.  

REISSMAN, L.  

RICHARDS, S.F.  
1972  'Geographic mobility of industrial workers in India', in D.J. Dwyer (ed.), The city as a centre of change in Asia, ch.6, Hong Kong University Press, Hong Kong.

RIDDLE, J. and HARVEY, M.E.  

RIMMER, P.J.  

ROSTOW, W.W.  

SANTOS, M.  

SCHELTEMA, A.M.P.A.  
1926  'De groei van Java's bevolking', Koloniale Studien, 10, Part 2, 849-83.

SETHURAMAN, S.V.  

SETHURAMAN, S.V.  

SHAW, R.P.  
1975  'Migration theory and fact : A review and bibliography of current literature', Bibliography Series No.5, Regional Science Research Institute, Philadelphia.
SINGARIMBUN, M.

SINGARIMBUN, M.

SKINNER, G.W.

SNEDECOR, G.W. and COCHRAN, W.G.

STERNSTEIN, L.

STERNSTEIN, L.
1974 'Migration to and from Bangkok', Annals of the Association of American Geographers, 64(1), 138-47.

STERNSTEIN, L.

SUHARSO, SPEARE, A., REDMANA, H.R. and HUSIN, I.
1976 Rural-urban migration in Indonesia, LEKNAS-LIPI, Jakarta.

SUROSO, Z.
1973 'Migrasi intern di Kotamadya Surabaya' [Internal migration in Surabaya Municipality], Seksi Demography, Fakultas Ekonomi, Universitas Airlangga, Surabaya, mimeo.

TAYLOR, R.C.

TEMPLE, G.P.

TEMPLE, G.P.
1975a 'Migration to Jakarta', Bulletin of Indonesian Economic Studies, 11(1), 76-81.

TEMPLE, G.P.
1975b 'The decline of agricultural involution: Analysis of migration, employment and income distribution in rural Java', seminar paper presented in the Department of Economics, Research School of Pacific Studies, ANU, Canberra, mimeo.
TIRASAWAT, P.  

TODARO, M.P.  

TOKMAN, V.E.  
1978  'An exploration into the nature of informal-formal sector relationships', World Development, 6 (9/10), 1065-75.

UNIVERSITAS INDONESIA, LEMBAGA DEMOGRAFI  

de VRIES, H.M.  
1927  The importance of Java seen from the air, de Vries, Batavia.

WAWOENTOE, W.J.  
1973  'Indonesia', in G. Breese (ed.), Urban Southeast Asia: A selected bibliography of accessible research, reports and related materials on urbanism and urbanization in Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Vietnam, SEADAG, New York.

WELLER, R.H.  
1974  'The structural assimilation of immigrants to Lima, Peru', International Migration Review, 8(4), 521-42.

WERTHEIM, W.F. et.al (eds)  

WHITE, B.  

WHITE, B.  

WHITE, B.  
1979  'Political aspects of poverty, income distribution and their measurement: Some examples from rural Java', Development and Change, 10(1), 91-114.

WIDJOJO, N.  
WIRTH, L.  

WRIGHT, A. and BREAKSPEAR, O.T.  

ZACHARIAH, K.C.  