CIRCUITS OF MIGRATION: A STRUCTURAL ANALYSIS OF MIGRATION IN PENINSULAR MALAYSIA

by

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DECLARATION

Except where indicated, this thesis is based upon original research conducted by the author.

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FOREWORD

A thesis that is so long in finishing will inevitably suffer from the following problems. First, the data become outdated. The then most recent census data of 1970 showing the national patterns of migration and the complementary field work in the Muda region conducted between 1975-76 which was then most current had become somewhat historical by 1990. While there has been no similar surveys since of the type as undertaken by the writer in 1975-76 (except those on female migrants by the writer in 1982 and 1985-87 in the Penang and Kedah region), as of 1991, the Malaysian 1970 census has been superceded by the 1980 and 1991 census. To overcome this inadequacy, wherever relevant, the more contemporary macro- and micro-data on migration have been used.

Second, and closely related to the first point, is that the thesis material, instead of being mainly a 1970s migration analysis, has also to incorporate the 1980s and the 1990s. For a fast developing country, undergoing rapid urbanization and industralization, spurred by both domestic policies and international circumstances, this period has seen tremendous transformation. Bearing in mind the major thesis of this study, that migration is an integral component of structural change both responding and conditioning economic and social forces at the same time, the 1970s to 1990s have wrought immense changes in Malaysia with their concomitant impacts on migration. Thus, this 30-year period saw the implementation and impact of the New Economic Policy (NEP); the "new" migration of rural women workers into manufacturing jobs in urban areas, in particular electronics factories in export-platform zones; the economic boom resulting in labour deficits in estates, construction and manufacturing sectors leading to legal and illegal immigrants from mainly Indonesia and Philippines; the deep recession of the mid-1980s when Malaysia experienced unprecedented retrenchments and mass unemployment; to be followed by the economic upswing of the late 1980s, again causing labour shortages and an influx of foreign workers. Responding to the fluctuations of the economy there has been a small emigration of Malaysian professionals legally to Singapore and other English-speaking countries and another mainly less-educated flow to the Middle-East, Taiwan and Japan. Foreign workers continue to be drawn into the country as the 1990s saw impressive sustained economic growth of about 8.5 per cent per annum; only to be temporarily marred by the Asian crisis of 1997-98 with some retrenchment and repatriation

of foreign workers. Urbanization continued unabated as the country began to move into a new phase of capital-intensive, high technology and knowledge-based industries. Only in the last two chapters, Chapter 7 and the Conclusion, has there been some incorporation of data beyond 1991 to 2003. It was difficult to ignore recent data, especially of the 1991 Census which was published in 1996. Happily, they merely reaffirmed most of the trends already suggested in this thesis when it was first submitted in mid-1991.

This leads to the third problem, perhaps the most difficult, and that is to contend with the changing ideas of the writer – an inevitable result of any long drawn-out study. The earlier drafts of this dissertation saw a shift from a mainly demographic-geographic thesis to a development-oriented one. And even within the development paradigm, there has been an evolution in theoretical bent, from dependency, to the world systems, and to the new international division of labour of the 1980s. In the area of methodology there has also been developments. The early draft of the Introduction hinted at the potential of adopting different levels of analysis (albeit at a simplistic level) of linking the macro- and micro-levels. Since then, this idea has become the multi-level approach, analyzing the structures and processes from the international, national, regional, village to family levels. At the time of the Simpang Empat Mobility and Migration Surveys, the life-history approach was seen as within the forefront of micro-level research. This had developed further into the family life-course methodology by the time of the later surveys.

Such intellectual and methodological changes are found throughout the study, and have at times been difficult to come to terms with. Fortunately, this theoretical and methodological development has been matched to some extent by more recent research carried out by the writer. Although most of the data come from the earlier research, to update this study, the more recent research of the writer has been incorporated. In this sense it shows a natural progression, in fact the intellectual development of the writer. Much of the material had been either published or presented at conferences, alone or jointly.

Finally, a thesis that has been so long in finishing will result in the writer having more people to thank. It is impossible to name them all. I wish to thank all the *kampung* people who helped me in the field work and for being so generous in letting me share their experiences. To my main supervisors, Dr Robin Pryor, Dr Peter MacDonald and Dr Kamal Salih, I wish to thank them for their help at different stages, and even when suffering from

thesis fatigue had supreme confidence in me. This thesis is as much a test of their endurance and faith as much as my own perseverance. And as to my family, they started to wonder if it would ever get submitted. While all have been important supports in various ways, I alone take full responsibility for this thesis.

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GLOSSARY

adat perpatih	matrilineal
adat temenggong	patrilineal
ambil upah	wage work
Ayah	father
bagi-dua	half and half, usually half for the owner and half for the retailer
bandar	large town
batik	cotton cloth printed with local designs
bee-hoon	rice noodles (in Chinese)
buka	open (especially *buka tanah* : open land)
Bumiputra	sons of the soil or Malays
dua warna TV	black and white TV
gaji tetap	regular salary
gaya	style
haj	pilgrimage to Mecca by Muslims
Hari Raya	festival celebrated at the end of the fasting month
Isi penuh	fill all posts in the government
jaga-kerbau	look after buffaloes
kabota	Japanese tilling machine
kampung asal	village of origin
kampung	village
kedai runcit	small provision store
kekeluargaan	family
kenduri	feast
kerbau	buffalo
ketua kampung	village headman
kuat semangat	spiritual strength
kueh	cakes
Mak	mother
malu	embarrassment or shame
mandor	overseer
mukim	aerial level below administrative district
Nenek	grandmother
nyanuk	senile
orang putih	white man
orang-buat	bewitched
padi	kunca credit
Pak Cik	uncle
pangkin	raised wooden floor often used as an eating space
pasar minggu	weekly markets
pekan	small town usually under 5000
perangsang	encouragement
pulau	island

relung	local form of land size measurement; 1 relung = 0.53 hectares
sarung	cloth worn around the lower half of body
see-fu	expert (in Chinese)
surau	religious hall
tahun gelap	year of the eclipse of the sun
tanah pusaka	hereditary land
tanah terbiar	abandoned land
Tok	grandfather
transmigrasi	transmigration (between islands) resettlement programme in Indonesia
tudong	scarf to cover the hair
tukang rumah	house builder
ugama	religious teaching

ACRONYM

DARA	Pahang Tenggara Development Authority
FELCRA	Federal Land Consolidation & Rehabilitation Authority
FELDA	Felda Land Development Authority
FTZ	free trade zones
KABUTA	Japanese mechanical soil-tiller
KADA	Kemubu Agricultural Development Authority
KEJORA	Johor Tenggara Development Authority
KESEDAR	Kelantan Selatan Development Authority
KETENGAH	Terengganu Tengah Development Authority
MADA	Muda Agricultural Development Authority
MAEI	Malaysian American Electronics Industry
MARA	Majlis Amanah Rakyat
MIDA	Malaysian Industrial Development Authority
MNC	multinational corporation
MTUC	Malaysian Trade Union Congress
NEP	New Economic Policy
NIC	newly industralizing countries
NIDL	new international division of labour
RDA	Regional Development Authority
RIDA	Rural & Industrial Development Authority
RISDA	Rubber Industry Smallholders Development Authority
TNC	transnational corporation
UMNO	United Malay National Organization

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

The main thesis of this study is that migration is an integral component of the major processes of structural change in a country. As such, migration should not be studied in isolation from the historical and evolving patterns of development of the country. In their specific forms and magnitudes, migration processes are patterned movements of human populations within and between territorial units. The important point to stress here is that these movements are a response to, and at the same time, conditions the economic and social forces which affect significant sections of a community.

In taking this approach, a structural analysis of migration is different from the usual approach of seeking causes of migration in individualistic terms as a starting point in the explanatory framework. It is not enough to ask migrants their reasons for leaving a place or choosing another, themselves fraught with the psychological complexities associated with the motivation for migration. Similarly, it is not enough to describe the socio-demographic and economic characteristics of the migrants prior to, and after migration. A structural approach must also go beyond the enumeration of "pull" and "push" factors involving a rudimentary characterization of origin and destination areas, for such studies only lead to a theoretical dead-end with limited explanatory value. Evidence of this *cul-de-sac* is the voluminous amount of repetitive writings on this subject with little headway made into a more universal framework and theory of migration.

On the contrary, a more meaningful disposition towards the analysis of migration, from both a theoretical and policy point of view, must begin from a consideration of the economic, political and social structures of the society. Individual responses and characteristics of migrants must be analyzed as consequences of these structures. In this way, migration analysis becomes historical analysis in the sense that the structured patterns of movements represent fundamental responses over extended periods of time and conditioned by societal processes. These processes may be marginally or significantly changed by state policies, depending on the articulation of external and internal factors affecting that society.

This dissertation takes Peninsular Malaysia as a specific case study to demonstrate the above thesis. It is argued that migration in Peninsular Malaysia occurs within a structured pattern. This structured pattern is a product of its colonial past which in turn shaped its

economy and the particular racial mix of its population. The consequent underdevelopment of the indigenous population, the Malays, as evidenced in their poverty, rural location and occupations called for certain government policies after Independence in 1957, and especially after 1970, to reduce these imbalances. Associated with this type of development, of being mostly primary product-oriented, is a dependent economy, very open and therefore, exposed to the vicissitudes of world economic cycles. To minimize the impact of the world's fluctuating demands on commodities, particularly emphasized during the recession of the mid-1980s, concerted efforts were made by the government to diversify Malaysia's economy through industrialization. Structural adjustment measures such as deregulation were undertaken to make the economy more resilient to external shocks. All these measures led to a successful and dramatic recovery by the late 1980s. Such forces had a very powerful effect on the migration patterns and processes of the country.

Except for McGee's work (1969, 1971) and to a lesser extent Pryor's research (1972) and, ESCAP's (1982) and Standing's (1983), there has been little attempt to examine migration and urbanization in Malaysia within a broader developmental context, integrating historical and contemporary economic and political factors. There has certainly been no migration study that has both the historical approach and the contemporary forces analyzed within a multi-level framework of analysis, from the broadest and highest level, the international, to that of the family and individual, seen as the lowest and most detailed level. Such a framework gives more than a context or background to the analysis of migration processes; it attempts to link the determinants at the world, national, regional, village and finally, family and individual levels. Thus, migration is not explained as a purely individualistic response, but one that is conditioned by various forces at different levels.

In this chapter, we will first examine in Section 1.2 three models of migration which have attempted in different ways, to view migration within the broad framework aimed at above. However, these models for various reasons, will prove to be inadequate, for the above purpose. This section concludes with an outline of a methodological framework which may point to more fruitful directions of research. In Section 1.3 we will review migration studies in Malaysia, highlighting their relative contributions and existing gaps in the present knowledge of this subject. The next section discusses the vital role of migration in Malaysia's national planning, especially in fulfilling the targets of the New Economic Policy (NEP). The research objectives and methodology are more clearly spelt out in Section 1.4, concluding with an outline of the dissertation in Section 1.5.

1.2 MIGRATION AND DEVELOPMENT: A REVIEW

1.2.1 Models of Migration and Development

Three models, namely, the Lewis-Fei-Ranis dualistic economy model, the Harris-Todaro two-sector model and Zelinsky's Mobility Transition model, have been selected for discussion as they have had a significant influence in studies on the relationship between migration and development. But all suffer from some severe limitations. Each will be discussed briefly in this section.

Migration is an important process to consider in the study of economic development because geographical mobility tends to be associated with sectoral changes in industry and occupations. This inter-sectoral mobility, of movement from predominantly agricultural pursuits to manufacturing which occurs with rural-urban migration, is believed to be central to the transformation of a country's economic structure (Hoselitz, 1953; Davis, 1965). The main point of the Lewis-Fei-Ranis two-sector model is that surplus labour released from traditional agriculture will be absorbed into the modern industrial and tertiary sectors in urban areas (Lewis, 1954; Fei and Ranis, 1964; 1971). This transfer of labour, with the spatial element implied is assumed to take place at zero cost in terms of both transport and loss of agricultural productivity, and is limited only by the institutional rigidity of subsistence real wages in the urban sector.

The greatest weakness of this model is the assumption that the development pattern of Third World countries will be similar to that of developed countries. It assumes that rural labour surplus will be automatically absorbed in urban areas. It does not consider that the experience of many Third World countries may be different owing to their colonial legacies and the impact of peripheral capitalism and the international division of labour. Thus, the model does not anticipate the problems of mass unemployment in Third World urban cities (see Turnham, 1971) nor the economic development of the rural populace through modernization of agriculture, as in the rural land development schemes of Malaysia (see MacAndrews, 1976; Paiva and Shamsul, 1984) and rural urbanization where certain industries are relocated to rural areas to hold back potential rural-urban migration, at the same time providing the necessary urban infrastructure (Young and Kamal, 1985).

The Harris-Todaro model (1970)[1] arose out of the inability of the Lewis-Fei-Ranis model to explain the paradoxical situation of substantial rural migration to urban centres

[1] Originally derived by Todaro (1969) with subsequent refinements of the model by Johnson (1971); Bhagwati and Srinivasan (1974); Fields (1975), and Thadani and Todaro (1978).

despite rising levels of urban unemployment and underemployment. This model postulates that the potential migrant's decisions are made according to rational economic reasons. He migrates in response to urban-rural differences in "expected" rather than "actual" earnings and the probabilities of gaining employment in the urban sector. The decision to migrate is represented on the basis of a "permanent income" calculation.

Although the concept of the rational man is questionable (but remains the basis of most economic models where man is a principal actor), Todaro has attempted to explain the burgeoning unemployed in Third World cities with persisting rural-urban migration (which is certainly not rational at face value). He has reduced the macro-picture of the Lewis-Fei-Ranis model to that of the individual, where the decision-making process is based on the individual's own perspective. In the potential migrant's calculation to migrate, a dynamic element has been incorporated into the equation – for the longer the migrant stays in the urban area, the more likely he is to get a job owing to better access to information and contacts. This conceptualization enables the model to postulate the existence of an expanding sector of urban unemployment, which includes in the usual statistical sense those seeking a job, constrained in a structural sense by the wage differential between urban and rural areas.

However, there are at least three assumptions in this model which makes it difficult to apply in Malaysia and other more complex Third World economies. First, the urban sector is assumed to be homogeneous. This ignores the complexities of the urban sector as evidenced in the different levels of capital and technology, foreign and domestic firms, and public and private sectors (see for example, Friedmann and Sullivan, 1974). This over-simplification may cause major problems in the application of the model in many parts of Asia where there are more complex employment patterns in urban areas, compared with the East African situation from which this model has been derived. For example, in Malaysia, not only is the labour market segmented by sex as in most countries, but the state-sponsored preferential employment of Malays has distorted the employment structure, further entrenching the already ethnically stratified occupational and industrial structures (Hirschman, 1972; Rais, 1973; Tham, 1977; Young, 1981b).

The second unsatisfactory notion of the Harris-Todaro model is the assumption that the rural sector is homogeneous. In reality, the rural sector consists of various communities stratified by institutional factors, such as class, ethnicity and kinship which vary in importance from country to country. Migrants are drawn from different strata of rural communities in different cultures (Amin, 1974: 91; Connell *et al.*, 1976: 2; Hirashima, 1977). In Malaysia, Malay and Chinese rural migrants not only come from different socio-economic backgrounds but leave for different types of work. The case study in Malaysia

will show how diverse the urban and rural sectors are and how job placement is influenced by cultural, institutional and political factors.

The third problem of the model is the over-simplified decision-making process imputed of migrants. The model implies that people migrate solely for one reason -- that of increasing their expected incomes. In fact, people migrate for numerous reasons. Even the "push-pull" concept which incorporates more than one reason for migration has been criticized for its simplistic dichotomy (Jackson, 1969: 3). Speare (1969) found that the cost of moving was a more important determinant of migration than expected income rise among Taichung migrants. Even if one accepts that income expectations is a major factor, research has shown that income differences have varying effects on different groups (Sahota, 1968; Schultz, 1971). This study will show that the reasons for migration are very complex and depends very much on the scale and level of analysis. A micro-level study from the rural and source end, covering all people who migrate will show that family reasons such as marriage and passive migration, as well as education rank as the most important causes. Selecting young migrants in the urban destination end will highlight economic factors because one is dealing with a specific group. Again, examining in greater depth the migrant's family structure within a household approach will indicate the importance of family-structure-type factors, such as rank in the family, etc. The point to emphasize here is that the decision to migrate is highly dependent on the type of population under study and the level of that analysis.

There are also problems associated with the measurement of the central variables (see Yap, 1977). It is well-known that stated reasons for migration are affected by rationalization and memory lapses (see Pryor, 1975b; De Jong and Gardner, 1981). In fact, even the interviewer can easily affect the response of the migrant being interviewed. The problem of measurement is further aggravated when the data collection is not designed to collect information specifically on the motivation of migration. Besides, expected incomes perceived by potential migrants are difficult to measure (Speare, 1969). It is also doubtful that the use of wages is very meaningful in many Third World contexts where household earnings within the household economy may be more relevant (Hart, 1974: 332-3; Connell *et al.*, 1976: 30).

The third model which relates migration to development is the Mobility Transition Hypothesis (Zelinsky, 1971). A different type of model from that of Lewis-Fei-Ranis and Harris-Todaro, Zelinsky (1971: 221-2), a geographer, hypothesized that:

> "there are definite, patterned regularities in the growth of personal mobility through space-time during recent history, and these regularities comprise an essential component of the modernization process".

The five-stage mobility transition closely parallels the demographic transition. Population circulation, internal and international migration vary according to the level of development in the country, progressing from a period of little genuine residential migration to one dominated by inter- and intra-urban migration.

The Zelinsky hypothesis is a contribution to migration theory for it is the first attempt to relate migration behaviour within both space and time dimensions. However, while the model may be applicable in developed countries (see Rowland, 1975) it may be less relevant to Third World countries. Like the Lewis-Fei-Ranis model, the Mobility Transition Hypothesis assumes a uni-directional path of development for all countries, irrespective of their historical experiences. The model does not account for colonialism which has dramatically affected migration and consequently, populations. For example, it does not explain the labour mobility to plantation and mining sectors so characteristic of Sub-Saharan Africa (see for example, Mitchell, 1969; Amin, 1974; Magubane, 1975) and Papua New Guinea (Curtain, 1981; Young, 1977).

The data sources employed by Zelinsky to support the Mobility Transition Hypothesis reveal several weaknesses. The first problem is the nature of the data used. As Zelinsky drew widely from migration research based on census data to illustrate his hypothesis, the patterns were subjected to census-data-type errors. The data were mainly lifetime migration which were cross-sectional and aggregative. Lifetime migration does not account for intervening moves while the statistical units employed varied in size between nations. The second problem is that of actual data collection. Censuses are not exclusively designed to elicit migration information. Consequently, they fail to identify among other mobility issues, short-term, repetitive moves. It was really surveys, including anthropological methodologies designed for studying population mobility that have detected massive evidence of circular migration in Third World countries (see for example, Elkan, 1967; Breman, 1977; Hugo, 1978; Young, 1982; Standing, 1985; Prothero and Chapman, 1985 for reviews). It is clear that the importance of this type of movement has been underestimated in Zelinsky's model.

These three models have contributed to the knowledge of migration and its relationship with development. However, they tend to be ahistorical and imply that the path of development is the same for all Third World countries and will at least resemble that experienced by the developed countries. The uneven impact and legacy of colonialism from the fifteenth to nineteenth century, and international capitalism as manifested today within the new international division of labour suggests the importance not only of changing global economic conditions but the changing internal social forces, such as the role of the state, in mediating internal economic and political problems (Kamal and Young,

1987b). How these countries respond to the interplay of external and internal forces are reflected in their path of development, for example, the newly industrialized countries (NICs) of Taiwan, South Korea, Hong Kong and Singapore, aptly named the "four little dragons", in extreme contrast to the economically depressed Sub-Saharan states. It is argued here that the impact of historical forces, such as colonialism and the position of Malaysia in the current international division of labour, mediated through the state cannot be ignored in the study of migration. The large primary export sector and a plural society are both legacies of colonialism. The country is dependent and open, and the society divided racially, being economically and geographically stratified. The government, after the racial riots of 1969, was forced to take radical action in eradicating these differences through the introduction of the New Economic Policy (NEP) in 1970. As part of the diverse package of remedial measures, rural development was stepped up and urban job creation expanded not only through the government but through export platform industries. A meaningful study of migration must understand the complexities of these inter relationships, historical and contemporary, and how they affect, and in turn, are conditioned by migration.

In short, a more adequate model which relates migration to development requires a theory of development of the Third World, to be applied in specific ways to the particular historical and contemporary role and structure of the national economy being studied within that context. Such a universal theory and model of Third World underdevelopment is not yet forthcoming and may well be impossible (see Forster-Carter, 1978; Mouzelis, 1980). Without going into the vast and conflicting literature, we should now explore some dimensions of a structural framework for analyzing migration and development.

1.2.2 Towards a Research Framework for Migration Analysis

A research framework for a structural analysis of migration must incorporate two tasks. First, it must be able to identify the structural processes which determine a country's developmental trajectory. This must be analyzed within the context of a meaningful periodization of that society's historical transformation. Second, it must be able to locate migration processes within this unfolding structure and periodization.

The first of these tasks involves a specification of the national model of development. The formulation of this model must go beyond the question of a country's development in terms of its position on a linear universal scale of economic and social modernization, and the imitative model of development this implies. The specification of a country's development model should recognise that national economies exist as integral parts of an increasingly inter-dependent world economic system, each playing a historically defined

role in the development of the system. Therefore, they become structured in particular ways depending on the articulation of internal and external factors.

Dependency theory represents the first real critique of the conventional development theory namely, modernization theory and its subsequent revision by the dual economy model which had formed the basis of the three models of migration discussed earlier.[2] The dependency model absorbed later into the more articulate world systems model, in its barest essentials, sees the underdevelopment of Third World economies as a direct product of the development of unequal trade relations and the flow of economic surplus from investment capital which benefited the advanced countries more than the "peripheral" economies. These unequal relations at the world level, in turn, through specialization of the role of the peripheral countries, created economic and social structures within these countries which blocked their transition to the form of development achieved by the advanced countries. There are many versions of this centre-periphery model of development of the world system, and the mechanisms through which the surplus of peripheral economies are continuously drained off, and of the implications of this process on the development of internal structures (see Amin, 1976; Wallerstein, 1979). These formulations of the world systems are themselves not without controversy, and numerous critiques are available showing the weaknesses of these original contributions and providing new theoretical directions (see Henderson and Castells, 1987). Among issues which are the subject of this underdevelopment literature are included the question of imperialism, the role of multinational corporations (MNCs) in the present world conjuncture, the nature of the world economic crisis, problems of industrialization of the Third World, the question of class formation, the role of the state and politics and more recently, urban development (for reviews see Brenner, 1977; Leys, 1977; Brewer, 1980; and Henderson, 1986).

The differences are due mainly to the particular social science bias of the author, for example, the political-economy bent of Baran (1957) and Frank (1969), the economic approach of Sweezy (1942) and Amin (1974, 1976), and the sociological contributions of Alavi (1972), Cardoso (1973), and Wallerstein (1974). There are also criticisms of, and inconsistencies within each author's model of the world system as well as inconsistencies between these various versions (Brewer, 1980; Henderson, 1989).

However, a more meaningful explanation of the development of the world economy and its impact on national economies can be achieved through the incorporation of the more general aspects of these different contributions. In particular, Wallerstein's world systems

[2] For an introduction to what is now a vast literature, see for instance, Frank (1969).

approach, while highly abstract, proffers the possibility of analyzing the formation of particular societies in terms of the timing and manner of its incorporation into the world economy. It is also able to accommodate the possibility of genuine growth and industrialization of some countries in the Third World, or the periphery, through graduation to the category of the semi-periphery, occurring at particular historical points according to the cycles and rhythms of development of the world economy. This is in contrast to the dependency theory which dooms the periphery to a permanent underdeveloped status. What may trigger this transition in certain territories, and not everywhere, is the role of the nation state in promoting such development and the availability of conducive factors such as labour, and other locational advantage. The development of the East Asian NICs, in particular, is evidence of this.

The possibility of Third World industrialization in the present period of development of the world economy was induced by a process of global restructuring described by another world system formulation called the new international division of labour (NIDL) theory (Palloix, 1977; Frobel *et al.*, 1980). The new in the NIDL is the export of manufacturing production which previously was concentrated in the core industrialized countries under the colonial or core-periphery division of labour. This globalization of industrial production is organised through transnational corporations (TNCs) to escape the high costs of labour in the advanced industrialized nations. The availability of cheap labour, the technical division of labour that allows for the spatial separation of different phases of the production process (from product design to fabrication of components, assembly, testing, and marketing), and the investment policies of some Third World states, enabled the formation of industrial zones in the periphery. Further development of these enclaves and later integration through the labour process and supporting industries could lead to economy-wide industrial development as attested to by the NICs.

What is important in these models of development of the world economy to the study of internal migration is the unifying framework they provide to the diverse economic, social and political processes which influence the migration phenomenon in particular countries. Rural-urban migration, for instance, reflects a similar response of labour to the one-way flow of economic surplus resulting from the exploitation of rural areas and smaller cities by the national metropolis (Portes, 1977: 8). Such a formulation of the migration response, however, also suffers like the dependency model on which it is based, from oversimplification. For one, it leads to a conception of origin and destination areas as independent entities rather than related within the national and international system. It also gives a rather static picture of the migration process, without explaining how existing conditions change, and how migration flows can occur in diverse patterns of flows in response to these changing conditions in origin and destination areas. The dependency

paradigm also fails to provide a robust enough basis for the description and explanation of geographical displacements of labour in the process of societal transformation. As Portes (1977: 9) says in proposing the world systems approach as an example of such an alternative:

> "labour migration, like related exchanges, does not occur as an external process between independent entities but as part of the internal dynamics of the same unit. [The international capitalist system] is constantly changing according to forces that allow its components to modify their relative positions without significantly altering the basic order".

The world systems approach applies well for international labour migration and to a certain extent, domestic migration (Young and Kamal, 1985). However, if it were to avoid the fallacy of transitivity, which the dependency school is accused of, that of applying international level processes directly to the national level, the world systems framework must consider more fully the role of mediating national factors on internal migration. The point of the world systems approach, however, should not be lost: that is, that national level processes must be interpreted within the context of the development of the world as a whole. It follows logically that the analysis of concrete national development experiences has to be historically specific as well.

The NIDL within the context of global restructuring, in which Malaysia is now integrated with, provides one part of the research framework at this level of analysis of internal migration, particularly relevant during the post-1970 phase. More specifically, the rapid export-led industrialization experienced by Malaysia in the 1970s and 1980s, which had such profound effects on migration, as will be shown in this thesis, is a product of this global restructuring, in conjunction with the implementation of the NEP.

This brings us to the second task of developing our research framework: that of situating migration processes within this national developmental model. Still macro in scale, the specification of migration phenomena here must be conducted at four levels. The first level is the analysis of migration streams and relating these to national developmental processes, some of which are influenced by international forces. To do this, particular cognizance must be taken of the sectoral characteristics of these migration streams as they reflect the processes of national economic transformation. The structure of these streams should be related to changes over the different historical periods of economic development of the society, including the underlying social conditions and the policies of the state in response to changing internal and international conditions.

The second level of analysis, best described as meso-level, examines the transformation of particular areas, either as regions of origin or as regions of destination. Such an examination incorporates a dynamic view of the relations between these areas, the role they play within the national territory, and the impact of international and national forces on these areas. It is through such an approach that in studying the regions of origin we may discover the underlying explanations for the persistence of lagging regions, in spite of migration. Similarly, an enumeration of the population of the areas as total mobility and migration groups, of not only outmigrants (which is usually the subject of study but analyzed in isolation from the other mobility groups) but of stayers, intending migrants and commuters will throw further light on the nature and implications of such movements. By the same token, the analysis of rural-urban migration in the destination-end should be studied through a more disaggregated characterization of the urban economy in peripheral national economies.

This leads to the third level which is best discussed in terms of the urban informal sector concept.[3] As argued earlier, the conceptualization of urbanization processes in Third World countries implied by the Lewis-Fei-Ranis and the Harris-Todaro models of migration is inadequate. It is to overcome these shortcomings that McGee and Armstrong (1968) devised the concept of "urban involution" and Hart (1973) formulated the "formal" and "informal" sectors based on the sources of income and income opportunities. The literature on the informal sector is now quite extensive with diverse case studies from most Third World countries (see for example, Portes *et al.*, 1989) and is well summarized by McGee (1978) and Kamal (1981b). There are two contending schools of thought.

The neo-dualist school, a development from Lewis-Fei-Ranis sees the urban economy as two sectors. These two sectors may be defined as two types of economy, a "firm-centred" and a "bazaar-type" (Geertz, 1963); as two systems of production, capitalist versus peasant modes of production (Franklin, 1965; McGee, 1974); as two-circuits, an upper- and a lower-circuit (Santos, 1976); and as two labour markets, a "protected" formal sector and an "unprotected" informal sector (Mazumdar, 1976).

According to this view, structural imbalances in the economy cause problems of labour absorption in the formal sector. Therefore, the informal sector is seen as a vital and dynamic sector capable of providing employment and income opportunities for the increasing numbers of rural-urban migrants. This is contrasted to the earlier held linear developmental thesis which regarded the informal sector as parasitic on the formal

[3] See World Bank (1978) for critical perspectives on the informal sector, Bienefield (1975) for African examples and McGee (1974, 1976) and Forbes (1979) for Southeast Asian examples.

counterpart, eventually disappearing with modernization of the entire economy through its absorption into the formal sector. The contemporary view is that the activities of the informal sector, while existing in the interstices of the modern urban economy and considered low in unit productivity, nevertheless contribute much in volume to economic growth.

A major criticism of the neo-dualist school is by the dependency school which believes that the relationship between the informal and formal sectors is not symbiotic. Instead, the level of capital accumulation possible by the informal sector is hampered by the structural factors in the socio-economic political system. These small-scale activities can only participate in economic growth in a dependent way in urban sectors of countries with external-oriented economies (Moser, 1978: 1025). Therefore, the relations of production, accumulation and distribution in the informal sector is subordinated to the formal sector (Bienefield, 1975). This complex production relations reflect a highly fragmented labour market in the urban economy differentiated by heterogeneous classes (Breman, 1976).

The importance of the informal sector in a structural analysis of migration is clear. Besides offering a more meaningful characterization of the Third World urban economy, it allows for the analysis of migration as a phenomenon of the structure of the labour market. In this way, forms of mobility and migration (in particular, circular and return migration), as much as the nature of their absorption into the urban formal or informal sectors through rural-urban migration, can be seen as particular responses and adaptations of displaced labour within persistent structures of underdevelopment. The tendency for certain ethnic groups and sex to gravitate towards certain occupations and industries is also a product of the fragmented labour market. The specification of these responses in particular situations, differing according to the development experience of a country, is part of the second level of analysis.

A fourth level of analysis, the micro-level goes down to the family and individual levels. It involves the study of the decision to migrate in terms of family-demographic structures rather than as simple individual's decision to migrate which does not take into account the household of which he is a part. The basic premise here is that the individual is an important element of the household which itself responds to outside socio-economic and political forces which may be national and international. A whole body of literature on household structures and processes and their links with the broader national and international forces have been developed. Hareven (1978a) has aptly labelled these different processes as personal time (in one's life-history), family time (within the family life-cycle) and industrial time (the socio-economic and political factors impinging on the individual's life through the household). The integration of all these provide the essential

linking of the micro- and macro-levels where the macro is not merely a background for the micro. Thus, the household and the individuals in it, and their inter-play of relations become a microcosm of outside forces.

1.3 MIGRATION RESEARCH IN MALAYSIA

1.3.1 Migration Research in Peninsular Malaysia

Migration research on internal migration in Peninsular Malaysia has been mainly macro-oriented, based on large surveys in urban areas. Pryor (1972) examined internal migration in the broader development context of the country, using a number of data sources, including a survey of migrants in urban and rural areas of Selangor to gain some insights into economic development and modernization processes. He (1972: 625-30) concluded that Peninsular Malaysia, a more developed nation than most of its neighbours in Southeast Asia, is in the later stages of Phase II of Zelinsky's Mobility Transition (see Zelinsky, 1971). Although Suresh's (1975) study of urban migrant labour absorption into metropolitan Selangor was derived partially from a sample survey, he used mainly census data. The major conclusion was that labour absorption was more efficient (in the sense that those seeking a job finds one) than in other developing countries, although migrant participation in the modern sector was low. Soon (1976) attempted to explain interstate migration flows and characteristics within a regression framework derived from census data. Without recourse to more detailed survey data more questions were raised than answered.

The later studies which used census data and covered national patterns were the series of country studies by ESCAP (1982) and Standing (1983). Both paid some attention to historical aspects of urbanization but were similar to the conventional type studies in that a large proportion of the report was devoted to interstate migration patterns (especially between 1970 and 1980), and inevitably, the characteristics of migrants. No good study on migration in Malaysia can ignore the role of the government in the redistribution of population especially after 1970. Both discussed these issues. But what was interesting in the Standing (1983) report which was more problem-oriented, was the use of survey data of inmigrants to the Federal Territory (Kuala Lumpur and environs) and Petaling Jaya. However, it slips back into the usual comparison of migrants and non-migrants. The same type of analysis was carried out by Mazumdar (1981) in his study of the Malaysian urban labour market. Again, concentrating solely on urban destination areas of the Klang Valley, Malacca and Johor Bahru, the study by Tey (1988) deals with migrant and non-migrant differences in demographic economic characteristics, with an added dimension, that of

occupational mobility. Finally, the most recent survey by the Department of Statistics (Malaysia, Department of Statistics, 1990) of migrants between 1987-88 covered the whole peninsula, but again focused on the interstate volume and pattern of migration and the characteristics of migrants with non-migrants.

While these studies have increased the knowledge of interstate flows, characteristics of migrants, distance travelled by migrants, cost and means of transport during migration, choice of destination and home ties, information on the complex decision-making processes and the motivation for migration data were gathered on a fairly general basis. Owing to the scale of the surveys, time and logistical constraints precluded in-depth communication with the respondents. With the exception of the Tey (1988) study which incorporated some life history data, the rest were basically large cross-sectional type studies undertaken at the destination-end.

Other macro-scale migration studies have been equally problem-oriented. MacAndrews (1976) studied the extent of rural modernization among FELDA (Federal Land Development Authority) migrants in two land development schemes. Using occupational mobility as one of the indicators of modernization, he (1976: 34) concluded that given certain conditions, fully integrated land development schemes were an effective means of rural modernization. A study was commissioned to determine the socio-economic characteristics of potential migrants for the Pahang-Tenggara land projects (Kaplan *et al.*, 1977). Two studies, of Negri Sembilan (Selvaratnam and Dissanayake, 1976) and Johor-Tenggara (Cheong *et al.*, 1976) examined the role of migration as one of the variables in the analysis of regional development. On a smaller scale, Khoo and Voon (1974) studied migration from a New Village in Pahang. This study did not exploit the conceptual and methodological advantages of working on a micro-level at the source-end.

One striking fact of published articles of the 1980s on migration is that a large proportion were on planned population redistribution, specifically that of land settlement schemes such as FELDA (Blair and Noor, 1981; Laquian, 1982; Paiva and Shamsul, 1984; Khoo, 1984; Ogawa and Chan, 1985; Oberai, 1986; and Nazli *et al.*, 1990). Most cover the same grounds, that of the reasons and objectives for these land development schemes, their government sponsorship, and role in rural development; highlighting the same issues, particularly those that describe how FELDA functions, and how it is administered, the performance of these schemes including the question of cost-benefit; and the host of problems faced by such schemes including the retention of settlers, the second generation problem, land concentration and social tensions between settlers and the local people, and finally, an assessment of its success, i.e. FELDA's ability to meet its objectives and in some cases quoting the same data from the FELDA reports.

However, one publication with a somewhat different bent is how agricultural development policies have affected inter-district migration (Nazli *et al.*, 1990). What is interesting here is the use of the Malaysian Family Life Survey, 1976-77 consisting of life-history data and matrices. It concluded that the existence of land development schemes reduces outmigration and increasing the acreage under agricultural development has had positive effects on outmigration from the district.

The only two studies which could be considered micro-scale and in-depth in approach (although varying very much in scope) again focussed on the urban destination-end and on one ethnic group – the Malays. McGee's (1969) intensive research was on Malay migrants in Kuala Lumpur Municipality between 1962-63 while Nagata's (1974) anthropological research concentrated on Malays migrating to the urban areas of George Town and Alor Setar.[4] Both these studies were able to capture some of the dynamic elements of the migration process. Nagata (1974: 317-21) detected circular mobility, a phenomenon which had been suggested as occurring in Peninsular Malaysia from indirect evidence (Hamzah Sendut, 1965; McTaggart and McEachern, 1969; Saw, 1972). Since then, findings by Maude (1979) and Strauch (1977) demonstrated the significance of circular migration in economically depressed Kelantan and among Chinese new villagers in the West Coast respectively. In far greater depth, McGee (1969) analyzed rural Malays adapting to urban life. Occupational mobility was one of the processes used for measuring the extent of urban integration. He (1969: 668-772) concluded that despite movement to towns, there was no major advancement or economic gain among the migrants, particularly after 1962. The finding exposed the inadequacies of western-derived models which assume both availability and ease of entry into urban occupations by rural migrants.

While these studies have added to migration knowledge in Peninsular Malaysia they have also pointed to existing gaps in our present understanding. First, there has been no research comparing the migration of Malays and Chinese on a micro-scale, in-depth level. Yet this very distinction which represents major economic, political and social differences within Peninsular Malaysia must have important bearings on migration.

Second, most of these studies were conducted in the destination-end. While destination-end studies have the advantage of interviewing the migrant (gathering information on their reasons for migration, and future intentions), the data suffer from rationalization and memory lapses. The motivation of migrants, a very complex issue (Pryor, 1975a; 1975b;

[4] Nagata did not discuss her methodology. It is assumed that the study was in urban areas because she mentioned two towns. While George Town can be identified, the other town, Bintang is probably Alor Setar where "Setar" (a type of tree) may have been translated as "bintang" meaning "star" in Bahasa.

De Jong and Gardner, 1981) have to be accepted at face-value – as declared retrospective reasons. They cannot be cross-checked against the information from family members at the origin areas (Caldwell, 1969: 15) nor examined within the broader institutional framework of the norms of the community structure which may have influenced migration (see Mabogunje, 1970). Although the major motive for migration is economic (McGee, 1969; Pryor, 1972; Khoo and Voon, 1974; Nagata, 1974; Suresh, 1975), a destination-end approach is not able to examine the economic background from which the migrant originates or the context in which the decisions are made.

It has been suggested that households play a vital role in affecting migration decision-making processes in Third World countries (Caldwell, 1969; Byerlee and Eicher, 1974; Connell *et al.*, 1976). The household demographic structure, its survival strategies and other inter-locking processes which unfolds within the family life course all impinge on the migrant's decision to migrate. Therefore, information on the migrant, detached from the household context presents only a partial view.

Another disadvantage of destination-end studies is the characteristics of migrants sampled at the destination-end which cannot be compared with their counterparts in the source-end who did not migrate. More importantly, outmigrants are examined as a specific type, isolated from the other types of migration and mobility of which outmigrants form a part. Also, studies conducted at the destination fail to capture return migrants. Therefore, the real effect of labour absorption is difficult to assess.

Finally, although rural-rural migration is one of the major types of migration flow in Third World countries (see Davis, 1969) including Malaysia, there is little research on it. With the rise in interest on rural resettlement projects in the country, as mentioned earlier, and as practically all the inmigrants are from rural areas, these studies have provided, for the first time, some knowledge of the rural-rural stream. However, it is still a very specific type of migration. A rural source-end approach examining all types of outmigration from the rural end is able to capture the whole spectrum of mobility and migration.

However, there is a problem of source-end studies whereby whole households which have migrated may be missed out. This is remedied by asking village elders, families and noting empty houses.[5] A tracer study, combining both the source-end and following up of the migrant at the destination-end, provides a better, albeit, far more difficult methodology. This is attempted in this study.

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[5] Houses are seldom rented out in Malaysian villages. In the case study, about seven houses were found empty. Information about those migrated families was readily derived from relatives and neighbours.

The late 1970s and early 1980s saw for the first time, the migration of young Malay women from rural areas to work in factories in the expanding Free Trade Zones (FTZs). Most of these studies have tended to concentrate on the characteristics of these new migrants, their adaptation to urban work and life (Jamilah, 1978; Kamal *et al.*, 1988).

While the body of knowledge on migration in Malaysia continues to grow with more national-level analysis based on the census or nation-wide surveys and other case studies, what is becoming obvious is that these studies are beginning to appear repetitive – as is already the case in migration research generally. Migration research appears to have reached an intellectual impasse. As long as the analysis of migration is not framed in a way where the phenomenon is seen as both a response and a conditioning factor of social change in a country, there will be limited new development in the understanding of the phenomenon. We now turn to the other important aspect of migration, its explicit incorporation into development policy planning in the country.

1.3.2 The Role of Migration in Malaysia's National Planning

The NEP represented a new era in Malaysian development planning. It was born out of an urgent need for greater social integration and a more equitable distribution of income and opportunities for all Malaysians. The foundation for these social disparities and economic inequalities have been laid during the colonial era to be further entrenched by an independent government (see Chapter 2). The NEP had a two-pronged development strategy which attacked the basic imbalances in the Malaysian society by:

(a) reducing and eradicating poverty irrespective of race; and
(b) accelerating the restructuring of Malaysian society in order to reduce and eventually eliminate the identification of race with economic function and geographical location (Malaysia, Government of, 1971: 1).

The aims of the NEP have been reaffirmed and more clearly delineated within the framework of the Third Malaysia Plan 1976-80 (Malaysia, Government of, 1976: 96-7) where the role of migration was outlined. Migration out of less-developed areas was to be encouraged as a means to reduce regional imbalances. The rural-urban flow should be stemmed by agro-based industries sited in rural areas to provide employment. At the same time, the movement of capital and skills from urban to rural areas would be stimulated.

Migration became one of the means to achieve the two development strategies of the NEP. To combat poverty there would be opportunities for intersectoral transfer of labour from low productivity to higher productivity activities. This implied the geographical mobility

of poverty groups[6] to areas of economic potential, such as areas of natural endowment (for example, Pahang and Johor for their land and forest resources), growth centres[7] and most important, land development schemes[8].

To restructure society, Malays engaged in subsistence agriculture below the poverty line would be shifted to urban areas and industrial sector occupations in which they are currently under-represented (Malaysia, Government of, 1973: 1). While the urbanization of the Malays would be encouraged, Chinese and Indian migration to rural areas will also be fostered. This would be achieved through increased intake of non-Malays to FELDA schemes and shifting of Chinese to rural areas to exploit their market-gardening skills (Malaysia, Government of, 1976: 189). To achieve the interstate migration targeted by 1990, there has to be sizeable movements of labour from Kedah, Perlis and Kelantan. Selangor, Pahang, Penang and East Malaysia must continue to be the principal receiving states.

It is clear that the government viewed migration as an important means of achieving the goals of the NEP. So central was migration to government policy that "balanced mobility [was considered] one of the biggest challenges facing the country during the Third Malaysia Plan period" (Malaysia, Government of, 1976: 97).

This was the state of the government's thinking and policy up to 1976, providing the impetus for the Simpang Empat Mobility and Migration Surveys undertaken by the author. Up to the Third Malaysia Plan, there were still some confusion as to the exact role of migration, important as it was in effecting the objectives of the NEP. Up to that stage, knowledge on migration was still limited. Thus, from the perspective of that period, there was an urgent need for a greater understanding of the complicated processes of migration for the policies to be successfully implemented. Despite the crucial role migration was

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[6] The poverty line was derived from the Post Enumeration Survey (1970). Forty-nine of all households were below the poverty line. This affected mainly rural households (59 of all rural households) who were mostly Malay (65 of all Malay households). The major poverty groups were *padi*-farmers, rubber and coconut smallholders, fishermen, estate workers, residents of New Villages, agricultural labourers, Orang Asli (Aborigines), urban poor and the indigenous peoples of Sabah and Sarawak (Malaysia, Government of, 1976: 161-4).

[7] There are two types of growth centres. One consists of established towns. The other is new growth centres located in rural development schemes. These growth centres provide opportunities for Malays in secondary and tertiary activities. Smaller centres are more conducive for Malay labour absorption owing to their propensity for short distance moves (Nagata, 1974: 321; Suresh, 1975: 113), and the less complex skills demanded which means less competition with the other community groups already established in the major cities (Malaysia, Government of, 1976: 169).

[8] There are two types of land development schemes. The first consists of large-scale capital investment in an existing heavily-populated agricultural region (usually rice-growing) such as the Muda (Kedah-Perlis), KEMUBU (Kelantan) and Krian (Perak). The second type is the development in virgin jungle, for example, the Jengka Triangle, Pahang-Tenggara and Johor-Tenggara. The latter schemes have more impact on population redistribution, hence the interest in their impact during the 1980s.

expected to play in the achievement of the aims of the NEP there were gaps in the knowledge and understanding of the phenomenon.

It must be borne in mind that migration was expected to be simultaneously a centrifugal and a centripetal force, encouraged, sustained or discouraged – depending on the particular aim of the NEP and the government's five-year plans. Conflicts were bound to occur especially as the processes of migration were not fully understood. There were a number of fallacies concerning migration in government planning.

The first fallacy concerned the belief that the number of urban poor had been swelled by migrants from rural areas (see for example, Malaysia, Government of, 1973: 5). The Mid-Term Review of the Second Malaysia Plan (Malaysia, Government of, 1973: 27) went on to predict that if the rates of rural-urban migration that prevailed between 1957 and 1970, continued into 1975, two million people would have changed their location during the five-year period. This conclusion was based on the assumption that there was rapid urbanization in Peninsular Malaysia.[9] In fact this did not happen.

The second fallacy was the belief that urbanization was caused by a large influx of rural-urban migrants. As Chapter 3 and Chapter 4 show, this is incorrect. Up to 1970, and certainly even until 1976 as the village case study shows, the rural-urban migration stream was small. Although the Third Malaysia Plan acknowledged the slow rate of rural-urban migration, one of the two reasons forwarded as an explanation was questionable. It suggested that rural migrants could not find suitable employment because of the high level of skills required in the Kuala Lumpur – Petaling Jaya – Port Klang industrial belt known as the Klang Valley (Malaysia, Government of, 1976: 149).[10] A more probable reason was that the government and private sectors in urban areas were not able to create enough employment for an expanding pool of job-seekers. Suresh (1975: 211-9) found that the incidence of unemployment was lower among migrants than non-migrants, when standardized for educational level, age, sex and ethnicity.[11] Besides, the high rates of unemployment in the urban areas would attest to the lack of employment opportunities for all segments of the population, rather than immigrants who, in the Malaysian case, always performed better than the non-migrants.[12] Whitney and Jones (1973: 74-5) had predicted

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[9] See Jones (1975: 99-100) for reasons for the prevailing belief that Third World countries are undergoing rapid urbanization. In Malaysia, this conclusion was partly based on the artificially inflated urbanization rate between 1947 and 1957 (caused by the Emergency resettlement). It was assumed that this high rate would continue into the 1970s.

[10] The other more plausible reason is the success of the land settlement schemes in drawing off surplus labour from subsistence agriculture.

[11] This does not account for unemployed migrants who might have returned to their rural homes and therefore are left out in a survey at the receiving end.

[12] See Chapter 4 for the employment rates among migrants of 1965-70.

that unemployment, as a result of the unprecedented growth of the labour force, would be one of the major challenges facing Southeast Asian nations during the next decades.

Another serious problem associated with migration and the Third Malaysia Plan was the contradictions in the two-pronged development strategy of the NEP. Heavy government investment into *in situ* agricultural development projects such as MADA (Muda Agricultural Development Authority) may, in the short-run, alleviate poverty and prevent outmigration. In the longer-run, the rise in incomes, coupled with the increasing ease and accessibility to educational facilities, and higher aspirational levels, both of parents and children, would lead to outmigration of a growing educated group.

A similar type of problem exists in the resettlement of landless farmers in presently economically viable blocks of rubber and oil palm land development schemes. Known as the "second generation" problem, all the children of these settlers cannot be absorbed into the family farm and would have to migrate to other land development schemes or to urban areas. It is likely to be a shift to urban areas as already, settlers have expressed their preference for their children to get white-collar jobs and live outside these schemes (Ogawa and Chan, 1985). Besides, the higher-than-average incomes of the settlers, availability of education in these schemes, and continuing support in education by the government will put their children in good stead for outmigration to urban areas. Thus, these two types of rural development schemes will only serve to stagger outmigration. They will not retain people unless there are jobs there that are commensurate with the rising education and aspirations of the youths. Therefore, government policies must anticipate this outmigration.

Similarly, the creation of new urban centres on these land schemes raises two questions on urban restructuring. First, to what extent can this accelerated urbanization of the Malays, with respect to other Malaysians, be accommodated in these schemes. Second, to what extent will this lower level urbanization draw labour away from the spontaneous urbanization streams that will converge on the existing larger towns in the more established regions of the country? These issues must be examined more carefully in the light of problems of urban concentration and urban management.

Finally, although Suresh (1975: ii) concluded that labour absorption into metropolitan Selangor is efficient, the restructuring of the society is attained not merely by a change from rural to urban sectors. The quality of occupations is an important consideration. While the informal sector in urban areas may act as a "safety valve" for rural migrants, this process cannot be sustained indefinitely – for the NEP aims not merely at increasing the volume of Malay participation but also, the value of their participation as well. This means

not only in terms of wealth owned as proposed in the NEP but also in terms of skills and income. It was targeted that by 1990 Malay participation and ownership should be 30 per cent of the national total (Malaysia, Government of, 1976: 1). The success of this objective depends on numerous factors including the world economic condition, the buoyancy of the Malaysian economy and the labour absorptive capacity of the urban areas. An analysis by Kamal (1975a) of the socio-economic profiles of cities, in particular, the nature and degree of *Bumiputra* participation in Peninsular Malaysia in 1970 revealed that the cities were largely Chinese with low Malay participation. Malay participation tended to vary according to the size of the city and location in a region as defined by its wealth per capita. By sectoral participation, Malays featured mainly in services (government services), transport and utilities with low levels of participation in manufacturing. These same findings are also found in the migration streams analysis in Chapter 3.

It is for these reasons that rural development must move in step with urban development. Because of rural-urban linkages, the freeing of educated rural Malays with increased expectations without a concomitant absorption of them into the urban areas would see the failure of the policy to restructure society. Therefore, there are justifications for a national system of rationalized growth centres (Kamal, 1975b). These centres will not only provide new jobs in manufacturing for potential migrants and thus, discourage them from migrating to the current urban centres, especially the Klang valley in search of work, but will ensure some dispersal of economic development to lagging areas. But for all these policies to work, there is an urgent need to understand the structure and processes of migration and its inter-relationship with the broader social, economic and political structure of the country.

After the Third Malaysia Plan and its Mid-Term Review (Malaysia, Government of, 1978) the prominent role accorded to migration through the NEP appeared to have been deemphasized in the subsequent plans. Perhaps it was assumed that migration would automatically perform its role. The problem of first applying migration as a tool to shift rural Malays to land settlement schemes and using *in situ* agricultural development to alleviate poverty and thus, slowing down their rate of rural-urban migration may be seen as the major issues of the 1970s.

By the late 1970s and in the 1980s, the emphasis had changed to industrialization, to the creation of sufficient jobs to cater to the rapidly increasing numbers of job seekers, especially new rural migrants, entering the labour market. It was in response to these demands that the government found it expedient to give generous tax incentives to foreign investors to locate their factories in the newly-created FTZs. Because these factories were labour-intensive, being mostly electronics and textiles, they employed mainly women as production workers. These goals constituted the "new" migrants, part of the third "wave"

of urbanization (see Chapter 5) which is the important subject of migration studies for the 1980s.

The Fourth Malaysia Plan, 1981-85 (Malaysia, Government of, 1981: 111) noted the increase in urbanization, especially among Malays and attributed it to the rapid growth of job opportunities especially in the services (government services), construction and manufacturing (private sector) in the 1970s. It concentrated on a four-pronged urban strategy: accelerating the development of towns with prospects for agglomeration economies; development of satellite towns and service centres to complement the growth of major urban centres; development of intermediate towns such as Alor Setar to complement the growth of regional growth centres; and strengthening the major regional centres such as Johor Bahru and Kuantan identified under the Third Malaysia Plan (Malaysia, Government of, 1981: 108-9).

These strategies were based on the following premises which have implications on migration. The first is that urban development will expand the industrial and tertiary sectors which will, in turn, generate more productive and remunerative urban-based activities for Malays, thus creating a *Bumiputra* commercial and industrial community, as envisaged in the NEP. Second, by spreading the urban areas, dubbed the strategy of rural urbanization, rural people will have easier and greater access to urban services and amenities. Finally, it was hoped that the development of urban centres would provide a catalyst for growth in the less developed areas, reducing the imbalances already in existence. Thus, the first premise is the creation of jobs for rural-urban migrants while the last two are attempts to retain the rural populace through rural development – that is, correcting the urban bias so typical of Third World countries which have created serious outmigration from rural areas.

By the Fifth Malaysia Plan, 1986-90 (Malaysia, Government of, 1986) the urban growth rate was expected to increase further (from 5.9 per cent in 1985 to 7.3 per cent by 1990) with an anticipated larger contribution from rural migration. The pattern of migration between 1981-85 had highlighted four zones: the north which consisted of a narrowly-based manufacturing sector, the central region which had traditionally attracted most migrants, with its diversified economic structure; the eastern region which attracted settlers and contract workers to the land settlement schemes; and the southern region where the economic structure is well-balanced but is losing migrants to other regions.

The prospects for the Fifth Malaysia Plan which have implications for migration is associated with the reorientation of regional and urban development strategies. There was a move to deemphasize states (for example, the notion of a lagging state such as Kedah) in

favour of regions (such as the northern region which is not constrained artificially by administrative boundaries) as the unit for planning. Instead of spreading resources thinly, as in the earlier plans, by developing industrial estates in many locations and developing towns which had problems getting settlers, the new approach aims to consolidate and concentrate development. The rationale for this is that industrial estates can reap the benefits of agglomeration; develop towns to complement rural urbanization; and move people to where jobs are as well as to move jobs to where people are.

The role of migration is again explicit. It is to be used to move people to regions (rather than states) where there are opportunities. Meanwhile, centres with growth potential within these regions will be developed to absorb urban-bound migrants. At the same time, the rural areas surrounding these regions will be revitalized to raise the incomes of those who remain. The emphasis is on the region with migration and development within the region.

While the understanding of migration processes proves to be fallacious in some of the earlier planning assumptions, the central role of migration in ensuring the participation of *Bumiputras* in the modern sectors of the economy, especially those in rural areas, is part of the NEP objectives. The deeper understanding of these migration processes and their linkage to the multi-level structure of factors, internal and external, is necessary to assess what works and what does not.

1.4 RESEARCH OBJECTIVES AND METHODOLOGY

1.4.1 Research Objectives

The main objective of this dissertation is to examine migration in Peninsular Malaysia in the context of Malaysia's developmental experience, within the framework of analysis as outlined. The approach adopted attempts to overcome the problems of existing migration studies as discussed, and to incorporate new methods of analysis that should bring out the more salient aspects of migration in Malaysia. For this purpose, a two-circuit hypothesis is formulated as a model of the structural relationship between Malaysia's development and the migration patterns it engendered. The analysis seeks to understand these patterns within a historical context, examining the responses of migrants according to their ethnic and economic background in order to explain the peculiarities of the migration process in Malaysia.

It was pointed out that there is a lack of understanding of migration and its determinants in terms of both process and policy implications. What is unique in the Malaysian situation is that migration is not merely a tool of redistribution of population but is part of a strategy to restructure society under the NEP. This is unlike other countries, such as Indonesia and the Philippines, where migration policy is primarily used to alleviate the extreme concentration of population in the major island or urban concentration, respectively.

It is important to appreciate this point for two reasons. First, the migration phenomenon is determined by its complex relationships with economic structure, just as it influences that structure itself. Second, migration as policy is not necessarily efficacious because it does not wholly contribute to the achievement of its objectives, such as population redistribution or primacy reduction, because of the interplay of other non-controllable factors and the effect of other policy influences, which may themselves be more efficacious. For example, in order to reduce urban primacy, it is not sufficient to prevent rural migrants from coming into the city without concomitant policies of rural development.

More specifically, a number of issues must be addressed in advancing our understanding of migration. These include:

1) the links between individual-level decisions with the broader structural factors and processes. While researchers often cite this point, the idea is usually implicit in their analysis rather than actually analyzed and operationalized. Thus the need to specify the national development model to see unfolding processes and structures determining migration in a particular historical context. This also means stating and analyzing the multi-level linkages, the world economy, the national economy and the regional-local economy. The two-circuit hypothesis of migration in Malaysia developed in this thesis is born out of this conceptualization.
2) the need to take a longitudinal view of the migration process, in order to see how both macro- and micro-processes as well as their interlinkages take place through the various phases of development and impact on each other in different ways. This implies the adoption of a historical approach to migration analysis, both in terms of the unfolding national development experience at the macro-level as well as the individual life history in the context of family histories at the micro-level.
3) how policies, reflecting the given conditions at different times, affect and impacts on migration processes at macro- and micro-levels.

There are a number of theoretical questions that are of special interest that also needs to be addressed. What stands out in the survey of migration research is that in spite of massive data collection and empirical analysis including case studies from all over, there have been little theoretical breakthroughs in migration research. Among those that need to be explored further in theoretical and empirical terms are three issues:

1) that the decision to migrate is not purely an isolated, individual volitional decision, but rather, is conditioned by family or household considerations which are

themselves influenced or constrained by the broader socio-cultural as well as local, regional and national processes.

2) that a more meaningful understanding of migration in a structural sense is to study migrants as a group in a mobility continuum that includes circulators/commuters and stayers in their total village context.
3) that push-pull factors and origin-destination studies of migration are inadequate unless seen in their total context and linkages (rural and urban), and that rural and urban areas are not simple but rather complex societies which cannot be reduced to mere probabilities of migration as in the Harris-Todaro model.

From the policy point of view, the important issues are:

1) the efficacy of migration as a policy tool in social engineering, relative to other policy instruments in effecting population distribution and change.
2) the controllability of market forces or other structural determinants such as the decisions of TNCs, technology, etc. in the implementation of migration policies.
3) that migration policy is part of a larger set of policies, therefore, it cannot be implemented in isolation, separated from other development policies such as industrialization or rural development programmes.
4) that policy impacts may be permanent or temporal depending on the entrenchment of migration structures and processes, which of course depends on a whole set of other factors.

In undertaking this migration study in Peninsular Malaysia, even more specific questions are raised. They are:

1) At the broader level:
   a) the specifics of the Malaysian model of development.
   b) the impact of colonialism in the structuring of migration.
   c) the characteristics of migration streams as description of circuits of migration.
   d) the policies of the post-Independent government on migration.

2) At the village level:
   a) the different types of mobility and migration in the study area.
   b) the reasons why people leave, remain or return to their *kampungs*.
   c) the relationships of the above to the socio-demographic and economic characteristics of the migrants.

3) At the household and individual level:
   a) how do family and personal life experiences according to their life-histories and stages of the life-cycle impinge on the process of migration in terms of the decision to migrate, strategy for education, access to work, and selection of destinations.
   b) how do macro-events affect the individual and family life-courses of the migrant.

In this thesis these research questions, at both the macro- and the micro-levels, have been set in a consistent framework of structural analysis of internal migration as described in the previous section. The search for answers to these questions, in the particular experience of

Malaysia, would require the choice of appropriate methodology consistent with the above multi-level framework.

1.4.2 Methodology

Meaningful answers to the questions of internal migration require the integration of macro-level (international or national) analysis with the meso-level (the region or state) with the micro-level (household or individual). Such a methodology must also be inter-disciplinary. The life-history method integrated into family histories is also used for its rich source of information. Set out below is a brief discussion of the methodology.

Linkages between Micro-Macro Scales

There appears to be a schism between the micro- and macro-scale of migration analysis and explanation. This is exemplified by the approach of anthropologists (micro) and economists (macro) who often use one level exclusively (see Epstein, 1975). However, these two scales are compatible rather than conflicting if their limits are understood. Ryder (1964: 458-9) defined the macro- and the micro-approaches in the following way:

> "The macro-analytical level of inquiry consists of propositions or statements of relationships among the properties of the population as units of reference. The micro-analytical level of inquiry consists of propositions or statements of relationships among the properties of the individual as the unit of reference."

The macro-method has tended to dominate migration research for two reasons. First, those who worked on migration such as demographers, economists and to some extent, geographers, have had a tradition of macro-approach in their search for models. The micro-approach is mainly used in anthropology and some segments of historical demography. The general disenchantment with models derived from aggregative data and the interest in the behavioural approach has given micro-studies greater relevance, particularly in the fields of fertility and migration (Clarke, 1976: 25).

The second reason relates to the availability of data. Most researchers have depended on census data as the major and most easily accessible source of national migration statistics. This is evident from major works on migration which have used census data (see Bogue, 1957; Eldridge, 1964, 1965; Ravenstein, 1885, 1889; Taueber *et al.*, 1968; Thomas, 1959) including country-level reports especially from the Third World. While census data provide an objective, national coverage of migration flows, rates and characteristics of migration, they fail to capture the complexities and dynamic nature of migration. Micro-

scale studies may be tailored to the aims of the researcher but they are often criticized for their lack of representativeness.

Therefore, both macro- and micro-approaches have their advantages and disadvantages. In this study, both macro- and micro-approaches will be used to complement each other in the attempt to understand migration. While the census data describe the national flows and characteristics, the micro-study probes the factors which produce these patterns. Linking certain moves by a migrant in his life-history and life-course to the broader political, economic changes is an attempt to integrate both approaches.

Inter-Disciplinary Approach

The multi-facetted phenomenon of migration and its relevance for different disciplines accounts for the interest in the subject by various branches of the social sciences. This is evidenced in the diverse migration literature.[13]

Demographers are concerned with the calculation and estimation of migration flows (Hamilton, 1965, 1966, 1967; Stone, 1967; Shryock and Siegel, 1971) and selectivity of migrant streams (Thomas, 1938; Bogue, 1961; Stone, 1967). Geographers and regional scientists are associated with migration and distance (Morrill, 1965), urban hierarchy and functional distance (Brown *et al.*, 1970), directional bias (Wolpert, 1967; Adams, 1969) and information flows (Berry and Schwind, 1969). Sociologists are interested in the effect of migration on social change (Jackson, 1969; Jansen, 1970) and explain migration in terms of the life-cycle and career pattern (Leslie *et al.*, 1961; Ladisky, 1967). Economists view migration within the framework of rational man who optimizes his economic opportunities in response to cost-benefit decisions (Sjaastad, 1962) and wage differentials and expected income (Harris and Todaro, 1970). Political scientists are interested in squatter settlements as potential seedbeds of political activities (Laquian, 1973), while anthropologists study problems of migrant adjustment in the new environment (Mangin, 1970; Du Toit *et al.*, 1975).

The conceptualization and theoretical contributions to migration research have been as diverse as the disciplines of the scholars. One would expect that the plethora of information on migration would lead to some basis for a more integrated theory of migration. Yet, it would seem that this very diversity of approaches has inhibited the construction of migration theory because of their narrow discipline-bound interests,

[13] See Shaw (1975) and United Nations (1973) for a general review and Amin (1974), Connell *et al.*, (1976), Todaro (1976), Simmons *et al.* (1977), and Yap (1977) for Third World examples.

unevenness of research focus, inconsistency of methodology and a lack of communication (or interest) of research findings between researchers of different disciplines.

My thesis in this study is that a meaningful explanation of the pattern and processes of migration in a country lies in a structural approach which is inter-disciplinary combining the historical and contemporary socio-economic and political forces within the world system.

Life-History and Family History Approach

Another reason for migration being one of the hardest population components to analyze is that the factors which influence migration vary on impact and perception by the migrant at different stages of his life-cycle. There are factors in the life-cycle which provide not only a particular orientation to the world outside and its influences, but also a particular set of opportunities at different stages of life. It is argued in this study that critical stages may be discerned, such as birth, commencement and termination of school, first major job, marriage and dissolution, birth of children, children leaving the household, retirement and death. Although the actual age for each of these events may be affected by the different socio-cultural factors (between different community groups)[14] and economic circumstances (between cohorts),[15] each of these stages affect the decision-making of the individual (Young, 1978). Transverse or static analysis do not fully capture the effect of time and all its ramifications on the migrant.

In order to analyze the impacts of macro-structures on the household, individual and family life-histories are constructed. Individual life-histories give a year-by-year account of important events in a person's life (changes in family formation, education, occupation, etc.) When meshed together with those of the rest of the family, family life-histories are created. By tracing the changing family life-cycle or the life-course (see Elder, 1978) we are able to see how the family and the household affect the individual and his decision to migrate. Here the question of household strategies of coping and adjusting covers the allocation of family resources such as labour (who should remain in the family business/farm, who should work outside and who should migrate) and investment (who to educate). Particular events affecting one member of the household may determine the changes of the next, for example, the death of the major breadwinner may force a

[14] In the case study, some of the socio-cultural factors which influence migration but vary in importance between Malays and Chinese are: attitudes to migration and jobs, age at marriage, place of residence after marriage and parents' dependence. Differences are discernable even between Chinese dialect groups, for example, Cantonese and Teochews, in their attitudes toward laterally extended families.

[15] An example of this from the case study are the people entering the labour force before and after World War II. There were marked differences in their level of education and consequently types of jobs.

reallocation of work, and investment causing children to be withdrawn from school, forced to enter the labour market and migrate. This methodology will be adopted in this study.

1.4.3 Plan of Dissertation

The dissertation is divided into two parts. The first part, consisting of Chapters 1 to 3, treats the research issues at the macro-level, and discusses the theoretical framework and empirical basis of the two-circuit hypothesis of migration in Peninsular Malaysia. The second part, comprising Chapters 4 to 7, goes down to the micro-level, and complements the first by analyzing in some depth, the structure and processes of different types of mobility and migration as expressions of how individuals and families adapt in a particular political-economic situation. The point of departure of the second part is the treatment of migration at the rural-end, rather than as is usually done, at the destination-end. Here, the migrants were traced to their destination. A later group of migrants was studied from the urban-end and traced back to their villages. A second point of departure is to study the migration experience of particular groups of migrants in terms of the impact of significant events, such as Independence in 1957, the advent of export platform industrialization, the 1985 recession, as well as pervading characteristics such as ethnicity.

In Chapter 1, we reviewed the models of migration and development and the literature of research on migration in Malaysia in order to develop the theoretical framework for this research. The role of migration in Malaysian development policy was also examined. Then we discussed the research objectives and methodology of this study.

Chapter 2 discusses Malaysia's model of development and traces the evolution of the colonial economy and its impact on the structuring of the two-circuit system. This is followed by an examination of the urbanization experience in terms of waves of urbanization in order to demonstrate the formation of the two-circuit system, and of rural development as a set of post-Independent policy measures that had contributed to the conservation of the structured migration pattern described by the two-circuit hypothesis.

Statistical evidence to support the idea of the two-circuit system is presented in Chapter 3 by examining the 1965-70 migration streams by strata. This statistical analysis covers the locational and socio-demographic characteristics, and in particular the economic structure of the two-circuits of migration. Because the association of location with sectors is too simplistic, an analysis of the same migration streams by the formal/informal sectors is carried out. In spite of this refinement, the evidence point to the same conclusion. It is this occupational, locational and ethnic structure of migration which the government has sought

to change through its migration policy and other forms of state intervention as reflected in the NEP introduced in 1970. The impact of the NEP is discussed in Chapter 7.

Chapter 4 examines the regional and local context of the study villages in Muda based on a field survey undertaken in 1976, as a background to the study of mobility groups. Here, we sought evidence of the process of conservation and dissolution of the two-circuits at the local-level. From these data, a typology of mobility and migration groups is devised in order to place the outmigrant group in their social context in terms of their socio-demographic and economic characteristics which reflect closely the national pattern of Chapter 3. Labour mobility may be analyzed as response to particular developments in the local, regional and national economy. In this regard, the chapter analyzes the linkages between individual histories of migration and the broader structural factors through devising of a concept of "critical moves", as a methodology to integrate the micro-level data with the macro-level data through analysis of the life-history data as personal conjunctures at different stages of the life-cycle as they reflect the changes in the socio-economic and political structure.

The following chapter, Chapter 5 bridges the mid-1970s with the mid-1980s. It deals with a new migration phenomenon, that of rural Malay females migrating to work in the recently developed electronics industry in the export platform zones. This analysis is from the urban-end, examining how international economic developments, in concert with national and local government policies structure migration patterns. It shows the effect of trade cycles on the workers. This analysis, basically macro in approach is based on a survey carried out in 1982 on workers in the FTZs compared with workers in the informal sector in Penang.

In Chapter 6 which covers the same period, the micro-level approach extended through the study of household histories of migration. The methodology of this relatively new area of study is surveyed, and then applied to a sample of factory girls drawn from a field survey carried out in 1985 to 1987. Two case studies of individual migrants drawn from the sample is examined in great detail to identify their status and migration experience within the family and wider structural context. These case studies illustrate in finer detail the individual processes of the two-circuits. By introducing the method of life-course diagrams, we were able to integrate the various household structures and processes to the wider economic context in order to understand the fuller complexities of the migration process.

Chapter 7 examines the post-1970 situation by assessing the role of migration in achieving the objectives of the NEP in breaking the entrenched two-circuit system in Peninsular

Malaysia. This will be considered in the context of the vast sectoral change brought about by the rapid industrialization of the 30-year period, culminating in the third wave of urbanization where over half the population becomes urban consisting of mostly Malays in modern sector occupations traditionally associated with the Chinese. Labour shortages will occur in tandem with the transformation, inducing a massive influx of foreign migrant workers. All these forces seal the process of rupture of the two-circuit system of migration.

The Conclusion recapitulates the major arguments and research issues raised in this thesis pointing to areas for future research, policy implications and the final disintegration of the structured nature of migration in the country.

CHAPTER 2
MALAYSIA'S DEVELOPMENT MODEL AND THE TWO-CIRCUIT SYSTEM OF MIGRATION

2.1 INTRODUCTION

The objective of this chapter is to specify a theoretical framework for the structural analysis of migration in Malaysia. As discussed in the first chapter, such a framework must relate the structure of migration directly to the pattern of development of the national economy and society. This involves two tasks. The first is to identify the structural processes which determine a country's development trajectory within the context of its incorporation into the world economy. The second is to try to locate migration processes within the unfolding structure and periodization.

For our purposes, it is necessary to determine the particular path and pattern of development of the national economy and their impact on different forms and functions of migration in that country. This is covered in the first section where the relationships between the Malaysian model of national development, namely its historical patterns, and migration movements are discussed. This entails a description of the evolution of the Malaysian economy in three phases of incorporation, from the colonial period, to post-colonial and finally the nationalist period of the 1970s. The particular manner of the country's integration into the world economy, the specific policies and practices pursued by the colonial government, and the development efforts of the post-colonial government, had all produced a highly open and over-specialized economy dependent on foreign capital and markets. It also produced a multi-ethnic social structure which exhibits significant correlations in geographical and sectoral terms that provide the underpinnings of contemporary Malaysian development problems and policies.

Based on this discussion, the second section of this chapter poses the major thesis of this study, that migration in Malaysia is highly structured according to location, occupation and ethnicity due to the particular history of Malaysia's development. This is described in terms of a two-circuit hypothesis which distinguishes between an upper-circuit of population movements made up of predominantly modern formal sector mobilities, and that of a lower-circuit consisting of mainly traditional, informal sector and rural-rural movements. The structuring of these migration patterns and processes are analyzed according to the above periodization of the development of the Malaysian economy in order to determine the dynamics of persistence and dissolution of the two-circuit system.

This is the framework on which much of the analysis in the subsequent chapters will be based on.

In the third section, the particular urbanization experience in Malaysia, closely linked to the historical path of development of the economy, is examined to show the impacts on the entrenchment and preservation of the two-circuit system. The section before the conclusion is devoted to rural development, the success of which, in the Malaysian case contributes considerably to the low and balanced urbanization experienced, and more importantly, to the preservation of the two-circuits of migration and labour mobility.

2.2 MALAYSIA'S MODEL OF DEVELOPMENT AND THE TWO-CIRCUIT SYSTEM OF MIGRATION

2.2.1 Incorporation and Integration of the Malaysian Economy

Two major periods in the development of the Malaysian economy may be identified: one of incorporation between 1786-1929 and one of integration from 1930 to present times[1]. However, within these two broad periods, sub-phases may be discerned, distinguished by the particular interlocking of international and national processes. From a basically feudal society, Malaya[2] under British colonialism, especially between 1870 to 1920 was transformed into a major supplier of raw materials, mainly tin and rubber, to the industrial core of Europe and America. Among the various phases of Malaya's incorporation and integration into the world economy this may be seen as the most critical, for it determined the model of development of the Malayan economy, its population structure and composition, and the international and internal migration patterns that were to persist into the present times.

Within the period of incorporation there were three phases. The first phase was between 1786, with the takeover of Penang by Light, to 1829, when the Straits Settlements were formally established. Between 1830 to 1874 tin became the main commodity of the peninsula bringing along its wake, European mercantile capital, local capital, political rivalries and Chinese secret societies' feuds, the latter providing the *raison d'etre* for the

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[1] While one can point to the Portuguese conquest of Malacca in 1511 as the beginning of colonialism in Malaya, it can be argued that full-scale colonial incursion only began with the establishment of the Straits Settlements in 1829.

[2] Malaya refers to the Malay peninsula which became independent in 1957 as the Federation of Malaya (consisting of the former Straits Settlements of Penang, Malacca except Singapore; the former Federated States of Selangor, Negeri Sembilan, Perak, Pahang and Johor and the former Unfederated States of Perlis, Kedah, Kelantan, and Terengganu). The Federation of Malaysia was formed in 1963 with the inclusion of Singapore, Sabah and Sarawak. Singapore left the Federation of Malaysia in 1965.

Treaty of Pangkor in 1874. This marked the point of formal British intervention which, in the next 35 years was to extend throughout the peninsula. The next phase, 1875-1929 saw the establishment of the second important commodity of Malaya, that of rubber. These two products and cheap immigrant labour, engineered mainly by European capital and local compradore capital contributed, within a span of less than 150 years, to the incorporation of Malaysia into the world economy.

The outstanding feature of the colonial economy such as Malaya's was its dependent nature, specializing as a producer of agricultural export commodities (rubber), or minerals (tin). The concomitant increase in such commodity export production meant the neglect of local food production. The foundations of uneven development were thus laid. On the one hand, there were the large plantations devoted exclusively to the production of raw materials for the core and mostly owned by foreign capital. On the other hand, there were the areas of subsistence agriculture, still peasant in nature and neglected by the colonial government as they did not serve the needs of the core. Within the rural region the export-oriented sector must be distinguished from the subsistence sector owing to their different relationships to the metropolitan countries. Buffering these two extreme zones is the zone of semi-feudal production characterized by partial integration into the external economy.

In the period prior to incorporation, the social formation was feudalistic. Settlements were simple, their rise and fall being dependent on the vicissitudes of local affairs and wars. Most of the people were self-sufficient with limited needs and wants. Trading links were generally underdeveloped until the coming of the Europeans. In this context migration was a response to natural calamities such as floods, drought and disease, or they were attempts to escape from enemies, pillage arising from wars, and forced labour (see Roff, 1967). Marriage, whether in exogenous or endogenous societies, remain an important reason for migration. The lack of a developed money economy and a certain level of surplus production beyond self-sufficiency meant that there was no wage labour mobility. Thus migration was not the product of major structural changes, which were non-existent in the local economy.

During the first phase of incorporation of the Malaysian economy, traditional migration of the type discussed in the feudal period continued in Malaya. What was new, and one which was to transform the composition of Malaysia's population, especially those of urban areas, is the influx of immigrants into the British controlled port cities and the hinterland. This process constituted the first of three "waves" of migration and urbanization in Malaysian development.

The period of integration was characterized by the further entrenchment of the Malayan economy into the world system. An integral part of this incorporation was the investment by the colonial government in roads, rail, port and other infrastructure to facilitate the expansion of British and immigrant capital. The territorial dominance of capital along with political arrangements with the Malay states which were brought under British control extended to bring into production new areas and new patterns of labour force formation.

Therefore, the structuring of migration during this major incorporation stage was the importation of immigrant labour which left the indigenous population within their own traditional economic world. On the whole they remained little affected by the dramatic changes around them and were still locked in the past patterns of mobility and migration. Except for a handful of elite Malays picked for exclusive education, to become the future bureaucrats of the expanding civil service, the vast majority remained in the rural areas (Roff, 1967). Another impact of incorporation during this period on migration was the increased value of land which led to conversion through sale of much traditional Malay land for mines and rubber plantations. A large proportion of the peasantry moved into rubber planting on a smallholder basis. Both these tendencies were officially discouraged. The colonial government wanted to retain Malays (Malay Reservation Act, 1911) so that food production for the rest of the population was ensured. The control of rubber smallholders for fear of their threat to the foreign-owned estate sector is clear from the rubber restriction schemes during the depression of the 1930s (Lim, 1967). Consequently, Malay migration into both the modern agricultural sector and urban areas was restricted by certain colonial policies.

Between 1930 and 1947, the Malayan economy, being heavily dependent on two commodities was severely afflicted by the Great Depression and the outbreak of World War II. Prior to this, the prices of tin and rubber had fluctuated according to world demand and crises. Malaya's over-specialization had its impact on internal processes such as migration. During these difficult years there was urban-rural migration when people were forced to seek refuge in rural areas.

A major development from this unstable period was that the seeds of Malay nationalism were sown (Roff, 1967). The re-establishment of British rule in the peninsula after the Japanese surrender was the period of significant political events, the abortive Malayan Union, the formation of the Malay nationalistic party UMNO (United Malay National Organization), the Federation of Malaya Agreement in 1948, the establishment of the ruling Alliance party (a coalition of Malay, Chinese, and Indian political parties), and the beginning of communist insurgency which was to last until 1960.

The post-war period of 1948-57 saw the consolidation of British control and the onset of an economic boom. Malaya got its Independence in 1957 which heralded a new phase of rural development, diversification of agriculture and import substitution. But on the whole it was still a neo-colonial economy persisting with all the main characteristics of underdevelopment of its colonial past.

These political events, except for the Emergency, did not really structure migration in a different way from that of the last phase. Immigration had stopped, a response of both the Malayan government and the sending countries of China and India. The Emergency resettled over 1.5 million persons or 10 per cent of the total population, mostly Chinese from rural areas into about 600 "new" villages along the more developed west coast of the peninsula (Kernial, 1964). This forced migration not only set the stage for future Chinese rural-urban migration (through incorporation of new villages into urban areas) and rural-urban commuting (owing to proximity) but further segregated the Malays, the vast majority of them being left in rural areas.

Towns, on the other hand, grew but instead of being of indigenous population, were mainly of immigrant stock. Compradore towns and port cities serving as collecting and distributing centres sprung up along the west coast in the tin and rubber belt (McGee, 1967). These enclaves catered mainly to the needs of the colonial and immigrant population leaving much of rural Malaya and Malays out of the process of urbanization. This led Lim Heng Kow (1978) to argue that the urban system of Malaya was really the product of the colonial-immigrant complex.

The urban areas displayed a particular type of urbanization. The main towns acted as port cities or towns which function as collection and distribution centres for the extraverted economy and as an articulated nexus to the metropolitan centres. Serving as compradore cities these outward-looking urban centres were completely lacking in industries except for a few light industries, such as food manufacturing for the home market. There were no major indigenous industries, and whatever nascent ones that existed prior to this period were stifled. Their potential development and growth had been obstructed by the particular nature of the economy's relationship to the core. As a consequence of the underdevelopment of local industries the surplus labour in urban areas (both as a result of declining mortality and rural-urban drift) were absorbed into an over-expanded tertiary sector. The tertiary sector grew in two ways. The first is through the emergence of the informal sector, the myriad jobs performed in urban areas which do not fall into the wage earning category. The second is through the expansion of the bureaucracy to serve the colonial government. In essence, this phase of incorporation demonstrates the characteristics of underdevelopment: a distorted economy whose sources of growth are

external due to its extraversion; limited linkages between its sectors and regions; and an economy which is highly dependent and therefore, open to the vagaries of international economic cycles.

During the post-colonial period, despite a change of government from the colonial to a national one, there is further integration of the national economy within the world system. The basic political and economic structures of the previous phase are preserved; for example, the further entrenchment of the plantation and mining sector. The economy is still lop-sided, dependent on the core, and consequently receiving the repercussions of the trade cycles experienced in the centre. The country's relationship to the outside economy is still mainly in terms of its former colonial master. In response to world market demand new agricultural crops are introduced in the commodity sector. The introduction of these new crops is seen as an attempt to diversify what is now recognized by the independent government as a dependent economy. Thus, while the expansion of the modern agricultural sector is aimed at reducing the reliance on a few export crops, the dependence of the economy as a whole is reinforced further. In addition, as a result of independence and the need to gain rural votes, the government undertakes a serious programme of rural development, mainly in the form of collective consumption such as roads, piped water, electricity, drains and other infrastructural facilities, as well as welfare projects such as schools, and health clinics.

By Independence in 1957 the Malayan economy was further integrated with the world economy. Except for some attempts to diversify agriculture and increase manufacturing within an over-specialized primary export base, Malaya displayed all the characteristics of a new colonial economy, being highly open and dependent on foreign capital and markets (Paauw and Fei, 1973). In Malaya's particular experience, its historical incorporation resulted in a multi-ethnic social structure with its attendant tensions and contradictions which began to find various political expressions in the state process. According to Kamal (1981a: 6):

> "The successful transition to a peripheral capitalist economy having been made at the point of formal political independence, the subsequent development of the social formation was determined by these inherited structures and the ability of the past colonial state to effect structural transformation within these historically defined structures."

Independent Malaya was forced to continue the colonial pattern of accumulation because of two reasons. This was the main source of foreign exchange available to the state to finance internal development and most of the productive assets were still owned by foreign interests.

With an independent government whose mandate derives from a rural base, rural development becomes a serious commitment. Initially, this development was in the form of physical outputs, that is, rural infrastructure such as roads, water, electricity, health and educational facilities. Later these were extended to restructure obstacles in agricultural development, such as extension services to farmers in the form of credit, technical assistance, rural education, and farmers associations and cooperatives. Finally, there were huge investments into land development schemes such as the Federal Land Development Authority (FELDA) and other state-level land alienation programmes to resettle landless and poor farmers, and provide them with modern agricultural means of production (Alladin, 1973, 1975). It was also an attempt to diversify agriculture from rubber to oil palm.

The other prong of the diversification policy was aimed at manufacturing. It was in this field that there was more dramatic change, intra-sectorally as well as inter-sectorally. But this was partly due to the statistical effect of a low initial base of production. It became clear that after the first burst of growth, industrial diversification slowed down owing to the limited domestic market and more importantly, the highly skewed income distribution (Kamal, 1981a: 8-9).

Within the urban areas, the system is also further entrenched. The cities continued their compradore services. However, for the first time, in line with agricultural diversification, there was an attempt to adopt import substitution policies as a means to initiate industrialization. Such activities only further increased the urban-rural disparities through a tendency toward urban bias in development. Unlike the industrialization experience of the core, compradore capital becomes industrial capital. However, genuine indigenous industrialization, except in light manufacturing, was thwarted. In concert with the internationalization of capital, the colonial agency houses were replaced by multinational companies which were resited in these countries specifically to exploit the cheap labour, to overcome tariff barriers and to take advantage of the new market. The urban population increased as a result of declining mortality, the effect of better medical facilities. Rural-urban migration contributed little to this growth. With the increase in urban population the informal sector increased in the urban areas. This was a testimony to the inability of industries to absorb these workers, a fact of underdevelopment. With independence the government sector expanded, partly to compensate for the limited absorption in the industrial sector, and partly to serve a rapidly growing bureaucracy and the increasing role of the state in development.

The unevenness, inequalities, poverty and rising expectations culminated in the 1969 communal riots which forced the government to take more radical steps to restructure

society and eradicate poverty under the NEP. This nationalist phase, from 1970 to the recession in the mid-1980s is exemplified by further attempts to industrialize, diversify agriculture and stepped-up development in rural areas. A new approach to development was taken, based on direct intervention of the state in the development process, particularly to restructure society through increasing the participation and ownership of wealth of the *Bumiputras* (indigenous people) in the modern economy. An export-oriented industrialization strategy was introduced through the development of Free Trade Zones (FTZs) to further integrate the Malaysian economy into the world system.

As a result of some of the more ambitious industrial strategies coupled with the 1985 recession, the economy faced serious external debt burdens and a six years' current account deficit. When recession occurred in 1985, brought about by the collapse of all commodity prices on top of the already burdensome external debt and government deficit, the government was forced to take austerity measures which included government job-freeze, privatization, and allowing the Malaysian Ringgit to depreciate, to promote economic recovery. At the same time, new incentives for foreign investment were introduced, essentially relaxing the strict restructuring requirements of the NEP. These structural adjustment measures contributed to a rapid economic recovery in the latter part of the 1980s.

It is in this whole complicated process of incorporation into the world economy, which is historically determined, that the Malaysian national development model is manifested. While some of the forces which determine a country's path of development can be historically generalized, such as colonialism, other forces are more specific to the experience of a particular country. These factors are the choices or decisions made within a particular country, the mix of its own circumstances, and of economic, political and social interactions at specific points in the country's history. It is within this structured context that migration in peripheral economies operate.

2.2.2 The Two-Circuit Hypothesis of Migration in Malaysia

It is the concern of this thesis to examine the effects of integration of peripheral societies in the 0world economy, which manifest in different patterns of national development, on their migration structures and processes. As has been suggested, the pattern of uneven development in Malaysia has produced a system of structured migration which is peculiar to the country. This structured pattern of migration and labour mobility is reflected in a two-circuit system which can be defined in terms of particular streams of migration movement as part of the system of flows.

Essentially, the two-circuit system was created by an explicit two-pronged colonial policy which had other important ramifications. On the one hand, the British created political stability and an ordered Western-style government to set the necessary preconditions for rapid economic and commercial development. On the other hand, the official policy was to maintain intact, as far as was compatible with other aims, the institutional structure of Malay authority and social organization, however irrelevant much of this had become to the economic and social life of the country (Roff, 1967: 12). Using the Residential System and disguised under the rubric of "advice", the colonial government ruled Malaya through the Malay aristocracy, a classical example of indirect rule.

The second policy which contributed to the foundation of the two-circuit system was the immigrant labour policy. To fulfil the colonial government's dual aims of commercial and subsistence agriculture, Chinese and Indians were imported to work in the tin mines and rubber estates. These immigrants served two functions. First, they provided a cheap and servile labour force[3] for capitalist development. Second, these immigrants were viewed by the British as a counterbalance for each other, a typical "divide and rule" policy. The mass migration of Indian labour, more than that of the Chinese was planned and directed by colonial authorities which established a centralized, government controlled system for mass recruitment of South Indian labour (see Stenson, 1980: 18-9). To consolidate the Malay population in the face of increasing numbers of immigrants of Chinese and Indian origin (by 1930, over half the country's population was foreign-born), the British encouraged Javanese and Sumatran immigrants whom they accepted as indigenous (see Jackson, 1961; Stenson, 1980: 30).

The third set of policies contributing to the development of the two-circuit system was the colonial policy of fostering two agricultural types, that of commercial plantation and subsistence food production. These practices further entrenched the two-circuit system. While encouraging large-scale plantation development through the provision of finance and infrastructure, the colonial government attempted to keep the indigenous population in traditional agriculture. But even as it encouraged food production among the Malay peasantry and market gardening among the Chinese, the British sought to prevent the involvement of the smallholders in commercial crop production. During the Depression, the Stevenson Restriction Scheme was introduced to cut production of the smallholder

[3] According to Stenson (1980: 15-6) Chinese workers were by no means cheap. "The Chinese had a long tradition of worker solidarity and society organizations, and because of their mobility and their capacity for independent pioneering, they were constantly bargaining for higher wages. European plantation agriculture required much cheaper and more docile labour." The Chinese were also politically volatile as evidenced by the secret society feuds and struggles over control of tin, trade, and labour. Thus it was to India that the British turned. The Indians were both docile and servile (Kernial, 1969: 57; Stenson, 1980: 17). See Jackson (1961) for the reasons for emigration of both Chinese and Indians, and Kernial (1969) for Indians specifically.

sector which grew in spite of colonial discouragement in order to protect the plantation sector. In addition to this was the Malay Reservation Enactment of 1913, and the food self-sufficiency policy enforced after World War I.

The fourth important colonial policy which entrenched the two-circuit system by retaining the overwhelming majority of Malays in the lower-circuit was that of education. The educational policies were consistent with indirect rule and pluralism. They aimed at nurturing a handful of Malay elite to preserve the *status quo*, and to recruit Malays into government service. For the other Malayans, education was communally-based. English education was limited to the few in urban areas. Thus the seeds of separatism were sown (Roff, 1967; Loh, 1975).[4]

During the period of incorporation and integration into the world economy, migration was structured in the following ways. First, the need for labour in a basically labour-deficit, or at least not densely populated, country to work in plantations and mines, forces the colonial government to import, as well as to encourage the immigration of cheap foreign workers from the labour-surplus countries of Asia, such as China and India. Therefore, unlike the experience of the core countries where urbanization developed mainly as a consequence of internal rural-urban migration in response to industrialization and the release of labour from the agricultural sector, in peripheral economies in the first phase of incorporation, urban areas grew as a result of international migration. In this sense, urban areas in Malaya, unlike nations where there is an indigenous form of urbanization, were made up of foreigners and the milieux were totally alien to the rest of the population. The indigenous people remained outside these colonial beachheads. The influx of foreign workers into the plantation and mining zones contrasted sharply with the rest of the rural populace. They were left in the subsistence zone, as well as the partially integrated interstices of semi-feudal production.

Second, in terms of internal migration, movement in the rural areas was confined to their particular zones. For example, there was little migration from the subsistence, traditional sector into the plantation and mining zones. The indigenous population continued in their age-old occupations associated with a subsistence economy. Mobility and migration was very much internal to this zone. While some people migrated to the smallholder sector, the migration pattern was locked into a predominantly rural-rural flow.

[4] Loh (1975) argued that the British attitude to education in Malaya was a reaction to British educational policy in India which had advocated English as a medium of instruction.

Third, within the distorted urban economy, movement tended to be an urban-to-urban flow, of people in services and some manufacturing in the later stages, moving between towns. Thus, what emerged was a particularly structured pattern of migration: international migrants moving to the urban and the export-oriented sectors in the rural areas; a major rural-rural stream of indigenous people within the subsistence and semi-feudal zones, isolated and separate from the rural-rural flow of migrants within the rural extraverted zones; and finally a small urban-urban flow of immigrants and Malay elites within the urban belt.

The migration patterns and processes of this national development experience incorporated some recent aspects structured by new forces of this period as well as the further entrenchment of some of the past patterns. Owing to the consolidation in the export zones and the rising nationalism in a newly independent nation, international migration was stopped. There was increased movement in the rural sector within the export commodity zones due to migration between plantations in the process of amalgamation and fragmentation of estates. Economic recessions in the world system also affected the flow of labour, as had happened to plantation and mine workers in British Malaya during the depressions. Further, in some land-surplus countries, the governments embarked on a programme of agricultural modernization involving varying degrees of public investment, from the high-cost FELDA (Federal Land Development Authority) schemes in Malaysia, to the less-expensive land schemes in Thailand and the Philippines, and the transmigration projects in Indonesia. Such migration streams involved the movement of population from the traditional subsistence and semi-feudal sector to the modern agricultural sector. Such development may be seen as an extension of private capital to state capital and the perpetuation of an extraverted and dependent economy. Within the traditional crop zone, there was another larger circuit of rural-rural migrants who moved primarily in search of land. Circularity, whether between the subsistence to the mining sector (as in South Africa), or to the plantation sector (as in West Africa), as well as temporary movements in terms of seasonal migration in rice cultivation (as in Malaysia or Java), or transhumance in North Africa, was also a feature of the structure of migration in peripheral economies.

During this period also, for the first time, rural-urban migration became important in the urbanization process. This stream was made up of two distinct groups. The first group consisted of young, educated, indigenous school-leavers (the product of increased education in rural areas after Independence) in search of non-agricultural modern sector type jobs, mostly white-collar. In some cases they were absorbed into the burgeoning

government sector, but most remained unemployed , searching for such jobs in the cities.[5] Some of these youths may filter into the informal sector. However, it was the other group, the landless poor who were forced to leave the rural areas in search of urban opportunities, who made up the bulk of the migrants forced to eke out a living in informal sector activities. Both of these processes, unprecedented growth of the government sector and hyper-tertiarization of the urban sector, were manifestations of the underdevelopment of peripheral economies at this stage of their incorporation into the world economy.

Within the expanding urban zones, there was urban-urban migration, more as a result of transfers of government employees and a response to service activities than movement to an expanding industrial sector. As more towns developed there was some urban-rural migration, which was basically suburbanization rather than a true urban to rural sectoral change.

The final important migration stream was that of the "brain drain" involving the emigration of the highly-educated who left the country in search of better opportunities in semi-peripheral or core countries.

What is very important in this scenario of uneven national development and integration to migration in a peripheral economy is the emergence of the three structures of: location (that is, rural or urban), ethnicity (rural tends to be indigenous, urban consists of immigrant stock, and therefore, their implications on the streams of migration) and sectoral change (the absorption of the rural-urban migrants into the urban economy). All three structures are closely inter-related with crucial political and economic overtones that are going to play a vital role during the third phase in the periodization of incorporation (or its counter process), that of nationalism.

The nature of the two-circuit system proposed in this thesis as a framework for understanding the structure of migration in Malaysia, in its broadest terms, represents an integration of economic organization, sectoral classification with urban-rural strata and occupational status. The first and third dimensions are recombined for simplicity into a formal and informal sector classification. From this integration we obtain the definition of the upper-circuit as comprising the urban and rural (plantation) sectors and the lower-circuit as consisting of the urban and rural informal sectors. The basic characteristics of the two-circuits, as derived from census categories, in locational, socio-demographic and economic terms are shown in Table 2.1.

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[5] See for example the African studies in Kenya and Tanganyika, where Todaro's (1969) thesis on migration and expected income was derived.

Table 2.1
Characteristics[1] of the Upper-Circuit and Lower-Circuit

	Upper-Circuit	Lower-Circuit
1.	Locational	
	a. Strata – urban	rural
	b. Conurbation – in conurbation	out of urban conurbation
	c. Migration flow – within and between the developed states of the West Coast	within and between the "lagging" states of the East Coast, Kedah and Perlis
2.	Socio-Demographic	
	a. Literacy – high literacy	low literacy
	b. Literate in more than one language	literate in one language
	c. Educational level – high	low educational level
	d. Tertiary education – more in university and greater diversification of tertiary education	less university-educated and less diversification in tertiary education
3.	Economic	
	a. Activity in year prior to the census – wage labour	self-employed
	b. Employment status in week prior to the census – employee	self-employed
	c. Usual industry – secondary, in services, commerce, manufacturing, transport	primary, in *padi*, rubber, other agriculture, fishing, logging
	d. Industry – secondary, in mining, manufacturing construction, transport and communication, and tertiary in commerce, and services	primary, in agriculture, forestry, fishing and hunting, and agricultural production
	e. Occupation – service, production, professional and technical, clerical, sales workers	agricultural workers
	f. Work at home – no	yes
	g. Help in the family business – no	yes

[1] Derived from census categories and classifications.

It is important to note that this concept is different from, though not unrelated to, Santos' (1976) model which distinguishes the two circuits in the urban economy and relates them to the two systems of industrialization/urbanization, namely, an extraverted form and an inverted form.

The two-circuit hypothesis of structured migration used in this thesis emphasizes the uneven rural-urban structure of the economy, where the extraversion or outward-linkage of the economy affect both the urban-industrial sector as well as the plantation and smallholder agricultural sector. The pattern of urbanization and rural-urban migration which contributes to it, thus, not only gives rise to the characteristic formal-informal dualism of the urban economy, but also the movement of population between urban informal and rural informal (non-corporate) sectors through circular migration and commuting. The particular patterns of movements, or flows, which are created in a given economy are a function of the nature of the economy and its relationships to the world economy. Within the structure of the two-circuit migration, we can identify the various flows, such as depicted in Figure 2.1. However, while theoretically all the flows shown are possible, only a limited number of them will be of any significance at a particular juncture of the economic development of a country in question.

The possible flows within the entire system and the effect of transformations in the economy can be classified into the two-circuits as follows:

I. Circuit-preserving

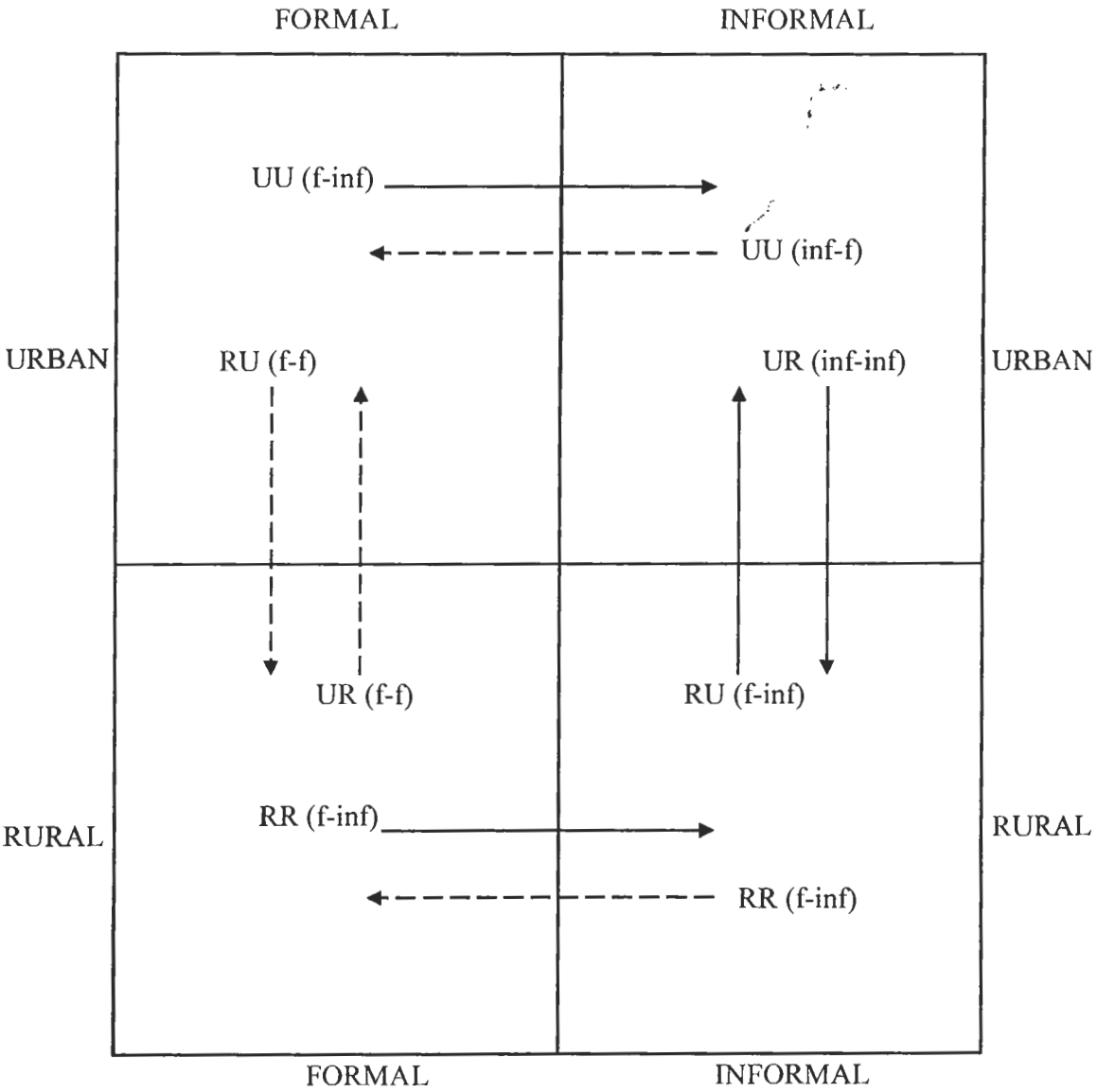
UU (formal-formal) UR (formal-formal) RU (formal-formal) RR (formal-formal)	Upper-Circuit
UU (informal-informal) UR (informal-informal) RU (informal-informal) RR (informal-informal)	Lower-Circuit

II. Circuit-dissolution

RU (informal-formal)
UR (informal-formal)
UU (informal-formal)
RR (informal-formal)
UR (formal-informal)
RU (formal-informal)
UU (formal-informal)
RR (formal-informal)

By circuit-preserving we mean those processes (structural changes or the lack of them, as a consequence of government policies and international forces) whose effects on migration

Figure 2.1
The Two-Circuits: Flows Between Location and Sector



Key

Entrenchment or preservation of circuit

Break of circuit

tend to maintain the two-circuits in their basic form, namely the migration streams involve the transfer of people between areas without a change in their sectoral position, that is in their incorporation into the formal or informal sector. On the other hand, circuit-dissolution involves migration streams which result in changes in their sectoral participation in terms of either shifts from the informal to the formal sector, or from the formal to the informal sector.

The above conceptualization of the two-circuits of migration appears to be merely taxonomic. But it is necessary to emphasize that the crucial dimensions are relational, and that these circuits represent relationships and linkages between labour mobility and the changing economic structures. In particular, within the two-circuit framework, the processes of preservation and dissolution of the two-circuits can be directly related to structural changes in the economy. These processes of conservation are tied up with the lack of possibilities for structural transformation of the national economy due to the international division of labour at this conjuncture which tends to perpetuate the pre-existing linkages within the world economy. This may reflect in inter-urban mobility, persistence of the urban informal sector, circular migration between rural and urban informal sectors as in volutionary processes, and the role of government in maintaining the present balance between rural and urban areas. However, processes of dissolution of the two-circuit structure include the particular industrialization policy of the government, the formal education system, penetration of capitalist forms of economic organization and the dissolution of traditional rural production systems (such as smallholders), and so on.

The transformation of migration structures in the Malaysian economy, as conceptualized within the two-circuit hypothesis will thus depend on the balance between these preservation and dissolution processes over time. This in turn will depend not only on the state and its various policies of intervention, and the forces of change on a world scale which will affect the functioning of the peripheral economy, but the interactions between these external and internal forces. This will be demonstrated in the following chapters which provide the background for the subsequent analysis in the dissertation. The above framework illustrates the basic model according to which the macro-level and micro-level analysis of migration streams and their characteristics, life-histories and family life-courses will be analyzed. The two-circuit model thus represents not so much an explanatory model but a means of organizing the analysis of migration in structural terms in the context of Malaysia's economic and social development.

2.3 URBANIZATION AND ENTRENCHMENT OF THE TWO-CIRCUITS OF MIGRATION

The development of the two-circuit system of migration as hypothesized in the above section may be analyzed in terms of its conservation and dissolution through the experience of urbanization during the pre-1970 years, and the rural development policies of the post-Independence years. The major historical trends in urbanization and the causes and role of migration are interpreted as "waves of urbanization", and are seen as periods of establishment and consolidation of the two-circuit system. It can be seen that even the urbanization rate in the immediate post-Independence years from 1957-70 was not sufficient to change the entrenched two-circuit system. This is reinforced by the success of rural development in its contribution to retention of the population in rural areas and therefore, the preservation of the two-circuits of migration.

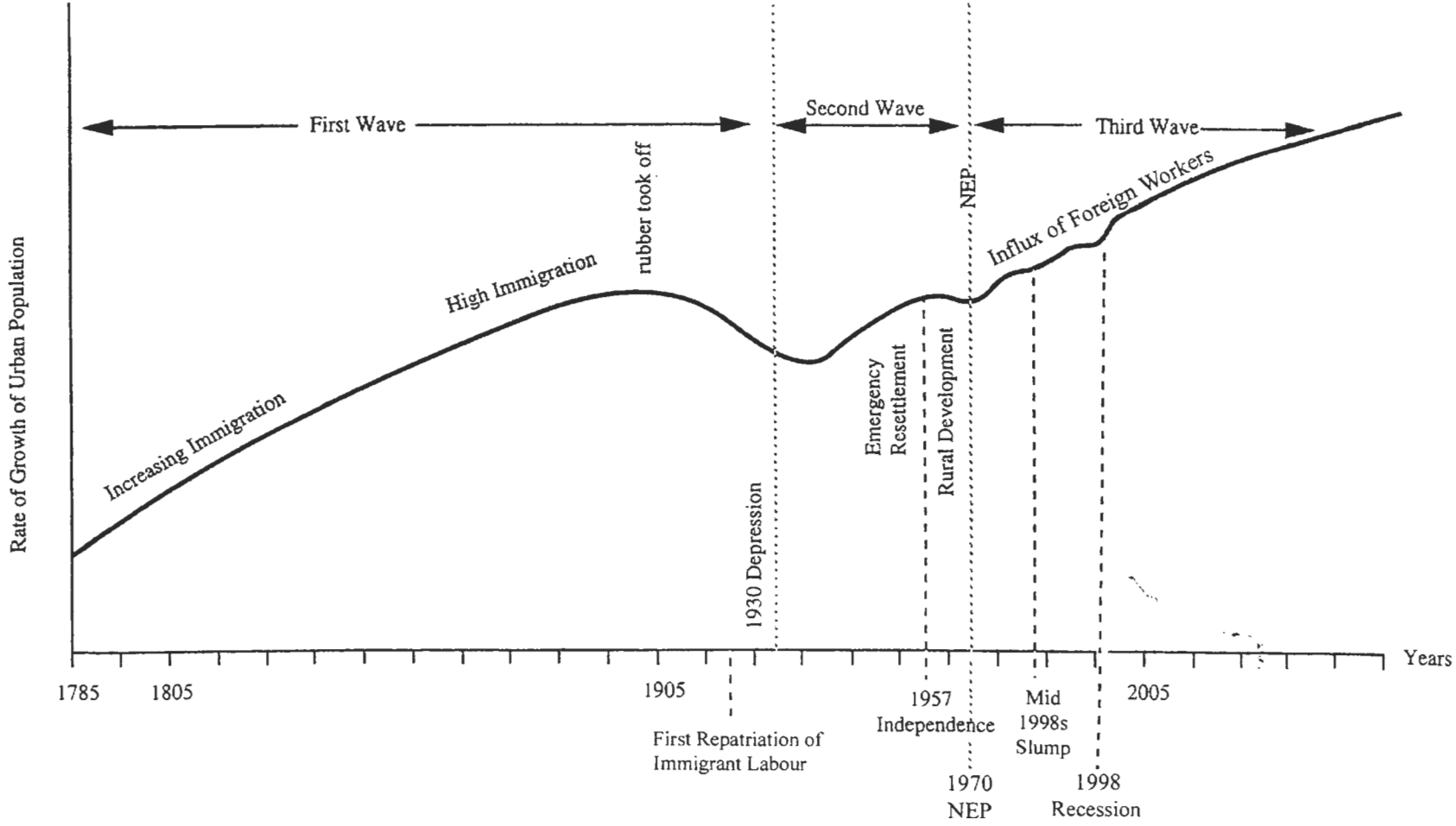
2.3.1 Waves of Migration and Urbanization

The urbanization experience of the Malaysian economy was determined by early colonial policies and practices, the way it became integrated into the world economy, and the particular mix of factors within the Malaysian society which has resulted in a specific type of political, economic and social development which in turn structured migration into three "waves" of urbanization (see Figure 2.2). Each of these waves changed the character of the urban situation as well as the urban-rural balance in the context of wider political, economic and social processes.

The first wave, between 1785 and 1930, in concert with the phases of incorporation discussed in the previous section, was epitomized by massive labour immigration. The second wave, from 1931 to 1970, but especially in the early 1950s, saw the crucial force, that of the Emergency Resettlement, accelerating and later, contributing to the further growth of towns. In the main, these two waves may be seen as the formation and entrenchment of the two-circuit system by establishing an urban system consisting mainly of immigrant peoples, further segregated and urbanized during the Emergency. Meanwhile, the bulk of the indigenous population was left in the rural areas, little affected by all these changes brought about by government policies. The delay in their rural-urban migration and eventual urbanization was again the product of government policy – that of large-scale rural development schemes carried out by the Independent government.

However, the third wave, triggered by the 1969 riots and galvanized by the radical aims of the NEP, beginning in the 1970s is the product of a deliberate policy to promote Malay

Figure 2.2
Stylised Diagram of Malaysian Waves of Urbanization and Migration



urbanization. This discussion will be dealt with in the next section, representing for the first time, the dissolution or breaking of the two-circuit system, and consequently, of the structured nature of migration in Malaysia.

The history of Malaysia's early urban growth was a direct product of the history of British colonialism in the Malay peninsula. The urban system which evolved was an imposition of an "alien" urban phenomenon upon the traditional settlement system (McGee, 1967, 1971; Lim Heng Kow, 1978). An interesting question is why the Malay peninsula did not have an indigenous urban system. Lim Heng Kow (1978) argued that in the experience of Kedah and Malacca, the failure of a city-state and a commercial empire, respectively, was due to the absence of extensive agricultural land and a large concentration of population. Therefore, it is the penetration of the Malay feudal economy by British capital in its search for raw materials in the hinterland, based mainly on the exploitation of immigrant labour that restructured the Malayan space-economy into the characteristic zones of production typical of the "dual" economies (see Boeke, 1953; Higgins, 1956). The contradiction between town and country in many aspects of urban-rural relations, which emerged as a result, is the basic structural dynamics of Malaysia's urbanization in its historical and contemporary forms.

2.3.2 First Wave of Urbanization, 1785-1930[6]

The history of urbanization in the first period of "modern" development of Malaysia saw the rise of the Straits Settlements, the first beachheads of British occupation of the Malay peninsula. Penang was formally ceded to the British in 1786, and Singapore was founded by Raffles in 1819. These two colonies in the Straits Settlements, the other being Malacca, grew rapidly – first Penang and then Singapore – up to the middle of the nineteenth century, gaining in importance as British influence and dominance over Southeast Asian trade with Europe increased. During the early nineteenth century prosperity and population grew in the Straits Settlements. However, the growth of population in these port cities was due mainly to immigrants who worked both in labouring and commercial urban activities as well as in farming in the surrounding hinterland (Jackson, 1961: 7). Penang's population grew from 5,875 in 1795 to 10,310 in 1801, and continued to expand until 1832, when the capital of the Straits Settlements was shifted from Penang to Singapore (Table 2.2). The expansion of Singapore, however, was most rapid from the 1830s which saw an acceleration of its entrepot trade and as a major port of entry for immigrant labour.

[6] Parts of this section has been published as a joint paper with Kamal Salih in 1981 as "Malaysia: urbanization in a multi-ethnic society – case of Peninsular Malaysia".

Malacca, on the other hand, did continue to grow, although not quite as spectacularly as the other two settlements.

It was tin mining rather than commercial trade which was responsible for the early growth of Penang and Singapore. The early mining settlements in the Malay States grew and began to thrive as a result of immigration from China. The increasing prosperity of the Malay chiefs, however, led to conflict which spread among the Chinese immigrant communities. This was the excuse for Britain to intervene in the increasingly lucrative tin market, and in 1874 the formal agreement which marked the beginning of colonial penetration into the interior Malay states, the Treaty of Pangkor, was signed. From then on the evolution of the economy and settlement in the Malay peninsula took on a more frenetic character.

Table 2.2
Population and Trade in Penang and Singapore, 1812-60

	Penang Island		Singapore	
Year	Population[a]	Trade	Population[b]	Trade
1812	14,671	-	-	-
1819	-	-	150	-
1820	17,131	-	-	-
1823	-	-	8,653	-
1825	-	1.1	-	2.6
1830	17,821	0.7	-	3.9
1833	-	-	26,625	-
1840	18,396	1.4	30,387	5.8
1850	-	-	43,478	-
1860	-	-	73,902	-

Source: Jackson, 1961: 12, 21.
Note: [a] Immigrants only; the indigenous population was, however, very small; the rest were garrison soldiers.
[b] Total population.

The spectacular growth in tin production, one of the two mainstays of the colonial and post-colonial economy for the next hundred years or so up to the 1860s, led directly to the growth of urban settlements along the western half of the peninsula where most of the tin mines were found (McGee, 1964; Hamzah, 1965). The increase in tin production based on immigrant labour and under the aegis of British capital, saw by 1903 over 223,600 Chinese labourers in the industry (Jackson, 1961: 87). Between 1880-90 nearly 1.3 million Chinese immigrants arrived (Table 2.3).

Table 2.3
Peninsular Malaya: Chinese and Indian Labour Immigration
(Including Singapore), 1786-1930

Period	Chinese Immigrant Labour	Indian Immigration Labour (Net Immigration)
Up to 1880	178,289[a]	64,459[c]
1880-1890	1,290,071[b]	53,527[d]
1890-1909	no data	277,373
1910-1929	no data	754,785

Source: Adapted from Jackson, 1961: 75-6; Kernial, 1969: 314-7. Economic report 1979/80-85/86.

Notes: [a, b] Based on arrivals at Penang and Singapore only; does not exclude repatriated/emigrating labour, and those who subsequently worked elsewhere other than Malaya.
[c] Up to 1879 only.
[d] Up to 1889 only.

A second and more large-scale sphere of production also emerged at the turn of the century, when large tracts of land were leased at very low rates to British-owned plantation interests for rubber-growing in response to the increasing world industrial demand for the raw material. Prior to this, until 1890, commercial agriculture was still devoted to sugar, tapioca, gambier and pepper. The development of rubber as a plantation crop led to an increase in the import of indentured Indian labour (Kernial, 1969; Stenson, 1977), which already was trickling in before 1890, as well as of Chinese labour which previously had been confined mainly to the tin-mining industry. The peak of Indian labour immigration was between 1910-29 (Table 2.3). The impact of these migration waves were shown in the 1921 and 1931 censuses where foreigners constituted 46.0 per cent and 50.8 per cent of the total population, respectively (Table 2.4). Thus, the great influx of the immigrant population in the period between the 1870s and 1920s was brought about by colonial labour policies which formed the basis of urban settlement development and the two-circuit system in the country.

The period from 1785 to 1930, but especially from the 1870s to 1920s, can be considered as the first wave of Malaysia's urbanization, based mainly on immigrant labour working in tin mines and rubber plantations under the sponsorship of British capital. This urbanization was based wholly on immigration from other countries. The development of colonial cities and ports which served as collection, distribution and commercial centres for the new export-oriented colonial economy became a typical pattern of urbanization in colonized nations (McGee, 1967; 1971). They functioned as compradore cities linking the

Table 2.4
Population Size and Ethnic Composition, 1921-39

Year	Territory	Indigenous[a]	Chinese	Others[b]	Total (in thousands)
1921	Malaya	54.0	29.4	16.6	2,906
	Singapore	12.9	75.2	11.9	420
	Sabah	77.1	17.0	5.9	263
	Sarawak		No adequate information		
1931	Malaya	49.2	33.9	16.9	3,787
	Singapore	11.8	74.9	13.3	559
	Sabah	75.0	16.0	9.0	277
1939	Sarawak	73.7	25.2	1.1	491
	Malaysia	48.8	36.7	14.5	5,114

Source: McGee, 1964.
Note: [a] Indigenous include both Malays and those classified as indigenous by the Borneo Territories Census.
[b] Others include all other races not classified as Indigenous or Chinese.

coloniser and the colonized, and further integrating Malaysia into the world economy (McGee and Armstrong, 1968).

They were enclaves because they served the needs of the colonists and the immigrants and therefore, were socially, culturally and economically alien to the rest of the country which was fast being structured into a dual economy and a plural society (Furnivall, 1956). At this stage these urban areas expanded owing to the colonial economy, and grew from the arrival of immigrants rather than internal rural-urban migrants (Cooper, 1951; Caldwell, 1962).

The major urban feature of this period was the concentration of urban centres along the tin-mining and rubber belt of the west coast, a legacy of uneven development in Independent Malaya. In 1911 there were eight urban centres[7], with as many as six being in the west coast. By 1921 there were 14 urban centres, 12 were in the west coast. This trend was to continue until 1931, where of the total of 16 urban areas, 14 were in the west coast. However, at the time when immigrants constituted the majority in the country's total population, there also occurred substantial development of smaller urban areas. Thus, in 1931 there were 65 towns with a population of 2,000 or more. The level of living in gazetted administration areas of more than 1,000 increased from 22.7 per cent in 1911 to 27.7 per cent in 1921 and 29.5 per cent n 1931. Such figures point to an incongruous

[7] Urban is defined as a settlement with over 10,000 persons.

feature of an exceptionally high urban population for an agricultural country (Cooper, 1951). This abnormal pattern of urbanization in fact reflected the unevenness of Malayan development characterized by its great dependence on export commodities like rubber.

The causes for urbanization may be attributed to the consolidation of British interests, further immigration (at least until the 1920s) and the decrease in death rates as a result of improved health facilities (McGee, 1964).

2.3.3 Second Wave of Urbanization, 1931-70

Unlike the first wave, where except for expanding mercantilist capital in Europe which hastened capitalist penetration in Malaya, the second wave presents a picture of fluctuating pattern of urbanization determined by the rhythm of the world economic system as well as by the internal structural adjustments which were engendered by the particular articulation of Malaysia's political economy.

This period began with a greatly reduced demand for Malaysia's staple products, tin and rubber. The 1930-32 Great Slump in the core was sorely felt by Malaya. Rubber prices crashed. Restrictions were imposed on rubber production, especially on the smallholders. British estate interests also began to repatriate immigrant labour. Between 1930 and 1939 some 211,000 Indians were repatriated. An even larger number of Chinese returned to China (Caldwell, 1962: 100-3; Lim, 1967: 187; Stenson, 1980: 20). Such reverse flows also occurred internally. For example, during the period of the first wave of migration, the depression of 1918 induced by World War I forced Chinese and Indians to leave moribund mines and declining rubber estates to work as own account farmers. The 1930s depression caused many urban dwellers to migrate to rural areas. Similarly, the hardships such as food shortages in urban areas during the Japanese Occupation forced as many as 400,000 persons to seek refuge in rural areas. These migrations were to have an important implication after the war. Most of these urban-rural migrants were Chinese who became rural squatters along jungle fringes because they could not purchase land due to the Malay Land Reservation Enactments. They constituted most of the people who were resettled during the post-war years of the Emergency, the main component of the second wave of migration and urbanization.

The Malays, except for the peasant rubber smallholders, on the whole, remained undisturbed throughout this period. Because they were not predominantly wage-earners in the tin and rubber industries like the Chinese and Indians, they were largely unaffected by the Depression. As *padi* farmers they had access to food and land. Moreover, the Japanese

treated them with benevolence, unlike the Malayan Chinese because the Japanese were waging a war with China in Manchuria.

The second wave of urbanization took place after World War II, mainly in the form of the Emergency Resettlement, involving the forced resettlement of over 1.2 million people, mostly Chinese, as part of the counter insurgency strategy against the communists after the war. As much as 10 per cent of the population was shifted into about 600 "new villages"[8] between 1950-52, an attempt to deny help to the communist by the local population.

There was a real fear that these squatters were a seedbed for communism. Besides, the colonial government could not afford to allow Malaya to become communist as it was the colony in which there had been the heaviest investment by Britain and certainly a major source of income (Kernial, 1964: 159). Thus these villages were set up at great speed, many were *ad hoc*.

The impact of the Resettlement Scheme[9] had far-reaching impact on the two-circuit system. First, it further urbanized the Chinese, and to a lesser extent, the Indians, who were already at that time, more urban than the Malays. The Chinese urban population increased 110 per cent between 1947 and 1957, from 26.5 per cent to 42.5 per cent.[10] The previous intercensal Chinese urban rate of increase was only 55 per cent (Kernial, 1964: 177). Caldwell (1963: 40) estimated that the Chinese rural population involving 455,000 persons fell by 42 per cent by the end of the Emergency.

The second effect, closely related to Chinese urbanization, was that far more Chinese than Malays were put into new villages. They comprised 86 per cent of new villagers in contrast to 9 per cent recorded by Malays (Kernial, 1964: 164-5). By 1957, four-fifths of new villages were Chinese consisting of more than 708,000 persons.

Third, because government policy held that Malay landowners should not be separated from their land, Malay resettlement tended to be smaller (average of 337 persons). This had implications on urbanization later as the larger new villages, mostly Chinese were

[8] The term "new villages" is a misnomer for these villages could be entirely new villages or be built around existing villages or they could be appendages to large towns (Kernial, 1964: 170).

[9] Resettlement involved two processes. Relocation was the transfer on dispersed rural settlers to prepared fortified sites (the villages were fenced-in and all movements in and out were checked), frequently some distance from their homes. Regroupment entailed the transfer of dispersed mines and estate labourers, their families and dwellings to some fortified point of concentration on the property of the employer, or close to it (Kernial, 1964: 163-4).

[10] Urban is defined as settlement with over 1,000 persons.

absorbed into towns and therefore, became urban. As many as 70 new villages had a population of over 2,000 and 15 villages had a population of over 5,000 (Kernial, 1964).

Fourth, the already uneven economic and settlement pattern of Malaya was further reinforced. It was the policy to resettle in the zone of greatest economic activity, that is, around principal urban areas. Thus, 68 per cent of these schemes were in the four states of Perak, Johor, Selangor and Negeri Sembilan, half in Perak and Johor alone. As a result, Chinese and Indians were further retained in the west coast. Fifty-six per cent of new villages were located in the urban periphery and 37.5 per cent established 15 miles from centres, which by 1957 had populations in excess of 10,000. Consequently, there was greater urban proximity for new villagers. It even led to the amalgamation of some new villages with existing urban centres. Moreover, policy deemed that resettlement should be close to transport links. Thus 71 per cent were on secondary paved roads and 12 per cent had road and rail connections. Consequently, there was easy accessibility to urban opportunities for new villagers.

Fifth, the government tended to reinforce the plural society. About 517 villages out of a total of 583 had only one race. Of these, 63 per cent were all Chinese and 22 per cent all Malay. Only 35 new villages could be considered multi-racial in their composition (cited by Humphreys, 1971: 226).

Sixth, resettlement caused important occupational changes among the villagers. There is general agreement by all researchers on new villages that the limited viability (due to the hurriedness of their implementation and artificiality) of most of these villages are causing circular mobility and outmigration (see ones, 1965; Humphreys, 1971; Khoo and Voon, 1974; Nyce, 1973; Pryor, 1979: Ch.7).[11]

Macro-level data also suggest outmigration. Between 1952 and 1957, 41.0 per cent of new villages remained static or declined in population. Over the 1950-57 period, 35 new villages were closed (Humphreys, 1971: 254). There are strong suggestions that these settlements have become stepping stones for urban-oriented migrants (Hamzah, 1962; Caldwell, 1963: 49; Ooi, 1975; Pryor, 1973). Another viewpoint by Saw (1972), deduced from the relatively slower rate of growth in larger urban centres between 1957 and 1970, is

[11] For example, Humphreys (1971: 238) found in his sample of new villagers that most Chinese and Indians were engaged in primary occupations (tin and rubber) because there was little opportunity to secure other employment. Many had become circular migrants and commuters. Nearly 8 per cent of household heads were working outside their villages at the time of the survey. Of those who had jobs prior to resettlement, 38.6 per cent had changed occupations. Ten per cent of these had secured urban work. And most important, of those who newly entered the labour force, 44.5 per cent were in non-primary occupations, a departure from the occupational structure of their parents.

that new villagers had returned to their former residence. The reasons were they had problems getting land titles and there were too few economic opportunities for them in the new villages. Swift (1965), however, found no evidence of Chinese returning to the Malay *kampungs* where they lived before the Emergency.

It is argued here that the conflicting evidence is due to the different types of new villages studied. The extent of return migration, outmigration to urban centres, commuting and circular migration depends on the economic viability and the location of the individual new village concerned. However, new villages continued to supply urban inmigrants and provide opportunities for Chinese and Indians to enter modern sector occupations and urban jobs in general. The turmoil of the Emergency mainly affected non-Malays. Again, the Malays remained relatively undisturbed, isolated in their agricultural subsistence pursuits, away from the mainstream of economic life.

In terms of urbanization, between 1947 and 1957 the number of urban centres continued to grow from 20 to 36. There was a consolidation of the past trend, that of increasing concentration of population and urbanization in the west coast. Out of 20 urban centres in 1947, 18 were in the western states. By 1957, of the 36 urban centres, 29 were in the west coast. Between 1947 and 1957 the west coast population increased by 30 per cent while that of the east coast, 20 per cent. All the states registered population increases except the Malay-dominated states of Perlis, Pahang and Kelantan.

For the first time there was evidence that the growth of urban centres was due to internal rural-urban migration. It had been estimated by Caldwell (1962, 1963) that 62 per cent of the total increase in urban population[12] was a result of rural-urban migration. And of these migrants about 25 per cent were Malay. What is interesting in relation to the two-circuit system is that there are now instances which suggest a dissolution of the two-circuits. The migration of Malays were due to a number of inter-related reasons, such as young rural Malays who have had the benefits of education in the villages seeking better job opportunities in towns as well as Malays who migrated for further education and better facilities offered in the urban areas (Hamzah, 1965; 1966; McGee, 1969). At this stage the government bureaucracy was starting to expand and jobs were created, especially in protective services (army, police and other uniformed personnel) which absorbed rural Malays. There was also an atmosphere of growing political awareness and consciousness with impending Independence in 1957. However, this migration may only be described as a drift to towns, the major movement was to occur after Independence with the coming of age of a cohort of young Malays, the product of the post-war baby boom, declining

[12] Urban is defined here as over 1,000 persons.

mortality and youths having had the benefits of rural education initiated by the Independent government.

Another feature which emerged during this period was that of conurbations. Kuala Lumpur, as the national capital doubled its size between 1947 and 1957 and superseded George Town as the largest city in Malaya. The conurbations of Kuala Lumpur, George Town and Ipoh constitute 38 per cent of the total urban population or 11 per cent of the country's total population (Ooi, 1975: 45). This pattern was caused by the expanding settlements (as a consequence of declining mortality and therefore, higher child survivorship in urban areas), rural-urban migration and the merging of some new villages into expanding towns. The growth of Kuala Lumpur may be attributed to its capital status and its being the centre of government, economic and commercial activities, as well as higher educational institutions.

The final point to highlight during this pre-Independence period is that larger towns displayed a relatively slower rate of average growth, of about 37 per cent for centres of 26,000-50,000 between 1947 and 1957. This may be explained by the larger base population, a statistical factor, and the changing functions of towns including greater diversification of activities. However, smaller towns of about 10,000-25,000 grew at a far higher rate of about 84 per cent, which suggests substantial rural-urban migration to small towns as well as the spread effects to smaller settlements. And, as a result of the Emergency Resettlement, there was an increased number of towns within the 2,000-10,000 range (Hamzah, 1962).

2.3.4 The 1957-70 Period: Slow Urbanization

The next important period in the analysis of urbanization with vital ramifications for the preservation of the two-circuit system was the 1957-70 period, that is immediately after Independence. This period was important in the context of the two-circuit system for two reasons. First, the success of the rural development programmes meant that it retained potential rural-urban migrants from flooding into the cities. Consequently, urbanization slackened. Medium-sized towns grew at a higher rate than metropolitan cities or large towns. And, for the first time, related to regional development schemes including those of the FELDA, several towns in the underdeveloped east coast states recorded some of the highest urban growth rates. Finally, the Malay proportion in cities grew but at a lower rate than anticipated.

Second, this period deserves special consideration because it led to a watershed in Malaysian development: the 1969 riots which initiated the radical New Economic Policy

(NEP). The culmination in the riots may be attributed to an inability to deal effectively with serious problems of uneven development within the country, some, the legacy of colonialism and others, a perpetuation of the neo-colonial model of development. In other words, not enough steps were taken to bridge the gap between the rich and the poor, the rural and the urban, the developed and the lagging states, structures bearing strong relationships with ethnicity. The NEP may be interpreted as the starting point of a new era which radically attempts to break the two-circuit system which had become increasingly entrenched during the post-colonial era.

The 1957-70 period may be described as a lull period in terms of increasing urban growth. But it was certainly a period which saw a number of trends new to Malaysia's past urbanization experience, reflecting of the socio-economic and political changes occurring in the nation.

First, there is a clear slowing down of urbanization. To get an idea of the relative change in urban to total population through time, Table 2.5 shows the proportion of urban[13] population between 1911-70. While it was not expected that the increase in urban population would be as high as 10.6 percentage points (as between 1947-57), the increase of 2.3 percentage points recorded for 1957-70 is remarkably low. Further examination of this low urban growth suggests it may even be exaggerated. Hirschman (1976) showed

Table 2.5
Peninsular Malaysia: Percentage of Urban to Total Population, 1911-70

	Total Population (in thousands)	Urban Population (in thousands)	Per Cent Urban to Total Population	Change
1911	2339.1	250.3	10.7	3.3
1921	2906.7	406.9	14.0	1.1
1931	3787.8	572.0	15.1	0.8
1947	4908.1	929.9	15.9	10.6
1957	6278.8	1666.3	26.5	10.6
1970	8780.7	2525.0	28.8	2.3

Source: Nathan, 1922; Vlieland, 1932; Del Tufo, 1949; Fell, 1960; Chander, 1977.

[13] Until 1970, the official definition of urban was settlements with over 1,000 inhabitants. Many researchers have felt that this is too low a threshold. According to Jackson (1961) many settlements of 1,000 are essentially rural in character. It would include new villages which are merely a cluster of *ad hoc* squatters (Ooi, 1975: 1). Most settlements of this size are still engaged in agricultural pursuits (Jones, 1965). Therefore, a cut-off point of 10,000 as employed by the Department of Statistics in 1970 is more realistic as these towns are likely to display the administrative, commercial, industrial and cultural activities associated with distinctly urban functions.

that much of this urban growth was due to the inclusion of new towns as well as the crossing of size categories during the intercensal years. A large proportion of the urban growth was a result of the reclassification of 13 settlements which crossed the urban threshold between 1957-70 (Pryor, 1973: 55; Ooi, 1975: 45). Hawley (1971) concluded that most towns in Malaysia grew from natural increase rather than inmigration during this period.

The low urbanization is partly due to the technical problem of under-bounding, where over 400,000 persons or 15 per cent of the total urban population in Peninsular Malaysia resided outside the 10 gazetted capital cities, but within their conurbations.[14] This fact was well illustrated in Hirschman's (1976) calculations which showed that metropolitan rural areas increased their proportion from 3.7 per cent in 1957 to 8.5 per cent in 1970, an average annual growth rate of 5.7 per cent, the highest of all urban categories. An analysis of the population of the 10 capital cities in the gazetted and conurbation areas shows that some cities in Peninsular Malaysia are clearly under-bounded. Kuala Lumpur has only 63.9 per cent of its population living in the gazetted area. Kota Bahru and Kuala Terengganu have an overspill of about 25 per cent. Ipoh, which increased its boundaries by absorbing two urban centres in 1970, is one of the least under-bounded. A comparison of the average annual percentage increase of both gazetted and conurbation areas made by Pryor (1973), showed that the average annual increase is higher in all places for the conurbation than for the gazetted areas. The second reason for the low urbanization rate is also related to a technical point. It is a statistical fact that as the proportion in urban areas increases, the urban growth rate generally decreases owing to the larger base population.

There is also evidence of low rural-urban migration. Hirschman's (1976) comparisons of the population in different-sized categories of settlements showed that between 1957-70, the rural share of the population remained unchanged. There is further evidence of low rural-urban migration from various studies.

Pryor's (1972a: 629) mobility survey of Selangor in 1970 found that most migrants moved less than about eight kilometers; they were drawn mainly from Kuala Lumpur's urban and peri-urban areas. Suresh (1975: 113) arrived at similar conclusions. He found that more than half of the migrants to the Kuala Lumpur metropolitan area were from Selangor; most moved short distances and 41 per cent were from within the Kuala Lumpur-Klang districts. Examining national flows, he found that two-thirds of migrants to the Kuala Lumpur metropolitan area originated from urban districts. Only 16 per cent came from rural

[14] The capital of Perlis, Kangar, had a population of 8,700 in 1970, below the urban threshold. Thus, the state of Perlis has no urban centre.

districts. These studies concentrated in the Kuala Lumpur region. However, on a national level, based on the 1970 census data, this thesis found that for migrants who moved between 1965-70, the rural-urban stream was the smallest (see Chapter 3), reinforcing the findings of low rural-urban migration in the country.

The low rural-urban migration may partly be attributed to leakages which occur when rural migrants leave to work in East Malaysia, Singapore and, more recently, Saudi Arabia. Chander (1977) estimated a net outmigration of 22,000 persons to Sabah and Sarawak between 1957-70. The government maintains a large army in Sabah and Sarawak where most of the men are from the peninsula. Other Malaysians are attracted by the opportunities and high wages offered in East Malaysia. Malaysians make up the largest group of foreigners in Singapore. As many as 187,192 were enumerated in the 1970 Singapore census.[15] The earlier waves of migrants to Singapore were highly qualified personnel looking for better opportunities outside a less developed Malaysia. In contrast, a high percentage of recent migrants were unskilled or semi-skilled to fill up the vacuum created by Singaporeans who have become more expensive and selective about their choice of work. Khoo and Voon (1974) found Chinese migrating from Sungei Ruan new village in Pahang to work in Singapore. Similarly Malay rural outmigrants from Kelantan have gravitated to Singapore (Maude, 1979). A similar pattern was found in the case study research area in Kedah (see Chapter 4).[16] The attractions to work in Saudi Arabia for rural Malay men are the high wages, especially with the oil boom, familiarity with another Muslim society and an opportunity to perform the *haj*. Finally, there is quite a sizeable proportion of Malaysian students studying overseas and those on government scholarships are mostly Malays, many from rural areas.

Lastly, rural-urban migration has been slowed down by an increase in commuting (daily or weekly). As yet unresearched nationally, commuting will be of growing importance, particularly with more efficient and cheaper transport facilities. For example, workers commute from Seremban to Kuala Lumpur (about 40 kilometers) and for the Penang FTZ factories, girls are picked up by bus daily from a radius of over 40 kilometers. Isolated village-level studies, especially in new villages, have alluded to commuting (Jones, 1965; Humphreys, 1971). The commuting field is wider in the larger conurbations of Kuala Lumpur-Klang, George Town-Butterworth and the Ipoh region. This important aspect of

[15] Of this total, 59.1 per cent were Chinese and 32.1 per cent were Malay. Fifty-four per cent arrived in Singapore between 1956-70 (Arumainathan, 1973: 78-80). Over 90,000 Malaysians hold working permits (earning less than S$750 per month). The more skilled personnel earning S$750 and over per month and their families are excluded from this group.

[16] Moreover, following the construction boom in Malaysia, especially in the Kuala Lumpur region and the oil-induced development of Terengganu, there is evidence of return migration of Malaysian construction workers from Singapore in the late 1970s and early 1980s.

mobility which circumvents the usual migration calculations will be examined in greater depth in this dissertation's case study of Simpang Empat (see Chapter 4).

The second feature of the 1957-70 urbanization pattern, important to the two-circuit system, is the change from the 1947-57 trends of town growth. Table 2.6 shows the average annual growth of gazetted areas between 1957-70. In all categories, except those of 10,000-74,999, the average growth rate has been lower than the national average of 2.61 per cent. In contrast to the 1947-57 urban growth trends, medium-sized cities rather than those above 75,000 recorded the highest growth rate of 1.31 per cent unlike the pattern of proliferation of new villages during the Emergency period.

Table 2.6
Peninsular Malaysia: Growth of Gazetted Areas between 1957-70

Size of Category of Gazetted Areas	Population Change 1957-70 (in thousands)	Average Annual Growth Rate	
> 75,000	264	2.15	
25,000 - 74,000	238	2.72	
10,000 - 24,999	163	3.06	
5,000 - 9,999	82	1.88	
2,000 - 4,999	97	1.69	1.31
1,000 - 1,999	12	0.36	
Metropolitan Rural Areas[a]	258	5.74	
Non-Metropolitan Rural Areas	1,418	2.68	
Total Peninsular Malaysia	2,532	2.61	

Source: Adapted from Hirschman (1976: 456-7).
Note: [a] Population in an administrative district with a metropolitan city.

The third characteristic of the 1957-70 urbanization pattern is the increased urbanization in the east coast. For the first time, the trend of urban consolidation in the west coast was disrupted. Of the 49 urban centres in 1970, 14 were in the east (in 1957, of the 36 urban centres, seven were in the east). The other interesting observation is that these towns recorded among the highest growth rates of over 4 per cent (see Table 2.7).

This new trend of urban dispersal may best be seen historically at a state level. Figure 2.3 shows the proportion of urban to total population by state between 1911-70. The most urban states were Penang, Selangor, Perak and Johor, all on the west coast.

The predominantly Malay and poorest states of Kelantan, Kedah and Perlis (no defined urban centre in 1970) were the least urbanized. The exception was Terengganu which rose

Table 2.7
Peninsular Malaysia: Growth of Thirty Largest Gazetted Towns in 1970, 1957-70

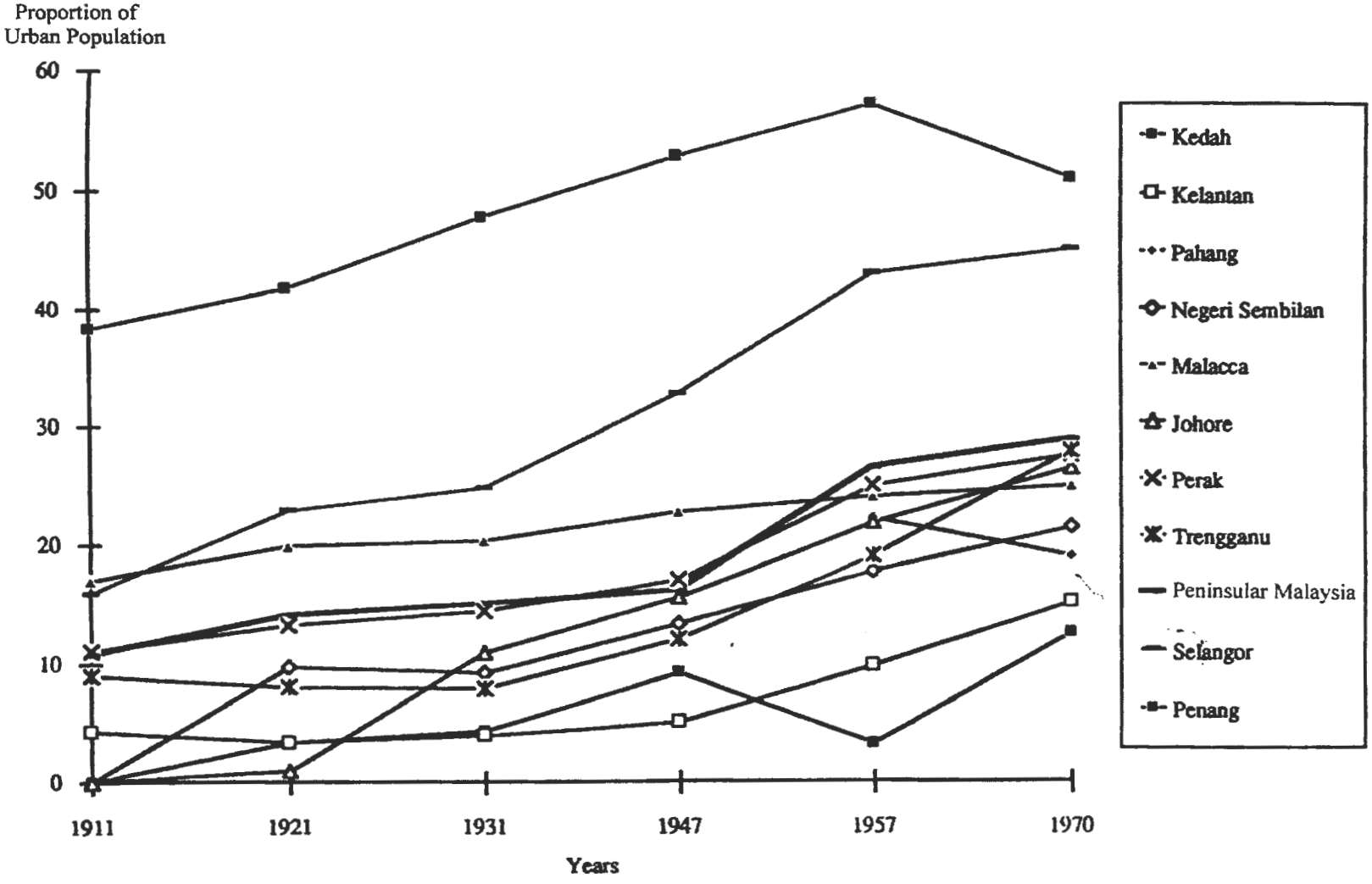
1970 Size Order of Town		Population (in thousands) 1957	1970	Average Annual Growth Rate
1.	Kuala Lumpur	327	452	2.49
2.	George Town	235	269	1.05
3.	Ipoh	181	248	2.41
4.	Johor Bahru	75	136	4.60
5.	Klang	76	136	4.60
6.	Petaling Jaya	17	93	13.30
7.	Malacca	70	87	1.70
8.	Seremban	57	81	2.71
9.	Alor Setar	53	66	1.73
10.	Butterworth	43	61	2.80
11.	Muar	39	61	3.46
12.	Kota Bahru	38	55	2.84
13.	Taiping	48	55	0.96
14.	Kuala Terengganu	29	53	4.57
15.	Batu Pahat	39	53	2.34
16.	Telok Anson	37	45	1.42
17.	Kuantan	23	43	4.87
18.	Kluang	31	43	2.52
19.	Sg. Petani	23	36	3.47
20.	Jinjang	17	27	3.80
21.	Bukit Mertajam	25	27	0.59
22.	Kampar	25	27	0.60
23.	Ayer Hitam	22	26	1.05
24.	Bentong	19	23	1.43
25.	Kajang	15	22	3.00
26.	Sg. Siput	16	22	2.52
27.	Kulim	18	19	0.38
28.	Dungun	13	18	2.60
29.	Raub	15	18	1.40
30.	Segamat	18	18	-0.28

Source: Adapted from Hirschman, 1976: 456-7.

dramatically to be third most urbanized state in 1970. This was due to the inclusion of five large villages into Kuala Terengganu. Penang and Malacca have had high urban proportions owing to their Straits Settlements history. Most of the other states increased their urban proportions significantly between 1947-57 as a result of the Emergency. The exceptions were Penang, Malacca and Kedah which had comparatively few new villages.

In the most recent intercensal period, Kelantan and Terengganu recorded sharp increases in urban population. The decline in Pahang may be attributed to outmigration of residents from Raub, Temerloh and Bentong to larger urban centres in Selangor or into rural land development schemes (see Saw, 1972: 115-6). Penang and Kedah registered a decline in their urban proportion due to stagnating economic conditions. Selangor and

Figure 2.3
Peninsular Malaysia: Proportion of Urban to Total Population by State, 1911-70



Source: Nathan, 1922; Vlieland, 1932; Del Tufo, 1949; Fell, 1960; Chander, 1977

Perak displayed gradual increases in contrast to the sharper increases noted by Johor and Negeri Sembilan, in part due to the growth of their capitals, Johor Bahru and Seremban.

The final major feature of the 1957-70 urbanization trend in Peninsular Malaysia to emphasize in the context of the two-circuit system is the increasing proportion of Malays in the urban areas. However, their urban proportion in 1970 is still far lower than expected in view of the fact that in 1957, 88.8 per cent of Malays were rural. Table 2.8 shows the urbanization of different communities between 1921-70. Malays have been urbanizing gradually, registering the second highest percentage difference between 1957-70. The various reasons for this pattern had already been discussed. This pattern is further borne

Table 2.8
Peninsular Malaysia: Urbanization of Community, 1921-70

Community	1921[a]	1931[b]	1947	1957	1970
Malay	9.0	11.1	7.3	11.2	14.9
Chinese	52.8	49.3	31.1	44.7	47.4
Indian	27.4	30.5	25.8	30.6	34.7
Other	63.7	66.0	46.2	49.3	40.8
Total Urban %	14.0	15.1	15.9	26.5	28.7

Source: Ooi, 1975;.Del Tufo, 1949: 42-8; Vlieland, 1932: 48-9; Nathan, 1922:38, 41-2.
Note: [a] The community proportions include Brunei and Singapore.
[b] The community proportions include Singapore.

out by the analysis of the 1965-70 migrants, where Malays constituted 53.6 per cent of the total rural-urban stream. Thus the proportion of Malays in urban areas is still below its expected proportion in the total population. Of vital interest to the two-circuit system are the internal structures of this urban pattern which have been conditioned by processes within the national and world economy. Two important aspects for discussion are the economic and ethnic structure of Malaysian cities.

First, research by Kamal (1974) on the economic structures of Malaysian towns in 1970 found that most of them were service centres. Manufacturing activities were low and tended to increase with the population size of the city. When manufacturing was classified as resource-based and non-resource-based industries, it was found that a larger proportion of resource-based industries were located in towns of up to 15,000. Sawmilling was an example where between half and three-quarters of the population were employed in a resource-based industry. Non-resource-based industries increased in importance with city

size. Thus towns of 30,000 to 50,000 were significant thresholds for general industrial activity. There was a pronounced widening and increase in the range and volume of manufacturing activity in towns in the 50,000 to 90,000 range, especially if they were state capitals or major regional towns acting as focal and supply points for their region. These findings have important implications on the two-circuit system, especially in the arena of sectoral divisions and their close relationship with the ethnicity of urban areas. With increasing industrialization and expansion into non-resource-based manufacturing, the structure of employment in Malaysian cities will change. The size of the services sector will continue to increase, while the particular form of industrialization, especially the export-oriented manufacturing industries continue to be labour-intensive.

Second, urban areas still exhibit the previous historical patterns of a significantly high non-Malay concentration, even though Malays constitute and will continue to be the main urbanization component (Table 2.8). A closer analysis of the spatial distribution of Malays in urban areas shows that their migration level varied little between urban size categories although the pattern changed markedly between regions, reflecting the spatial distribution of Malays in different regions. Therefore, the Northeast region with a much higher proportion of Malays in the total population shows a significantly higher average Malay migration component than that of the Chinese-dominated west with the resource regions of the Southeast falling in between (Kamal, 1974).[17]

On the average, the rate of Malay urban growth is far higher than that of Chinese urban growth, and that except for the 50,000-100,000 size category in the West, there is a general decline in the growth rates of both ethnic groups with the decreasing urban size of towns (Table 2.9). The largest urban growth rates were registered by Malays in Kuala Lumpur (9.0 per cent) and in Johor Bahru (6.7 per cent). Interestingly, these two cities also exhibited the highest growth rates among urban Chinese. The greater performance of Kuala Lumpur can easily be explained by its capital city functions, while that of Johor Bahru by both the influence of Singapore and its own inherent growth.

Ethnically, the cities are, except those in the Northeast, mainly Chinese. Malay participation is rather low, differentiated within the set of cities according to their size and location in a region. Table 2.10 shows the proportions of sectoral participation of Malays in urban areas, again classified by size of city and region. On the whole, Malay participation is low and does not, in any sector exceed 50 per cent of the national average. As anticipated, Malays in the northeastern cities, regardless of size play a more prominent

[17] Northeast consists of Kedah, Perlis, Kelantan and Terengganu; West consists of Selangor, Perak, Penang, Negeri Sembilan and Malacca; while the Southeast consists of Johor and Pahang.

Table 2.9
Peninsular Malaysia: Malay Urban Migration and Ethnic Growth Rates, Categories and Regions, 1970

Region/City	Average Malay Migrants	Average Annual Growth of Chinese Population	Average Annual Growth of Malay Population
West[a]			
Kuala Lumpur[d]	28.79	3.80	9.00
100,000+ (excl. K.L)	24.88	2.73	3.65
50,000-100,000	29.58	1.53	4.60
10,000-50,000	23.33	2.70	3.69
Southeast[b]			
100,000+	47.47	3.60	6.70
50,000-100,000	37.28	1.70	3.32
Northeast[c]			
100,000+	-	-	-
50,000-100,000	53.75	2.67	2.53
10,000-50,000	61.74	1.42	2.40
Peninsular Malaysia			
100,000+ (incl. K.L.)	33.71	3.37	6.45
50,000-100,000	40.20	2.37	3.99
10,000-50,000	38.97	1.94	3.14
Total	37.62	2.56	4.52

Source: Malaysia, Department of Statistics, unpublished data, 1974.
Note: [a] Selangor, Perak, Penang, Negeri Sembilan and Malacca.
[b] Johor and Pahang.
[c] Kedah, Perlis, Kelantan, Terengganu.
[d] Includes Ampang and Petaling Jaya.

role than any of the other regions. They feature least importantly in the West. What is interesting, and again reflects the structured nature of the Malaysian political economy is that irrespective of the regions, Malays tend to concentrate in certain sectors, that is, in electricity, services, transport and agriculture. The dominance of Malays in agriculture is less important in the West and extremely important in the Northeast. In contrast, the general lack of Malays in manufacturing, construction and commerce throughout the country disguises their high participation in manufacturing in the Southeast and Northeast (cottage industries and other smaller-scale activities) and in commerce and construction, also in the Northeast.

To elaborate on this pattern, Table 2.11 shows the employment status of Malays by region. What emerges from the table is the comparatively large proportion of Malays in wage

Table 2.10
Peninsular Malaysia: Per Cent Malay Participation in Urban Sectors, 1970

City Size/Region	Agriculture	Agri-Products	Mining	Construction	Electricity	Commerce	Transport	Service	Manufacturing
West									
Kuala Lumpur	6.61	5.51	6.62	3.98	28.12	6.44	17.27	22.92	9.93
100,000 + (excl. K.L.)	15.05	6.90	8.03	4.23	28.44	4.88	22.25	21.22	6.76
50,000 – 100,000	40.46	10.12	9.94	29.06	28.44	22.44	43.88	41.10	8.85
10,000 – 50,000	27.45	7.30	11.30	4.80	25.59	8.02	19.78	28.53	7.06
Southeast									
100,000 +	42.33	46.68	32.61	27.89	60.43	18.73	43.50	55.12	37.25
50,000 – 100,000	23.80	16.87	11.86	14.25	53.02	10.27	32.11	44.84	8.59
10,000 – 50,000	22.84	6.81	44.25	8.45	51.61	7.65	25.21	36.11	9.17
Northeast									
100,000 +	-	-	-	-	-	-	-	-	-
50,000 – 100,000	71.76	60.52	26.46	21.89	38.84	37.73	58.25	58.05	13.18
10,000 – 50,000	76.70	63.81	62.82	57.89	68.59	41.06	61.83	58.99	43.19
Peninsular Malaysia									
100,000 + (incl. K.L.)	21.33	19.70	15.75	12.03	39.00	10.02	40.85	33.09	17.98
50,000 – 100,000	45.34	29.14	16.09	21.73	40.1	30.96	44.75	48.00	10.21
10,000 – 50,000	42.33	25.97	39.46	23.7	49.93	18.91	35.61	41.21	19.81
Total	36.33	24.94	23.77	19.15	43.01	19.96	40.40	40.47	16.0

Source : Malaysia, Department of Statistics, unpublished data 1974.

labour and looking for their first job. The latter is an indication of the large number of young Malays entering the labour market and suggestion of high unemployment among Malay school-leavers. This is particularly problematic in the Northeast. Yet the Malay-dominated towns of the Northeast display the highest proportion of Malays as

Table 2.11
Peninsular Malaysia: Malay Employment Status, City Size and Region, 1970

City Size/ Region[a]	Employer	Self-Employed	Wage Labour	Family Worker	Looking for First Job
West					
Kuala Lumpur[b]	20.14	14.50	37.25	18.66	36.00
100,000+ (excl. K.L)	15.62	12.57	25.16	16.06	28.47
50,000-100,000	23.79	18.06	30.0	16.21	34.28
10,000-50,000	16.24	13.38	27.02	12.31	23.01
Southeast					
100,000+	13.85	17.26	36.14	15.87	40.34
50,000-100,000	29.59	24.29	36.05	19.12	41.30
10,000-50,000	23.48	15.81	29.46	12.60	33.87
Northeast					
100,000+	-	-	-	-	-
50,000-100,000	38.58	51.01	48.31	48.12	61.85
10,000-50,000	51.65	65.74	64.20	47.99	68.62
Peninsular Malaysia					
100,000+ (incl. K.L.)	16.54	14.78	6.45	16.86	34.94
50,000-100,000	30.65	31.12	3.99	27.82	45.81
10,000-50,000	30.46	3.164	3.14	24.3	41.83

Source: Malaysia, Department of Statistics, unpublished data, 1974.
Note: [a] See Table 2.9 for regional definition.
[b] Includes Ampang and Petaling Jaya.

employers, a category which Malays generally fare poorly in. Owing to the agricultural sector and informal sector activities, the Northeast also has a high proportion of Malays in the self-employed, and worker categories.

2.4 RURAL DEVELOPMENT AND MIGRATION, 1957-70: ENTRENCHMENT OF THE TWO-CIRCUIT SYSTEM

In spite of all the urban factors discussed above, the most important reason for the low urban growth and the small rural-urban migration in the 1950s, and thus the continuing entrenchment of the two-circuit system of migration, is related to the broader impact of

policies adopted by the national government. The extensive rural development programme launched in the 1960s, both in *in situ* irrigation schemes, and new land settlement schemes in frontier regions have affected urbanization and population redistribution. The low rural-urban migration was specifically the result of retaining potential migrants in *padi* irrigation schemes and redirecting the rural poor to land resettlement schemes in a rural-rural flow.

Ness (1967) in his study of rural development in Malaysia concluded that among Southeast Asian countries, only Malaysia and Singapore have translated their development programmes into action. Government rural development succeeded in retaining potential rural-urban Malay peasants and prevented them from "voting with their feet". Jobs were created, directly or indirectly, in target areas of double-cropping, higher-yielding rubber and oil palm, and FELDA schemes. The living standards of rural areas were upgraded substantially by a better network of communications, education, health, mass media facilities and public utilities. Land development schemes helped to siphon-off potential rural-urban migrants by redirecting them to modern-sector agriculture, thus easing the pressure in agriculture.

The above points were supported from the examination on the selectivity of outmigrants from rural areas. As will be shown in Chapter 3,[18] the bulk of rural-urban migrants were Malays who were inevitably absorbed into the government sector. They made up two streams. The first group consisted of the educated elite, a small proportion of the rural mass. The large majority were recruited into the expanding protective services[19] where education requirements were comparatively low.

The post-Independence period between 1957 to 1970 demonstrated a marked shift in development policy which attempted to create a better rural-urban balance. The focus of the national government was on rural development. The impact of these policies, through rural infrastructure projects and new land development, generated its own pattern of migration, albeit induced by policy which manifested in greater rural-rural population redistribution and a slowing down of the rate of urbanization. In effect, this was a period of further conservation of the two-circuit system.

After World War II, there was an obvious change in government policy which reflected the changing priorities of an increasingly independent government. As mentioned earlier a prime consideration of the colonial era was the economic well-being of the United

[18] This covers an analysis of the economic characteristics of all rural-urban migrants between 1965-70 in Peninsular Malaysia. The case study deals with a more detailed analysis of migrant characteristics and processes.

[19] Protective services consist of the uniformed services of the army, navy, air force and police.

Kingdom which was now replaced by the needs of an independent government concerned with developing the welfare of its people. The concept of a balanced budget was replaced by that of an expanding economy. The importance of urban development was superseded by rural development which aimed to help the Malay peasant. Social services, such as education, moved from low priority to high priority and was redefined from "consumption" in the colonial budgets to that of "investment". To espouse national consciousness, a unified education system (same curricula and language teaching) of both Malay and Chinese mediums at secondary schools was implemented. Educational, health and social amenities were increased in rural areas. To carry out these aims, organizations competent to plan for and stimulate the economy were created. Nationalistic interest changed to those of communalism and class (Ness, 1967).

A number of reasons contributed to the clamourings for an increase in the living standards of the rural Malays. There was an over-representation of Malays in legislative councils. Many Malays felt that the Chinese had gained the benefits of urban living by shifting to new villages. This enhances their sense of neglect prevailing from the colonial days. The question of Chinese loyalty during the Emergency sparked Malay-Chinese tensions which made the bridging of disparities more urgent (Ness, 1967).

Against these changing priorities, rural development became the major aim. The government was pragmatic enough to know that it needed the support of the rural majority. There was a recognition that an agricultural country such as Malaysia depended on agricultural development for national development. Rural producers were given pride of place in development policy. Finally, the threat of communism experienced during the Emergency made the government realise that an attack on poverty was also an attack on communism.

According to Snodgrass (1980: 166), in the 1950s "rural development" was perceived as both productivity-rising programmes and efforts to improve infrastructure and social services. When it became apparent that rural advancement was limited by the strength of the sector's economic base there was greater emphasis on productivity-raising projects as seen in the aims of the First Malaysia Plan 1966-1970 (Malaysia, Government of, 1966).

However, the government was constrained to continue the colonial pattern of accumulation for two reasons. First, it was the main source of foreign exchange available to the state to finance internal development. Second, most of the productive assets were still owned by foreign interests. Concern of the state was focused on the question of stabilization through diversification, but more importantly, on rural development since the main support for the Malay-dominated government had come from the peasantry. An examination of public

development expenditure over the First Malaya Plan (1956-60), Second Malaya Plan (1961-65), and the First Malaysia Plan (1966-70) shows the major allocations toward agriculture and rural development increasing from 23.6 per cent between 1956-60 to 30.7 per cent in the 1966-70 period. Social services in the form of education, health and community facilities increased from 14.4 per cent to 21.7 per cent over the same period. Although the combined allocation of transport and utilities fell from 59.6 per cent in the First Malaya Plan to 33.8 per cent in the First Malaysia Plan, in absolute terms the amount was fairly high. The rather high allocation for transport and utilities in the First Malaysia Plan reflected the ideological continuity of colonial policies which had limited the role of the state to the creation of social infrastructure to facilitate private capital accumulation (Kamal, 1981a: 8). The proportion spent in this sector was progressively reduced during subsequent plans. The relatively low emphasis given to the industrial sector was also noticeable during this period.

The objectives of the rural development programme were divided into three groups. Output goals emphasized the rural infrastructure such as water, electricity, roads, health and educational facilities. Cultural goals attempted to modify traditional Malay values to make them more responsive to economic progress. This aim was dropped later, owing to its sensitive nature. The mixed goal, of output and cultural aims, attempted to change the structure of the rural economy through extension services, such as credit, technical assistance, rural education, farmers' associations and cooperatives (Ness, 1967: 124-5). The emphasis between 1950-60 was on the output goals.

Between 1950-51, the Rural and Industrial Development Authority (RIDA) was formed to provide physical improvements in rural areas, in extension services and to foster a spirit of self-reliance among rural folk. In 1966, RIDA became MARA (Majlis Amanah Rakyat) as an authority not only to promote non-agricultural activities in rural areas but also as a training body to effectively absorb rural Malays into the urban economy.[20]

The impact of policies geared towards physical outputs were very extensive (Lim, 1967; Ness, 1967; Lim, 1973).[21] Great strides were made in providing the rural population with education, health, roads, electrification, irrigation and other socio-economic facilities. While these are impressive achievements which have enabled the rural masses to enjoy better welfare, increased output in irrigated double-cropping regions and accessibility to markets, they have not tackled the structural weaknesses of the agrarian economy. For

[20] See Gale (1981: 44-85) for a more detailed discussion of these public enterprises.

[21] See the First Malaya Plan 1956-1960 (Malaya, Government of, 1956), Second Malaya Plan 1961-1965 (Malaya, Government of, 1961), First Malaysia Plan 1966-1970 (Malaysia, Government of, 1966) and Second Malaysia Plan 1971-1975 (Malaysia, Government of, 1971) for comparative statistics up to 1970.

example, the problem of monopoly-monopsony, *padi kunca* credit and land tenure (fragmented land and absentee landlordism) have remained mainly unsolved. These inherent problems in the rural areas may result in only marginal income increases for farmers. To effectively restructure the economy and to eliminate rural poverty, better rural infrastructure must be accompanied by institutional reforms to be carried out simultaneously on the marketing, credit and land tenure systems (Fisk, 1963; Lim, 1973: 184-5). The second important aspect of rural development is that of land settlement attempts to overcome these problems. Both these programmes have inhibited Malay rural-urban migration, which resulted in low urbanization in the country between 1957-70.

The government faced numerous problems carrying out its rural development plans. Prior to, and soon after Independence, it had to operate through a colonial bureaucracy with custodial interests rather than developmental interests. In 1959 the Ministry of Rural Development was established to overcome these obstacles. It had the full backing of Cabinet and succeeded in centralising control. Expatriates were Malayanized and nepotism minimised under federal authority. Administration and communication became streamlined, requests for funds standardized, and long-term financial commitment to projects were implemented to accelerate the progress of development programmes.

The major achievement of the pre-1970 years was in land development. Land development programmes did not suffer from the institutional inadequacies of the physical output programmes. They consisted of schemes with or without government subsidy, with federal or state joint-control. An analysis of the rate of land development under these programmes between 1961-65 and 1966-70 shows two important trends. FELDA, created in 1956 to open new agricultural areas for the landless and to build a self-help attitude among settlers, has emerged as the spearhead of the national land development programme. This is clear from the large decline in the acreage developed by fringe and controlled alienation projects. Although there has been a fall in total acreage developed over the two periods, FELDA remained the primary developer with the government planning to accelerate the rate of land development under FELDA (Lim, 1975: 187-9). In the post-1970 period, namely the NEP years, land development schemes were undertaken through the creation of regional development authorities (RDAs) which extended the FELDA model on a bigger scale. FELDA, and the other smallholder development agencies such as RISDA for rubber smallholders, MADA and KADA for padi planters, and the Federal Land Consolidation and Rehabilitation Authority (FELCRA) concerned with the traditional rural sector, all continued their programmes through the last 20 years. But the RDAs combined both rural and urban development programmes. Their overall impact on the two-circuit hypothesis will, however, be discussed in the last chapter.

FELDA, the earliest and proto-typical land development programme, has two related objectives: to alleviate poverty and restructure society. It aims to reduce poverty by providing land for the landless and raise the incomes of the poor by increasing employment opportunities within the modern agricultural sector. It plans to restructure Malaysian society by bridging the economic disparities between Malays and non-Malays. This is achieved by bringing the Malays into the modern sector and creating an entrepreneurial middle-class. Modern urban amenities and facilities are built in the settlements as a means to modernize the rural inmigrants. Malays are socialized into a new life-style (Alladin, 1973: 55-8).[22]

FELDA adopted an integrated, or "captive project" approach to land development (Taib, 1964). Its responsibilities are comprehensive, from jungle clearing to the establishment of an outlet office in London (Alladin, 1975). It opens up tracts of land and plants them with a major cash crop, usually rubber but increasingly, oil palm. These schemes are provided with basic infrastructure, including a processing plant.[23] Although the aims of FELDA remained intact, some of the methods to achieve these ends have changed during the first 15 years of FELDA's development (1956-70). Among the major changes were: size of FELDA projects, regional distribution, diversification of main crops, tenure (size of holding and nature of land tenure), production and repayment, settlers selection and extension services.[24] These changes arose because of the problems associated with the echnicalities of resettling people, FELDA's integration with national policies of agricultural and regional development, and FELDA's role in bridging racial inequalities.

The economic effects of the FELDA programme have not been analyzed satisfactorily. By expanding the amount of cultivated land, FELDA may have kept the average rural incomes above what they otherwise would have been and consequently retarded rural-urban migration. But it probably gave little rural land (as most settlers are either landless or own very small plots), and does not affect unemployment in the areas from where settlers originate for these same areas had low measured unemployment.

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[22] For example regular cash income necessitates budgeting. There are new choices and new skills to be learnt as well as a new world system to adapt to.

[23] Each settler family receives between 10-14 acres of land; eight acres for rubber, 10 acres for oil palm. The rest of the land comprises a home garden (quarter acre) with the remainder for fruit trees or rice. When the settler arrives, his house is already built, the main crop growing. He lives on a stipend until the major crop matures. He is then expected to repay his loan to FELDA by instalments until he gains ownership of the land. He is bound by contract not to subdivide his land for inheritance.

[24] See Wikkramatileke (1975) for the overall changes in FELDA strategies. For elaboration on the changing size of schemes see Pryor (1972); regional distribution Degani (1964), Hill (1965), Pryor (1972), and Third Malaysia Plan (Malaysia, Government of, 1976: 209-12); diversification of main crops, tenure and production and repayment (Alladin, 1975), recruitment (Pryor, 1972) and extension services (Alladin, 1975).

Critics of FELDA argue that such high expenses are not warranted for they benefit only a small proportion of the rural Malay population. By 1970, despite an increased rate of land development, the proportion of rural Malays who had been resettled was still only under 15 per cent. Abdul Aziz (1964: 43) concluded:

> "even if it (FELDA) can considerably increase the rate of its ability to settle the landless rural population, the FELDA is still unlikely to be able to deal with more than one-fifth of the problem of Malay landlessness".

What the programme did achieve was to facilitate the accommodation of natural increase in the rural population albeit, by a small proportion. For example, in the early 1970s rural natural increase was about 150,000 a year while FELDA absorbed perhaps 14,800 individuals (about 2,740 families) per year (Snodgrass, 1980: 180).

By reinforcing state capitalism through export commodity products such as rubber, palm oil and cocoa, there was a further dependence on world commodity markets. This was one of the major dissatisfactions felt by settler families whose incomes, targeted at RM400 per family per month initially, while nearly four times the medium income of rural Malay households in 1957-58, fell by half or less during the rubber price slumps of 1967-68 and 1974-75. Allied to this problem was the valid criticism of stifling settler initiative and fostering dependency, an effect of the extension of state paternalism.

The "second generation" problem of FELDA settlers will gain momentum with the increase and ageing of settlers' families. Unless adequate jobs were created for the children approaching the age of entry into the labour market in urban areas, or within self-sustaining FELDA schemes, this new rural cohort with higher aspirations may become disenchanted.[25] This is likely to happen when settlers are unable to bequeath their land to competing sons (not allowed to subdivide) or are themselves too young to retire. Training schemes have been stepped up to provide these youths with skills. Youth settlement projects absorb the off-take of agriculturalists from FELDA schemes (Alladin, 1975). However, the success of this is still to be seen.

Finally, the problem of racial concentration is reinforced. Nearly 95 per cent of FELDA settlers are Malay. Its potential danger and harm have been mentioned by Shamsul (1975) and Hussain (1972). However, the Third Malaysia Plan (Malaysia, Government of, 1976: 189) is committed to recruiting more non-Malays into FELDA schemes as a means to assist poverty groups and to increase agricultural participation among non-Malays.

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[25] Interestingly, in a study conducted on rural youths in Johor in 1970-71 only the sons of FELDA settlers felt hopeful enough about rural life to state that they wanted to pursue careers as farmers (cited by Snodgrass, 1980: 181).

An analysis of the type of migrants who are selected as FELDA settlers will throw more light on the preservation of the two-circuit system. First, an examination of the selection process showed that it is likely to draw from a rural Malay pool. The selection of settlers is based on a point system. Priority is given to those who need land, and, somewhat arbitrarily, on motivation and enthusiasm. Preference is given to those married, aged 21-45, with a large family, owing less than two acres of land or possessing no agricultural land. Potential settlers should have some agricultural skills or trade skills, and without serious criminal records. Pryor (1972) found in his sample that 47 per cent of settlers were over 40 years old and only seven per cent in their twenties. Eighty-two per cent had over five in the family. In terms of occupation or the economic background of settlers, both Pryor (1972) and MacAndrews (1977) have found that those recruited into FELDA schemes were generally poorer, rural people from the traditional agricultural sectors.

In spite of the problems faced by FELDA and some of the more valid criticisms of the scheme, land development through FELDA has been quite an achievement. While just 20 per cent of land alienated in the early 1960s went to FELDA, as much as 54 per cent of the area actually developed during the second half of the decade was developed by FELDA.

Between 1971-75, 82,400 acres were developed annually and 13,700 families resettled by FELDA (Malaysia, Government of, 1976: 288).[26] By 1976, FELDA had opened 1,186 schemes, settled 37,345 families and planted 812,684 acres with rubber, oil palm, sugar cane or cocoa (FELDA, 1976: 1). This represented nearly 50 per cent augmentation of the acreage which rubber smallholders cultivated in 1952. Although some costs may be cut in FELDA programmes, on the whole, studies have shown them to be an efficient use of public funds.[27]

Although there were failures, land development has been an important and successful element in Malaysian rural development. The total area cultivated was raised from about 5.3 million acres just after World War II to 7.1 million in 1970, with the largest proportion being after Independence. As much as 1.5 million additional rural residents were accommodated. Although this was not an improvement on the man-land ratio, as argued by Snodgrass (1980: 182) constancy itself is a major feat when it is compared to the nearly universal experience in low-income countries of rapidly rising rural population density. Given the surge of rural population and the necessary interval before industrialization occurs when a large work force is needed, the use of available land as an intermediate measure for underemployed rural labour has been a good policy.

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[26] The Authority's target was to resettle 23,700 families between 1971-75 and develop 55,000 acres per year (Malaysia, Government of, 1971: 133).

[27] See in particular the works of Sumer Singh (1965) and Hussain Wafa (1972, 1975).

The overall impact of FELDA on migration has been first, the shifting of between 6.2 and 8.1 per cent of total movers between 1957-70. The first figure of 6.2 per cent or 145,373 persons includes the settler and dependants as well as ancillary staff in FELDA schemes such as school teachers, health staff, police, etc. and their families. The second proportion of 8.1 per cent or 195,373 persons would include casual workers and other contract labour employed by FELDA to clear the jungle, build settlers' houses, put in the infrastructure, etc.

But because the majority of these migrants are temporary they are less important than the permanent settlers' families. A much larger proportion of migrants are involved in the development by FELDA in the major regional integrated land schemes such as Jengka Triangle and Pahang Tenggara (Pahang), and Johor Tenggara (Johor). The expected number of persons involved is a further 70 per cent of the 1957-70 figure.

Second, FELDA programmes have stabilized internal population movements in the 1970-75 period by absorbing population from a particular state into a FELDA scheme within that same state. Thus, of the 28,095 settlers in a total of 90 schemes at the end of 1973, 71.1 per cent came from the same states.

Third, FELDA had an important impact in Pahang making it the major inmigration state in the 1957-70 period. FELDA opened 30 out of 90 schemes in Pahang and was responsible for moving 9,794 settlers or 14.9 per cent of the total immigrants into Pahang between 1957-70.

Therefore, the role of FELDA in rural development has been very significant. This has had various impacts. In line with the characteristics of a peripheral economy, the increasing role of the state in the form of state capitalism has been increased. This role is further extended in the 1970s in the form of regional development authorities as part of national planning. Although FELDA has been an important agent for mobility, mostly short distances and within states, more importantly FELDA has been responsible for the increase in rural-rural migration alleviating pressures of land and unemployment in rural areas and thus, stemming potential rural-urban migration, a significant factor in the conservation of the two-circuit system.

As a result of the contribution of FELDA and the other agencies in improving the standard of living in rural areas and in retaining some of the otherwise rural-urban flow, and the success of rural development especially between 1957-70, the urbanization patterns for the same period as we had seen above registered a decline. Rural development may also have induced urban-rural migration, an unusual migration flow for a Third World country.

Based on this study, using the 1970 census, the urban-rural stream emerged as the largest flow among migrants who moved between 1965-70 (Chapter 3). A number of reasons have contributed to this reverse flow. The first is sub-urbanization or the movement of urban residents to the non-gazetted periphery of urban areas. As mentioned earlier, the bulk of the population growth is occurring in the conurbations, specifically in areas outside the gazetted urban boundaries. Thus, within the larger conurbations of Kuala Lumpur, George Town, Ipoh and Johor Bahru, large housing estates as well as factories are located outside gazetted urban limits.

Government development in rural areas has attracted urban residents seeking new opportunities in agriculture, commerce and construction. In this category are the returned and disabled servicemen who are given priority in land resettlement schemes. A study on the growth in agricultural acreage between 1957-70[28] shows that although the increase is 36.9 per cent or 2.8 per cent per annum, there were particularly large increases in wet *padi* (87.8 per cent) due to irrigation schemes (MADA and KEMUBU) and oil palm (47.5 per cent) mainly in FELDA settlements. Owing to subdivision in estates (see Abdul Aziz, 1962) smallholding rubber rose by 55.7 per cent.

Further evidence of this may be gleaned from an analysis of the characteristics of migrants who moved between 1965-70. There was a high proportion of urban-rural migrants engaged in agriculture in Negeri Sembilan (75.5 per cent), Perlis (75.0 per cent), Johor (74.9 per cent), Kedah (63.4 per cent) and Pahang (55.9 per cent). Except for Perlis and Kedah which are primarily rice economies, the other states are mainly rubber producers. Johor and Pahang have the largest proportions in oil palm (Census Sample Tape, 1970).

Another cause for urban-rural migration has been government policies of decentralization from the Klang Valley, the establishment of growth poles, and the siting and relocation of industries in rural areas. Industrial estates have been established near large towns such as Ipoh, Seremban and Alor Setar as well as smaller settlements like Sungai Petani and Kuala Pilah. The establishment of agro-based industries, for example, pineapple canning or rubber processing factories in rural areas may have induced migration of higher level personnel from urban areas. This was most evident in the 1970s and 1980s with the implementation of the NEP.

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[28] A comparison of the industrial structure by rural and urban distribution between 1957 and 1970 would illustrate the urban and rural changes in the work force. Unfortunately, while the Census Sample Tape provided this breakdown, the same tabulation for the 1957 Population Census was not available.

The perpetual transfer of government staff, especially those in the armed forces and teaching, has also contributed to the urban-rural flow. The government deemed certain occupations (for example, doctors, engineers and architects) priority jobs which meant that recently qualified people have to serve the government for at least three years. During this time, they are mostly assigned rural posts which are unpopular. The Harun Scheme in education allowed the government to transfer newly graduated teachers anywhere in the country.

Finally, the return migration of first generation Malay rural-urban migrants from their government jobs in urban areas to their *kampung asal* (village of origin) on retirement has added to the urban-rural flow. This appears to be quite a common practice.

2.5 CONCLUSION

This chapter has specified a theoretical framework for the structural analysis of migration by periodizing the incorporation of the Malayan economy into the world economy and how the migration processes have been structured as a consequence.

It is argued that migration in Malaysia operates within a two-circuit system that is structured by location, occupation and ethnicity. The upper-circuit consists of population movements within the modern formal sector while the lower-circuit is mostly migration that is traditional and informal. This two-circuit system was created by the colonial policies of immigrant labour to work in the tin-mines and rubber; dual agricultural system of export-oriented plantations and indigenous subsistence agriculture; and education policies consistent with indirect rule and pluralism.

An analysis of the three waves of migration and urbanization between 1785 to 1970 showed how the initial two waves, of massive labour immigration and in the 1950s the emergency resettlement were circuit-preserving. Although Independence in 1957 saw a strong push to improve the livelihood of rural Malays through massive rural development projects such as FELDA, these schemes helped to retain Malays in the rural areas thus, minimising rural-urban migration. It was only the third wave, in the 1970s, galvanized by the NEP, a product of the bloody 1969 riots, that attempted to promote Malay urbanization and as a result the dissolution of the two-circuits.

Overall, both the pattern of urbanization, due to its initial immigrant nature, and rural development which contributed to a slowing down of Malay-dominated rural-urban migration and urban growth had contributed to the entrenchment of the two-circuit system of migration.

The next chapter examines in some detail, the migration streams in Malaysia between 1965-70, which will provide further evidence of the two-circuit system discussed earlier, and will throw some light on the characteristics of migrants in a national context. This discussion sets the stage for the village-level analysis of migration and mobility, further exploring the processes of migration within the broader socio-economic and political structures and the third wave of migration, from 1970 onwards.

CHAPTER 3
THE STRUCTURE OF THE TWO-CIRCUIT SYSTEM OF MIGRATION: MIGRATION STREAMS, 1965-70

3.1 INTRODUCTION

Following the theoretical discussion in Chapter 1 and the historical analysis in Chapter 2, this chapter will now focus on a statistical analysis of the structure of the two-circuit system of migration. The analysis will be based on census data regarding place of previous residence over the years 1965 to 1970. It will be done in two parts. The first part will focus on the nature of the four migration streams defined by strata (namely, the urban-urban, rural-rural, rural-urban, and urban-rural) and will examine the spatial, socio-demographic and economic characteristics of migrants in these streams. The second part will analyze the formal-informal sector characteristics of the migration streams using employment status data.

The major thesis of this analysis is that these characteristics, whether in terms of the four major streams of migration or in terms of the formal-informal sector classification, reflect the structured nature of internal migration in Peninsular Malaysia. This migration structure had been defined in terms of the two-circuits, by integrating sectoral classifications, with urban-rural strata and employment status. From this integration the upper-circuit is defined as comprising the urban formal and the rural plantation sectors, while the lower-circuit consists of the urban informal and rural peasant sector. The schema of migration flows is shown in Figure 2.1. Not all these flows will be significant. The task is to determine the characteristics of these flows and to consider them as part of the processes of conservation and dissolution as discussed in Chapter 2.

The first section discusses the methodology and data used for this analysis. This relates to the definition and derivation of migration streams based on residential strata and the classification of upper-circuit and lower-circuit dominated states according to a number of economic and social indicators. The migration streams within these two groups of states are briefly discussed as a spatial backdrop to the main section of this chapter, that is the economic features of the migration streams and their relationships with ethnicity. This is further refined in the next section which examines the economic characteristics of the four migration streams within the formal and informal sector framework. Section 4 discusses the socio-demographic characteristics of the migration streams. The chapter

concludes with a discussion of the implications of these characteristics on the two-circuit system.

3.2 METHODOLOGY AND DATA

This analysis was derived from a two per cent systematic sample tape of the 1970 Population and Housing Census (Census Sample Tape, 1970) created by the Malaysian Statistics Department (see Appendix A for a discussion of the data source and problems encountered). The main reason for selecting only migrants who moved between 1965-70 (called variable period migrants – see Appendix A for a discussion of the definition) for analysis was to minimize the basic inadequacies of census data for migration study. Owing to the cross-sectional nature of the census data, the characteristics of the migrants do not relate to their time of move. For example, it is impossible to know if an occupation enumerated at census time is the same as at the time of move. This problem applies to the cross-tabulations of migrants with any of their attributes. The magnitude of this problem is intensified with increasing time lapse between the time of migration and the time of census enumeration. Another reason for selecting people who moved between 1965-70 was that the migration streams have not been affected by the period of Insurgency between 1948-60 when thousands were involuntarily relocated.

One problem encountered in this analysis relates to the definition of residential strata. In order to derive the migration streams, the strata of the preceding residence is cross-tabulated with the strata of the present residence. While the strata of the present residence can be based on the *objective* size of the settlement, the strata of the preceding residence is *subjective*.[1] This may inflate the urban-rural flow and deflate the rural-urban flow because migrants may have named the town closest to their *kampung*, rather than their actual *kampung*.

Also, an element of subjectivity was introduced when migrants were asked to nominate the strata of their preceding residence. However, the experience gained by the writer from fieldwork suggests that rural people generally classify urban areas into *pekan* (small towns) or *bandar* (large towns). Although the major settlement in the field study was defined as rural by the census classification in 1970 (population of 1,300 and

[1] Although Question 24 on Form Five of the 1970 Population and Housing Census requested the name of the settlement, neither the name nor the strata were coded. Instead, respondents were asked in Question 23 whether their last residence was *kampung* or town and this information was coded.

therefore less than 10,000, the statistical cut-off point for urban), most of the respondents perceived it as urban. Based on this perception a more realistic threshold of urban for the purpose of this analysis is to use 1,000 and above as the urban limit for the strata of the present residence.

Using this definition, the four migration streams of 1965-70 are : urban-rural (U-R) 34.6 per cent, rural-rural (R-R) 32.3 per cent, urban-urban (U-U) 26.8 per cent, and rural-urban (R-U) 6.3 per cent.[2] While it could be argued that the subjectivity of the strata for preceding residence has influenced these patterns, a number of equally fair arguments may be put forward which suggest that these patterns do reflect the national migration and urbanization trends. As shown in Chapter 2, this high U-R flow may be the result of successful rural development, especially land development and resettlement schemes during the mid-1960s. It is certainly a result of increasing suburbanization as evidenced in growing conurbations around the main cities.

The small R-U proportion is explained by the low urban growth rates. To a great extent, rural development programmes have succeeded in retaining rural people except the more educated. The research of Pryor (1972) and Suresh (1975) in Selangor point to the low rural-urban migration while findings from a recent study of squatters in major towns in Peninsular Malaysia show that the majority of urban squatters were in fact from other urban areas (Johnstone, 1980). Similar indirect evidence of low rural-urban migration may be gleaned from Hawley's (1971) and Pryor's (1973) analysis of urbanization in Malaysia up to 1970, that medium-sized towns have grown from inmigration from smaller settlements rather than from rural areas.

It may be suggested that the 1965-70 period was abnormal. However, an identical migration stream analysis by the writer of all migrants (irrespective of the time of move) show a similar pattern : U-U 34.3 per cent, U-R 32.2 per cent, R-R 27.2 per cent and R-U 6.3 per cent. In addition, examination of the characteristics of all the migrants suggests that they are fairly representative of all migrants.

[2] If the urban threshold is 10,000 and above, the migrant streams for 1965-70 are as follows : U-R 44.0 per cent, U-U 29.0 per cent, R-R 23.3 per cent and R-U 3.7 per cent.

3.3 SPATIAL CHARACTERISTICS OF MIGRATION STREAMS IN THE TWO-CIRCUIT SYSTEM

Of critical importance in the concept of the two-circuit system, and reflective of the uneven development in the country is the ethnic composition of the migration streams. Generally, the upper-circuit is mainly U-U migration with some leakage overseas in the form of the brain drain. Together with the U-U stream, the lower- circuit which consists of the R-R migration stream constitute the process of conservation of the two-circuit system of migration. The dissolution of the two-circuits is mainly the R-U and the U-R migration streams.

Reflecting the ethnic distribution of the country's population, 57.1 per cent of all migrants between 1965-70 were Malays, 29.3 per cent were Chinese and 13 per cent were Indians (Table 3.1). Following from the discussion in Chapter 2, it should be no surprise that most of the Malay migrants were in the R-R stream (75.1 per cent) compared to the Chinese in the U-U stream (41.4 per cent) and Indians in the U-R stream (15.1 per cent). However, aspects of dissolution in the two-circuits are showing in the higher proportions of Malays in the R-U stream (56.0 per cent) and U-R stream (54.9 per cent).

Table 3.1
Migrants 1965-70: Ethnic Composition of Migration Streams, 1970
(in percentage)

	Ethnicity				Total	
Migration Stream	Malay	Chinese	Indian	Other	No.	%
Urban-rural	54.9	29.4	15.1	0.5	9,173	100.0
Urban-urban	44.7	41.4	13.2	0.8	8,580	100.0
Rural-rural	75.1	13.7	10.6	0.6	7,094	100.0
Rural-urban	56.0	32.9	10.8	0.4	1,664	100.0
Total no.	15,132	7,769	3,453	157		26,511
%	57.1	29.3	13.0	0.6		100.0

Source: Census Sample Tape, 1970.

Because Malays are mainly rural and Chinese urban, the migration streams mirror this ethnic pattern. Over one-third of the Malays were in the R-R stream and nearly half of the Chinese in the U-U stream (Table 3.2). Indians, Chinese and Malays recorded

high proportions of over one-third in the U-R stream.

Table 3.2
Migrants 1965-70: Proportions of Each Ethnicity Within the Migration Streams, 1970

	Ethnicity				Total	
Migration Stream	Malay	Chinese	Indian	Other	No.	%
Urban-rural	33.3	34.8	40.2	28.7	9,173	34.6
Urban-urban	25.3	45.7	32.8	42.0	8,580	32.4
Rural-rural	35.2	12.5	21.8	25.5	7,094	26.7
Rural-urban	6.2	7.0	5.2	3.8	1,664	6.3
Total No.	15,132	7,769	3,453	157	26,511	
%	100.0	100.0	100.0	100.0		100.0

Source: Census Sample Tape, 1970.

3.3.1 Regional Disparities and the Two-Circuit System

Having set the background of the ethnic composition of the migration streams we now turn to the spatial patterns of the streams. To examine further the characteristics of the two-circuit system and the relationship between urbanization, ethnicity and state, the 11 states of Peninsular Malaysia were divided into upper-circuit-dominated and lower-circuit-dominated states, based on a number of economic and social indicators (Table 3.3). What emerges clearly is that the lower-circuit states of Kelantan, Terengganu, Kedah and Perlis are the lowest in terms of per capita GDP; have the largest proportion of poverty households in GDP sectoral terms; dominate in agriculture, forestry and fishing, with low amounts in manufacturing, utilities and wholesale and retail; and have large proportions of its population in *padi*-farming and low proportions in manufacturing, commerce and services. As expected, these states show up poorly in health indicators, having a larger number of persons per doctor, and acute hospital bed. Similarly, ownership of motor cars and motor cycles is low. By contrast, the upper-circuit states ranked high for all the indicators of economic development and health facilities.

Table 3.3
Peninsular Malaysia: Selected Indicators of the Upper- and Lower-Circuit-Dominated States, 1970

		Usual Industry 1970[a]				GDP by Sector, 1970 ($ million)				Health		Motor Vehicles		Poverty
	1970 per capita	Padi	Mining	Commerce	Services	Agric., Forest. & Fishing	Manuf.	Utilities	Whole-Sale & Retail	Persons Per Doctor	Persons Per Acute Hospital Bed	Private Cars Per 100 Persons	Motor-Cycles Per 100 Persons	Percen-tage House-Holds
Upper-Circuit														
Selangor	1,616.5	5.5	10.4	16.1	26.8	399.4	586.0	78.7	443.1	2,327	542	7.4	8.7	29.2
Penang	987.2	10.1	10.1	20.2	25.4	155.0	101.2	24.8	212.5	3,986	638	5.1	10.0	43.7
Perak	981.1	12.9	5.4	10.9	15.4	486.2	142.4	59.0	187.7	5,944	648	3.1	6.8	48.6
Negeri-Sembilan	979.4	8.3	3.0	7.1	16.5	181.9	75.9	11.1	45.4	4,717	398	4.2	7.5	44.8
Malacca	798.3	5.0	3.8	13.9	18.1	105.4	19.8	8.3	77.5	5,021	587	3.9	6.3	44.9
Johor	900.4	0.8	5.7	8.5	14.1	489.6	166.7	23.9	130.1	6,716	608	3.2	6.9	45.7
Pahang	975.2	15.5	2.4	6.0	12.9	224.0	38.5	5.6	36.9	6,573	572	2.5	6.4	43.2
Lower-Circuit														
Kelantan	462.9	4.0	2.9	7.4	8.0	139.6	17.9	4.0	35.6	11,647	934	1.5	3.4	76.1
Terengganu	591.7	35.7	2.5	9.0	9.5	100.8	12.4	1.6	17.2	10,063	694	1.2	3.1	68.9
Kedah/ Perlis	665.4	44.7	2.1	8.1	8.3	426.3	46.5	6.5	41.7	9,222	907	1.8	6.1	64.5
Peninsular Malaysia	993.6[b]	100.0	100.0	100.0	100.0	3,432	1,307	245	1,423	4,344	627	3.8	6.9	49.3

Source: Third Malaysia Plan 1976-1980, 1976: 201-2; Census Sample Tape, 1970.
Note: [a] Usual Industry is defined as the major industry of the individual for the past 12 months.
[b] Malaysia.

The major poverty states in the peninsula display serious structural problems of regional disparities in development. These problems are closely related to the level of urbanization and ethnic distribution of the population. Thus, the poor states of Kelantan, Terengganu, Kedah and Perlis have the lowest proportion of urban population and are overwhelmingly Malay. The three main types of variables, of state, economic activities, and ethnicity examined in the two-circuit system in GDP sectoral terms; dominate in agriculture, forestry and fishing, with low amounts in Table 3.3 are inextricably linked together. Table 3.4 further demonstrates the effect of the two-circuit system within the Malaysian states in terms of urbanization, percentage of Malays and Chinese, and different types of migrants. The more developed states of Penang, Selangor, Perak, Negeri Sembilan, Malacca, Johor and marginally, Pahang, represent the upper-circuit. The "lagging" states of Terengganu, Kelantan, Perlis and Kedah have a majority of Malays ranging from 93.3 per cent to 71.0 per cent and represent the lower-circuit. This difference in pattern of Chinese- and Malay-dominated states further reinforced by the more Chinese populated states in the west coast having the most migrants living in urban areas compared to the Malay states.

A simple index was constructed to illustrate the upper- and lower-circuits. The U-U stream, being the upper-circuit, was given a value of 1 while the R-R stream, the lower-circuit was given a value of 0. U-R and R-U streams, representing the breaking of the two-circuits were each given a value of 0.5. The proportion of each migrant feature, such as state of origin, state of destination, etc. for the four streams within each state was multiplied by their respective value (depending on the type of stream) and divided by 100. The index was derived by adding up these values for the four streams in each state. The index ranged from 0 to 1 with 1 indicating high on the circuit and 0 low on the circuit. This index is a means of simplifying complex tables. While the use of the index means losing some details, it is a useful way of collapsing the four migration streams within each state into a summary measure. Migrants based on state of origin and state of destination and interstate and intrastate migration patterns were summarized by this index (Table 3.4).

Table 3.4
Migrants 1965-70: Upper- and Lower-Circuit-Dominated States by Index of Circuits of Migration Patterns

	% of Urban to Total Population[a]	Per Cent Chinese	Per Cent Malay	% Migrants Living in Urban Area	Index by State of Origin[b]	Index by State of Destination[c]	Interstate Migrants: Index by Interstate Migrants[d]	Interstate Migrants: Index by Ethnicity Chinese	Interstate Migrants: Index by Ethnicity Malay	Interstate Migrants: Index by Intra-State Migrants	Interstate Migrants: Index by Ethnicity Chinese	Interstate Migrants: Index by Ethnicity Malay
Upper-Circuit												
Penang	52.3	55.9	31.7	78.1	.66	.67	.68	.75	.62	.65	.68	.62
Selangor	45.0	46.5	34.4	81.1	.62	.66	.79	.82	.77	.63	.69	.56
Perak	27.5	42.4	43.3	73.0	.57	.57	.67	.84	.57	.55	.67	.46
Negeri-Sembilan	21.5	39.6	44.1	72.8	.59	.55	.60	.57	.62	.50	.57	.56
Malacca	25.1	39.4	53.1	55.4	.50	.41	.51	.57	.49	.29	.38	.06
Johor	26.3	39.0	53.1	63.1	.48	.49	.73	.81	.65	.44	.52	.41
Pahang	20.0	31.0	61.4	70.0	.58	.51	.50	.67	.42	.51	.55	.50
Lower-Circuit												
Kedah	11.2	20.0	71.0	51.7	.51	.39	.54	.59	.46	.34	.56	.15
Perlis	11.2	17.8	78.3	39.2	.35	.29	.43	.61	.35	.18	.45	.12
Kelantan	15.1	5.9	92.3	37.9	.33	.33	.57	.60	.52	.28	.59	.19
Terengganu	27.0	5.7	93.3	44.3	.41	.38	.47	.53	.46	.31	.70	.30

Source: Census Sample Tape, 1970.

Notes : [a] Derived from Chander (1977).
[b] Proportion of migrants in each stream originating from a particular state.
[c] Proportion of migrants in each stream arriving in a particular state.
[d] Interstate and intrastate migrants are derived from the variable preceding state residence cross-tabulated by the present state residence.

The two outstanding features from the table which lend support to the two-circuit system are the differences between the upper- and lower-circuit states and between Chinese and Malays. For example, the indices derived from migrants' state of origin or destination show that the more Chinese states ranked high on the circuit while the more Malay states ranked low on the circuit. The index by interstate migrants illustrates a similar pattern. When the interstate pattern is divided into Chinese and Malay communities, the Chinese consistently ranked higher on the circuit than the Malays, both in Chinese- and Malay-majority states.

Similarly, an index indicating the level on the upper- and lower-circuit was applied to interstate and intrastate migration in the Chinese- and Malay-dominated states. The pattern which emerged was consistent: the Chinese states scored lower. When these migration patterns were analyzed by ethnicity, the Chinese persistently ranked higher on the index than the Malays, the difference between Chinese and Malays widening in the Malay states. Indians, owing to their small numbers have been excluded from the analysis but they are found in the Chinese-majority states of Selangor, Negeri Sembilan, Perak and Penang, all in the developed west coast.

Using the classification of migration streams according to the index alone, it is now possible to consider, in greater detail the spatial characteristics of the migration streams in the two-circuits. A closer examination of the migrants defined by state of origin shows that the underdeveloped Malay-dominant states of Kelantan, Perlis, Terengganu and Kedah have the highest proportion of R-R migrants while Penang and Selangor have the highest proportions of U-U migrants (Table 3.5). While R-U migration is most pronounced in Terengganu and Kelantan, U-R migrants noted highest proportions in the upper-circuit states. An assessment of the destination state of these migration streams indicates patterns similar to those of the state of origin. The U-U and U-R streams are most prominent in the developed states while R-R and R-U streams are mostly found in the "lagging" states.

3.3.2 Interstate Migration in the Two-Circuit System

An analysis of only interstate migrants by migration streams for each state shows that the U-U and R-U patterns are similar to those discussed above. The relatively higher proportions of R-R interstate migrants in Pahang is due to interstate FELDA settlers while the higher proportion of U-R interstate migrants is caused by retirement migration

Table 3.5
Migrants 1965-70: Migration Stream by State of Origin and by State of Destination, 1970

	Migration Stream by State of Origin						Migration Stream by State of Destination					
					Total						Total	
	U-U	R-R	R-U	U-R	No.	%	U-U	R-R	R-U	U-R	No.	%
Upper-Circuit												
Penang	46.9	14.1	8.5	30.5	1,756	100.0	48.0	13.8	8.1	30.1	1,820	100.0
Selangor	41.0	16.3	4.1	38.6	5,121	100.0	45.6	14.3	4.6	35.5	6,234	100.0
Perak	34.8	20.2	6.1	38.9	5,266	100.0	33.5	20.3	6.7	39.5	4,421	100.0
Negeri Sembilan	37.2	19.2	5.9	37.7	1,786	100.0	30.0	20.9	6.3	42.8	1,592	100.0
Malacca	31.5	32.1	5.9	30.5	1,037	100.0	21.9	39.6	5.0	33.5	826	100.0
Johor	26.6	30.3	5.9	37.2	3,632	100.0	29.0	30.7	6.1	34.2	3,393	100.0
Pahang	37.2	22.0	3.8	37.0	1,460	100.0	28.3	27.0	3.0	41.7	2,160	100.0
Lower-Circuit												
Kedah	20.9	39.3	6.7	33.1	3,000	100.0	19.2	41.5	6.8	32.5	2,874	100.0
Perlis	19.0	49.3	7.4	24.3	363	100.0	13.3	55.3	5.5	25.9	383	100.0
Kelantan	18.9	52.1	10.2	18.8	2,024	100.0	17.6	51.4	10.7	20.3	1,645	100.0
Terengganu	22.8	41.0	11.0	25.2	1,066	100.0	20.4	44.7	11.0	23.9	1,163	100.0

Source: Census Sample Tape, 1970.

as well as land development schemes.

The ethnic composition of these interstate migration streams within each state highlights an important feature. Although the Chinese make up the majority, compared to Malays among U-U migrants, the Chinese-Malay disparity tends to increase in the Malay-dominated states. For example, in Kelantan, the Malay proportion in the U-U stream is 23.7 per cent while the Chinese proportion is 82.8 per cent. While the Malays outnumber the Chinese in the U-R streams in Malay-dominated states, the Chinese are the majority in this stream in the Chinese-dominated states. Although Malays tend to be the majority in the R-U flows for developed states, the Chinese are the larger proportion in the rapidly urbanizing states of Kelantan, Terengganu, Johor and Pahang which suggests that the Chinese are fast responding to new urban opportunities in the "lagging" states.

When migration streams as a proportion of all interstate inmigrants are considered in the upper- and lower-circuit states, some interesting patterns emerge. First, it is evident the upper-circuit U-U migrants contribute substantially to non-adjacent states (for example, Penang to Selangor) while the lower-circuit R-R migrants tend to move between contiguous states (for example, Selangor to Pahang). This suggests that upper-circuit migrants of an urban nature move greater distances and may be less bound by occupational immobility when compared to their R-R counterparts. Second, U-U migrants in the Malay states are drawn from more states (for example, Kedah and Johor migrants into Terengganu) than their counterparts in the developed states. Except for two R-R flows from Pahang to Negeri Sembilan and that from Kedah to Penang and Perak, the states of Perlis, Kelantan and Terengganu have not contributed inmigrants to the developed states.

The R-U and U-R interstate streams reflect the uneven development within the country. Thus, R-U streams are an important feature of the developed states; Selangor, in particular, is a major destination of rural-urban migrants from both developed and underdeveloped states. Conversely, the R-U flows are small in the less developed states.

The ethnic composition of these streams are similar to the earlier patterns of Chinese dominating the U-U flows and Malays dominating the R-R flows. While there are Malay U-U inmigrants in all states, including the poor states of Kelantan, Terengganu, Kedah and Perlis, Chinese U-U inmigrants are found mainly in the developed states. Perak is a major outmigration state for Malay U-U migrants and Selangor for the

Chinese U-U migrants.

The main Malay R-R interstate streams are found in the Malay states of Kelantan, Terengganu and Pahang, explained by agricultural migration as well as movement into FELDA schemes. Most of the Chinese R-R migration flows are within the developed states of the west coast.

Within the U-R stream which represents a break of the lower-circuit among Malay migrants, Selangor is an important outmigration state for both developed and less developed states. This is probably due to government transfers and decentralization policies. For the Chinese, movement is primarily in the west coast, with Perak as an important source state. In sharp contrast to the Malay U-R pattern, Selangor is a minor source state for the Chinese. An analysis of the R-U stream shows that the Malays move mainly within the Malay states although Selangor is an important destination state. The relatively fewer Chinese R-U migration flows are found almost exclusively within the developed states.

3.3.3 Intrastate Migration in the Two-Circuit System

An analysis of intrastate migration pattern using the upper-circuit and lower-circuit index again points to higher indices recorded in Chinese-dominated states compared to Malay-dominated states (Table 3.4). The comparatively low indices registered by Malacca and Perlis are due to the smallness of these states which has resulted in low intrastate migration. A comparison between Chinese and Malay intrastate migrants shows that the Chinese are on the upper-circuit compared to the Malays, the contrasts being accentuated in the Malay-dominated states.

A more detailed examination of intrastate migration by migration streams within the developed and underdeveloped states shows similar patterns to those discussed earlier. High U-U and U-R migrant proportions are recorded mainly in the developed states of Selangor, Penang, Perak and Johor. R-R migration is most pronounced in the states belonging to the lower-circuit. Malacca, in the upper-circuit is exceptional for its high proportion of intrastate R-R migration which may be explained by its agricultural economy comprising mainly *padi*. The low proportion registered by Terengganu is due to both its high U-R (suburbanizing) and R-U migration streams (rapid urbanization). Fairly high R-R migration is noted by the developed but primarily agricultural states of

Johor, Pahang, and Negeri Sembilan.

The community composition of these intrastate migrants shows that, again, the Chinese dominate the U-U streams and the Malay dominate in the R-R streams. Among R-U migrants, the Chinese have a relatively higher proportion, the difference being most pronounced in the lower-circuit.

This section dealt with the spatial aspects of the two-circuit system of migration. It has shown that the upper-circuit is mainly Chinese and the lower-circuit is mainly Malays. Both Malays and Chinese are equally represented in the dissolution of the two-circuit system as manifested in the R-U and U-R migration streams. When the states of Peninsular Malaysia were classified according to their level of development as representing the upper- and lower-circuit, Malays were found to be circulating within the R-R streams in the less developed states of Kelantan, Terengganu and Kedah for both interstate and intrastate migrants. By contrast, the Chinese in the upper-circuit of the U-U migration stream operate within the developed west coast states. The break of the two-circuit system in the form of the R-U migration flows has a larger proportion of Malays than Chinese and have their source in both the underdeveloped states of the east coast and the west coast states, mostly tending to gravitate towards Selangor. Likewise, the U-R flows, while of same importance in the underdeveloped states, are most pronounced in the west coast, especially among Malays, an indication of suburbanization in Selangor and Perak as well as the transfers of government servants. The apparent anomaly of the two-circuit system is the fairly large proportion of Malays in the U-U stream which also flows into the east coast states. However, it must be emphasized that these migrants (mainly government servants) make up only a small proportion of all Malay migrants and certainly ignore the masses of immobile Malays who do not migrate. There is also a small movement of Chinese U-U migrants to the east coast states, a stepwise migration from other urban centres in response to government decentralization policies which have recently concentrated in the urban areas of Kelantan, Terengganu and Pahang.

3.4 ECONOMIC CHARACTERISTICS OF MIGRATION STREAMS IN THE TWO-CIRCUIT SYSTEM

The clustering of certain ethnic groups within certain industries and occupations, called niches, in a country is a classic product of a society which had its early beginnings as an

immigrant society. In countries where colonialism has had an impact, this may be reinforced by colonial labour and development policies. The Malaysian economy, of Malays, Chinese and Indians which tend to dominate in different specific industries and occupations is one such example (Rias, 1973; Tham, 1977; Hirschman, 1979). Often this clustering of occupations is closely associated with residential location under the broad structure of ethnicity.

The main argument in this section is that, based on one of the most important manifestations of the two-circuit system, occupation and industry, the economic characteristics of migration are highly structured up to 1970. This conforms to the earlier discussions on the uneven development of the Malaysian economy with its spatial characteristics.

3.4.1 Employment Status of Migrants in the Two-Circuit System

Table 3.6 contains a summary of some of the important economic features of the four migration streams. The upper-circuit tends to have the largest proportion of employees, wage earners, and as indicators of modernity of work characteristics, people who do not work in the family business, and do not work at home. By contrast, the lower-circuit, represented by the R-R stream, has the lowest proportion of all these features. The R-U and U-R patterns reflect the U-U stream, although the R-U migrants possess greater similarities to the U-U migrants. The largest proportion of migrants in the labour force is in the R-R stream which also has the highest employment rate of 96.1 per cent. This may be explained by the nature of rural occupation where workers can be more easily absorbed into family labour, with varying extent of under-employment, unlike most urban-type jobs. For the same reason, U-U migrants have the highest proportion of those who do not work in the family business, at home and largest percentage unemployed.

A perusal of the activity one week prior to the census by ethnicity (Table 3.7) shows that the Chinese consistently had a relatively larger proportion employed in all streams compared to the Malays. They also had a smaller proportion of unemployed, the greatest difference in unemployed between Malays and Chinese being among U-U migrants. This is a similar pattern to the national one (Chander, 1977:420). Malays have a higher proportion of students and those who "look after the house" than Chinese in all streams. Because this data is influenced by age, it is important to

examine the activities by age-groups by ethnicity within the migration streams. For all age-groups, in all the migration streams except R-U, the Chinese have higher proportions employed than Malays. Conversely, the Malays have proportionally more unemployed than the Chinese except R-U migrants aged 20-29. This may be due to difficulties faced by the Chinese in an unstable employment market compared to Malays who are absorbed mainly into the government services. Malays have higher proportions than the Chinese in both "looking after the house" category and students (where the greatest difference is 15.7 per cent among U-U migrants). To illustrate these patterns more clearly, Figure 3.1 shows the activities of the two most migrant-prone age groups (10-19, 20-29) by ethnicity by migration stream.

Table 3.6
Migrants 1965-70: Summary of Economic Characteristics of Migration Streams

Economic Characteristics	Migration Stream			
	U-U	R-R	R-U	U-R
Labour Force	52.6	57.5	48.1	53.7
Employment rate	(93.6)	(96.1)	(94.4)	(94.4)
Unemployment rate	(6.4)	(3.9)	(5.6)	(5.6)
Employment Status				
Employee	78.2	52.1	70.4	65.8
Usual Activity				
Wage earner	73.1	45.1	65.3	59.9
Do Not Work in Family Business	98.1	88.4	96.9	94.1
Do Not Work at Home	81.8	43.7	75.0	63.8

Source: Census Sample Tape, 1970.
Note: In brackets are the employment and unemployment rates which together add up to a 100 per cent.

Table 3.8 shows the employment status of the ethnic groups by migration stream. In all but the U-R stream, the Chinese have a higher proportion than Malays as employers. The large Malay-Chinese difference in the R-R stream is probably due to the overwhelming numbers of Malays in that stream who are self-employed farmers (29.9 per cent compared to 12.0 per cent among Chinese). More Malays are self-employed than the Chinese, except in the U-U stream where the latter also have more employees, reflecting the importance of Chinese petty commercial businesses relying on family labour. The higher proportion of Malays "looking for the first job" compared to the

Table 3.7
Migrants 1965-70: Activity by Ethnicity by Migration Stream, 1970

Activity	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Employment Rate	(92.2)	(95.4)	(96.3)	(97.3)	(94.7)	(95.4)	(94.1)	(96.8)
Unemployment Rate	(7.8)	(4.6)	(3.7)	(2.7)	(5.3)	(4.6)	(5.9)	(3.2)
Look After House	23.7	23.3	24.7	21.2	27.1	25.8	27.6	21.1
Student	22.8	14.9	12.0	10.0	19.4	15.4	16.6	14.6
Other	3.8	4.7	6.7	4.8	5.4	7.6	5.3	4.4
Total No.	2,229	2,879	3,862	752	705	422	3,679	2,104
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census Sample Tape, 1970.
Note: In brackets are the employment and unemployment rates which add up to 100 per cent.

Figure 3.1
Migrants 1965-70: Activity One Week Prior to the Census of Selected Age Group by Ethnicity in Migration Stream, 1970

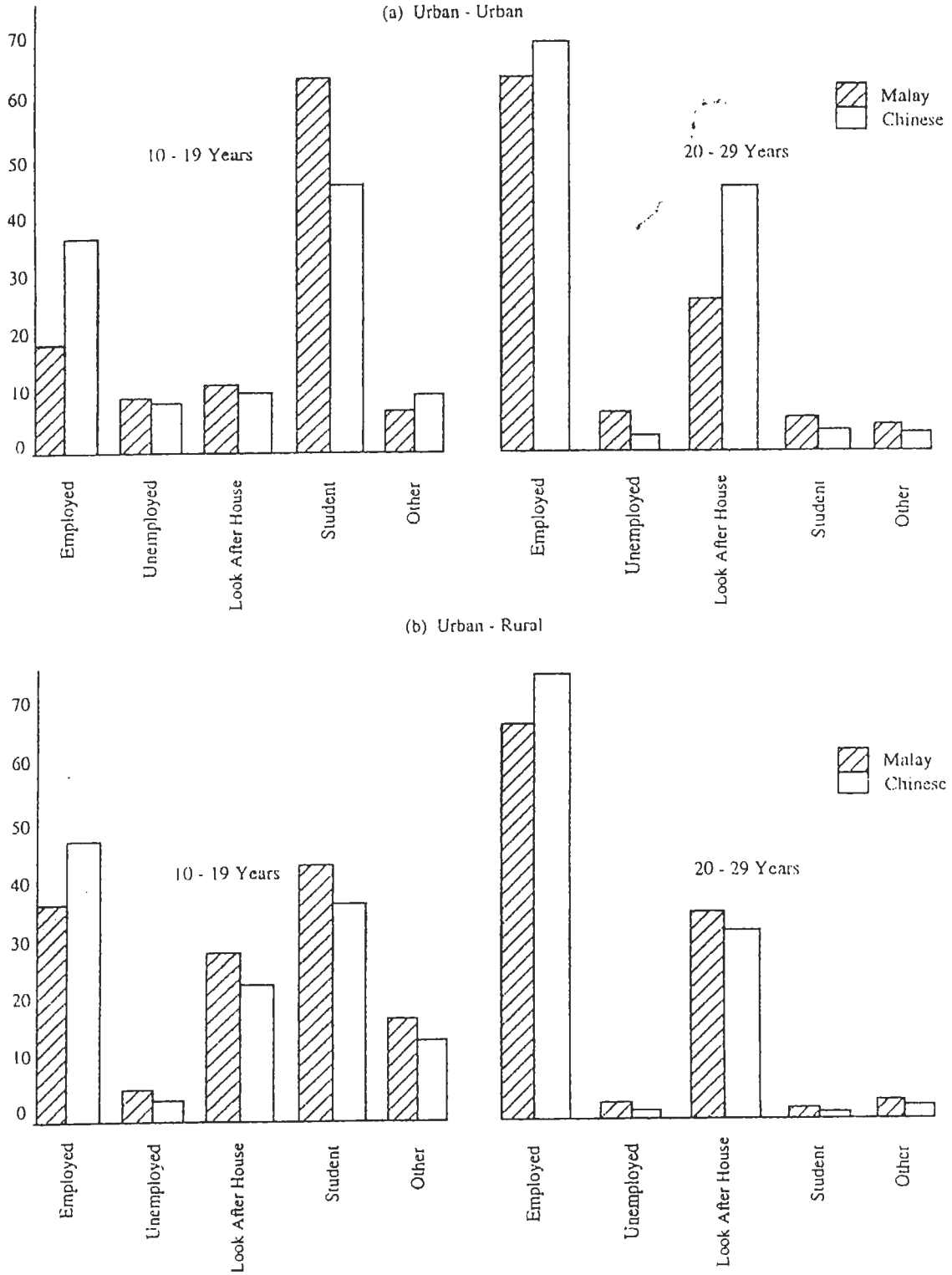
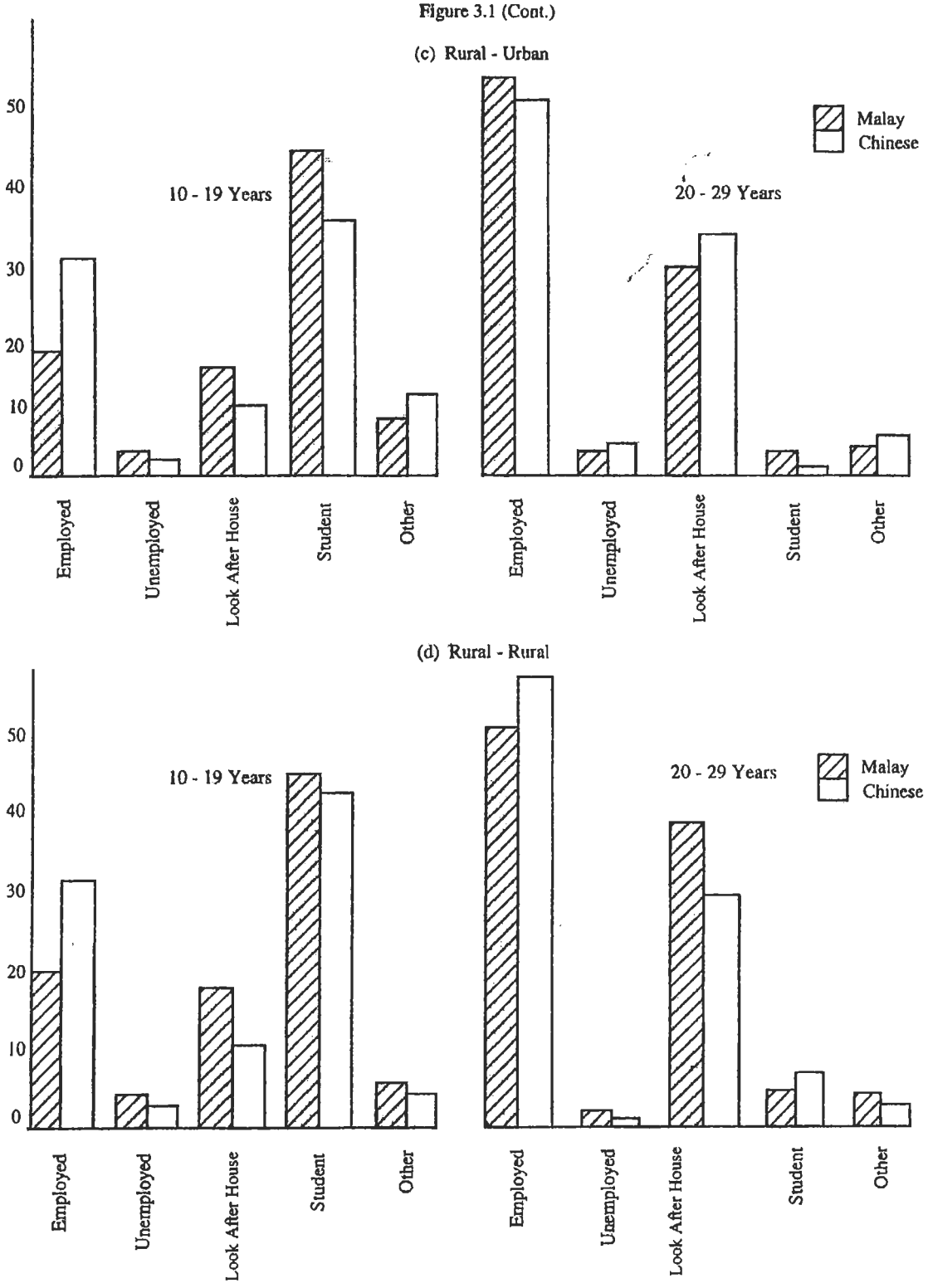


Figure 3.1 (Cont.)



Source: Census Sample Tape, 1970.

Table 3.8
Migrants 1965-70: Employment Status of Ethnic Groups by Migration Stream, 1970

Activity	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Employer	2.8	3.5	2.2	5.6	3.8	5.1	6.0	4.6
Self-Employed	5.8	10.0	29.9	12.0	13.9	10.6	18.4	15.0
Employee	81.9	76.7	44.8	68.7	69.6	70.4	59.7	71.6
Family Worker	2.3	6.2	19.8	12.4	8.0	10.6	11.7	7.4
Looking for First Job	7.1	3.6	3.2	1.2	4.7	3.2	4.2	1.4
Total No.	1,457	1,644	2,187	482	339	216	1,856	1,260
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

Chinese is consistent with the other observations on Malay unemployment, particularly in the U-U stream.

As age affects employment status, age-group by employment status by ethnicity in the four streams is explored further. Some interesting observations emerge which reinforce the earlier findings. There are proportionally more Chinese employers than Malays in most age-groups, in all streams. Owing to the prevalence of small Chinese businesses in urban areas there are far more self-employed Chinese than Malays in the U-U stream in all age-groups. The reverse occurs among R-R migrants where the Malay farmers constitute the majority. In all streams there are far more Malays "looking for the first job" than Chinese. This is most conspicuous in the 10-19 age-group where the Malay-Chinese difference reaches a peak of 13.5 percentage points in the U-U stream. This is not only a result of the larger number of young Malays entering the labour market, but indicates the real difficulties faced by Malays in penetrating the urban employment structure.

So far, the discussion has been on the more general aspects of the two-circuit system. The next part examines the two most important manifestations of the two-circuit system, that of industry in the week prior to the census and occupation of migrants in the four streams.

3.4.2 Usual Industry of Migrants in the Two-Circuit System

Table 3.9 shows the industrial groups and selected sub-categories of industries of the different migrants during the past year. This detailed breakdown provides some insights into the industries of the migrants. U-U migrants have the largest proportions of all streams in services, manufacturing, commerce, transport and utilities – all belonging to the secondary and tertiary sectors. Services in the U-U stream is mainly government, community (teachers) and personal (servants). The manufacturing industrial group in the U-U stream is the most diversified. Commerce is dominated by the retail trade.

In sharp contrast, the R-R migrants are basically in the primary sector where agricultural production, and agriculture, forestry and fishing comprise 77.1 per cent. Consistent with the other economic patterns, R-U migrants reflect U-U migrants' characteristics. The largest categories here are services, manufacturing and commerce. While the main groups in services are the same as U-U migrants, the R-U migrants tend to be in light

Table 3.9

Migrants 1965-70: Selected Industries[a] by Migration Stream, 1970

Usual Industry	Migration Stream			
	U-U	R-R	R-U	U-R
Agriculture, Forestry, Fishing	3.7	27.1	7.7	13.8
Agricultural livestock	2.5	24.6	5.0	10.6
Forestry, logging	0.8	1.5	0.9	2.0
Fishing	0.5	1.0	1.8	1.2
Agricultural Production	4.9	50.0	12.3	33.2
Rubber	4.7	41.2	11.4	28.7
Oil palm	0.1	6.6	0.7	3.4
Coconut	0.1	1.2	0.2	0.4
Mining and Quarrying	1.1	2.1	0.9	9.7
Metal	1.0	2.0	0.9	9.5
Manufacturing	16.8	4.6	15.7	10.5
Food and beverage	1.5	0.5	3.8	1.8
Textile	0.8	0.2	0.7	0.2
Footwear	2.8	0.4	2.5	0.8
Wood and furniture	1.2	1.8	2.6	2.2
Printing and paper	1.3	0.1	0.8	0.5
Rubber	1.1	0.2	0.5	0.4
Chemical, non-metallic and petrol	1.4	0.5	1.1	1.2
Metal and basic metal	1.5	0.2	1.3	1.0
Machine, electrical, transport	2.5	0.4	1.8	1.3
Construction	2.9	1.3	4.8	1.8
General contractors	2.1	1.2	4.3	1.5
Utilities	1.6	0.4	1.3	1.0
Electricity, gas	1.2	0.2	0.4	0.6
Water, sanitary	0.3	0.1	0.9	0.4
Commerce	13.1	3.9	12.7	4.3
Wholesale	1.2	0.4	1.1	1.1
Retail	10.3	3.0	10.6	4.7
Banking and insurance	1.1	0.6	1.1	1.4
Transport	6.6	1.2	3.8	2.4
Transport	5.1	1.1	2.7	2.0
Communication	1.2	0.1	1.1	0.5
Services	49.6	9.4	40.8	20.3
Government	18.8	3.1	12.3	9.2
Community	13.6	3.7	13.6	6.3
Personal	12.9	2.1	12.2	3.1
Miscellaneous	1.3	0.4	1.3	0.7
Total no.	3,571	2,777	559	3,335
%	100.0[b]	100.0	100.0	100.0[b]

Source: Census Sample Tape, 1970.

Note: [a] These are the main industry categories. Not all the sub-categories will add up to the main categories owing to their being selected ones and rounding errors.

[b] Rounding error.

manufacturing (for example, food and beverages, wood and furniture and footwear) rather than the heavier manufacturing (machine, metal and chemical) characteristic of U-U migrants. Retail comprises 85 per cent of the commercial industries. One industry in which R-U migrants are outstanding is construction. R-U migrants have the largest relative proportion in construction compared to all other streams. This suggests the importance of the rural labour supply in urban construction.[3]

U-R migrants are engaged chiefly in agricultural production, services, and agriculture, forestry and fishing. Rubber and agricultural livestock are the major categories which suggest the importance of return migration to rural areas and migration into FELDA schemes. U-R migrants in services may be due both to suburbanization and transfer of government servants to rural areas. Migrants in this stream have the largest proportion of all streams in mining and quarrying, tin being the most important. It will be shown later that like construction, this is a predominantly Chinese industry.

Table 3.10 on the ethnic composition of the industrial structure shows that Malays and Chinese dominate different industries. Thus, in the U-U stream, the Malays are mostly in services where the Malay-Chinese percentage point difference is 27.5 per cent. Even within services, while half the Malays are in government and another 20 per cent in community, the Chinese are mainly in personal (servants) and community (teachers). It is in commerce and manufacturing that the Chinese have larger proportions than the Malays, with 13.5 and 13.4 percentage points difference respectively. The retail trade is Chinese-controlled. Looking at the manufacturing industries, the Chinese tend to concentrate in the higher technologically-skilled types, such as machinery, electrical and transport manufacturing while the Malays have a slight edge over the Chinese in textiles. This is explained by *batik* manufacturing and the recency of modern textile industries with government-set preferential Malay employment quotas. Malays in the U-U circuit move almost exclusively within and between services, utilities and transport.

An analysis of the R-R stream shows that the Malays are conspicuous in agricultural production, and agriculture, forestry and fishing, both comprising 80.0 per cent of all R-R Malay migrants' industries. Even within the lower-circuit, the Chinese display greater diversification than the Malays, with substantial proportions in

[3] This is a typical pattern, especially for the circular migrants (see Young, 1982) who are unskilled and have to be labourers in construction.

Table 3.10
Migrants 1965-70: Selected Industries by Ethnicity by Migration Stream, 1970

Usual Industry	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Agriculture, Forestry, Fishing	4.7	3.2	31.3	20.4	11.7	3.0	18.2	11.6
Agricultural livestock	3.3	2.0	29.4	12.6	7.8	2.0	14.8	7.7
Forestry, logging	1.2	0.6	0.9	5.4	1.0	0.5	1.8	2.9
Fishing	1.8	0.5	0.8	2.4	2.9	0.5	1.5	1.1
Agricultural Production	1.8	6.6	48.9	43.8	8.4	15.4	33.1	24.1
Rubber	2.9	7.7	39.1	39.1	7.8	15.4	27.8	21.9
Oil palm	0.1	-	7.6	3.0	0.3	-	4.2	1.6
Coconut	0.2	-	1.4	-	0.3	-	0.7	0.1
Mining and Quarrying	0.6	1.4	1.0	5.4	0.6	1.5	3.2	20.3
Metal	0.7	1.2	1.0	5.2	0.6	1.5	3.0	20.1
Manufacturing	10.7	24.1	4.0	8.5	11.7	23.4	7.5	16.9
Food and beverage	0.6	2.2	0.5	0.7	1.3	8.0	0.9	2.8
Textile	1.5	0.3	0.2	0.2	1.0	0.5	0.3	-
Footwear	0.9	5.1	0.3	0.9	1.6	4.0	0.4	1.7
Wood and furniture	1.8	3.0	1.5	3.2	2.6	3.5	1.6	4.0
Printing and paper	1.1	1.1	0.1	0.4	0.6	-	0.4	0.6
Rubber	0.5	2.0	0.2	-	-	1.5	0.4	0.3
Chemical and non-metallic and petrol	1.9	1.1	0.4	0.2	1.2	3.0	1.1	2.3
Metal and basic metal	0.5	2.8	0.1	1.1	1.2	1.0	0.5	2.1
Machine, electrical, transport	1.0	3.7	-	0.6	1.3	3.0	1.1	2.3

Table 3.10 (contd.)

Usual Industry	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Construction	1.3	4.7	0.9	3.0	2.3	8.5	1.2	2.9
General contractors	1.4	3.1	0.7	2.8	1.9	7.5	1.0	2.4
Utilities	2.0	1.1	0.4	-	1.6	-	1.1	0.5
Electricity, gas	1.5	0.8	0.2	-	0.3	-	0.6	0.4
Water, sanitary	0.5	0.2	0.2	-	1.3	-	0.5	0.1
Commerce	6.0	19.5	2.8	9.1	12.0	13.9	4.5	11.0
Wholesale	0.9	1.6	0.2	1.3	1.6	0.5	0.2	2.6
Retail	5.0	15.5	2.1	7.6	9.1	13.4	2.2	7.5
Banking and insurance	0.9	1.6	0.5	0.2	1.3	-	1.9	0.8
Transport	9.4	3.3	1.3	0.2	4.2	3.0	2.9	2.0
Transport	6.8	3.0	1.1	0.2	2.9	2.5	2.6	1.3
Communication	1.9	0.5	0.2	-	1.3	0.5	0.2	0.7
Services	63.5	36.0	9.5	9.5	47.4	31.3	28.4	10.6
Government	34.7	4.1	3.3	2.6	19.8	2.0	15.3	1.9
Community	14.3	13.0	4.1	2.4	15.6	10.4	9.2	2.9
Personal	9.9	15.0	1.6	4.1	10.7	13.9	2.1	4.2
Miscellaneous	0.7	1.8	0.3	0.4	0.6	2.0	0.6	0.8
Total No.	1,515	1,629	2,042	461	308	201	1,680	1,186
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

commerce, manufacturing, services, and mining and quarrying.

However, the R-U Malay migrants exhibit greater industrial diversification than their U-U counterparts. There are more R-U Malays in commerce (12.0 per cent against 6.0 per cent) and manufacturing (11.7 per cent against 10.7 per cent). Nearly half of the Malays in the R-U stream are in services, almost exclusively in government and community services suggesting strongly that this is the major channel for breaking the two-circuit system.

The U-R Malay migrants are in agricultural production and services where Malay-Chinese percentage point differences are 9.0 per cent and 17.8 per cent, respectively. The high proportion of Malays in the government and community sectors suggests decentralization from established urban areas and continued suburbanization. The Chinese retain their leadership in traditional Chinese domains of mining and manufacturing.

3.4.3 Occupations of Migrants in the Two-Circuit System

Table 3.11 shows the occupations of migrants in the four streams. The upper-circuit is anticipated to have a larger share (compared with the other streams) of more educated and skilled workers. Indeed, the U-U stream consists mainly of service, production, professional-technical, clerical and sales workers. Protection services and domestic servants constitute nearly all the service workers, reflecting the role of government service and the demands of urban society for domestic help. The importance of the tertiary and secondary industries is evident in the diversified structure and nature of the occupations in the U-U stream.

R-R migrants present a quite different picture. Here, agricultural workers comprise 75.8 per cent of all R-R migrants. The U-R migrants reflect many features of R-R migrants, being mostly agricultural, production and service workers.

Examining these industrial categories by ethnicity reveals great differences between the Malay and Chinese migrants (Table 3.12). For example, in the U-U stream, Malays in the service sector are protection workers while the Chinese are mostly servants. The Chinese proportion in production work is twice the Malay proportion.

The striking Malay-Chinese differences in the R-R stream are in the category of

Table 3.11
Migrants 1965-70: Selected Occupations[a] by Migration Stream, 1970

Occupation	Migration Stream			
	U-U	R-R	R-U	U-R
Professional and Technical	15.5	3.4	12.1	6.8
Teachers	8.6	1.4	8.5	3.5
Administrative and Managerial	1.6	0.4	0.8	0.4
Clerical Workers	12.8	1.8	7.3	5.5
All clerks	6.4	1.6	6.6	4.6
Sales Workers	10.3	3.3	10.8	5.2
All sales workers	7.0	1.9	7.1	2.8
Working proprietor (sales)	0.9	0.7	1.1	0.9
Service Workers	28.0	5.2	23.5	11.8
Cooks and maids	10.7	1.8	9.9	2.8
Protection services	14.4	2.7	7.8	6.8
Working proprietor (services)	0.4	0.1	0.4	0.2
Agricultural Workers	7.8	75.8	20.0	45.7
Farm managers	0.2	1.0	0.7	-
Farmers	1.4	21.1	2.8	9.7
Animal husbandry	4.9	47.8	12.3	28.8
Forestry workers	0.5	1.2	0.5	1.6
Fishermen, hunters	0.9	1.0	1.7	1.2
Production Workers	23.9	10.1	25.4	24.6
Miners	0.5	1.1	0.4	6.1
Wood processers	-	0.8	0.9	1.2
Chemical processers	0.5	0.9	1.0	1.3
Food processers	0.6	0.5	2.8	1.0
Tailors	3.0	0.4	2.4	0.7
Machine and electrical fitters	4.3	0.8	1.9	2.4
Bricklayers and carpenters	2.1	1.0	2.9	1.3
Dock workers	-	-	-	1.2
Transport workers	3.5	1.8	4.3	2.9
Not Elsewhere Classified	7.8	4.8	10.2	7.0
Total No.	3,321	2,869	578	3,458
%	100.0[b]	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

Note: [a] Major occupational categories exclude labourers not elsewhere classified but proportions of specific occupations include them. As the sub-categories are selected ones, they do not necessarily add up to the main categories.

[b] Rounding error.

Table 3.12
Migrants 1965-70: Occupation[a] by Ethnicity by Migration Stream, 1970

Occupation	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Professional and Technical	14.8	15.5	3.8	2.2	15.1	8.2	8.6	4.5
Teachers	8.0	8.3	3.0	1.3	10.6	5.3	5.3	1.7
Administrative and Managerial	1.3	1.8	0.2	1.1	0.4	1.5	0.1	0.9
Clerical Workers	15.6	10.7	1.3	2.8	7.2	6.7	4.8	6.6
All clerks	11.2	9.4	1.2	2.8	5.3	6.3	3.7	6.1
Sales Workers	4.6	14.7	2.5	7.6	9.4	13.4	2.6	8.4
All salesmen	2.8	11.6	1.3	4.5	5.6	9.2	1.2	5.2
Working proprietor (sales)	0.6	1.2	0.6	1.8	1.1	1.4	0.5	1.6
Service Workers	41.0	17.8	4.9	6.7	27.7	17.0	16.4	6.9
Cooks and maid	8.0	11.1	1.5	2.8	11.2	1.8	3.9	
Protection services	27.5	1.9	2.4	2.8	12.5	0.5	11.9	1.4
Working proprietor (service)	0.2	0.5	0.2	-	0.4	0.5	0.2	0.3
Agricultural Workers	6.0	8.6	79.3	60.7	19.4	20.1	51.8	32.7
Farm managers	0.2	0.2	0.6	1.7	0.3	1.0	1.0	1.4
Farmers	1.0	1.3	26.3	7.7	4.4	1.0	14.2	5.6
Animal husbandry	2.2	5.8	46.9	44.4	8.7	16.0	29.2	21.0
Forestry workers	0.7	0.3	0.9	3.6	0.6	0.5	1.5	2.3
Fishermen & hunters	1.4	0.5	0.8	2.4	2.8	0.5	1.5	1.1

Table 3.12 (contd.)

Occupation	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Production Workers	16.6	30.8	7.9	18.9	20.9	33.0	15.8	39.9
Miners	0.3	0.7	0.5	3.0	0.6	1.0	2.2	12.8
Wood processers	0.9	0.9	0.5	2.8	-	-	0.9	2.1
Chemical processers	0.5	0.4	0.9	0.4	-	-	1.5	0.7
Food processers	0.2	0.9	0.6	0.4	0.9	5.8	0.5	1.6
Tailors	0.7	5.0	0.3	0.9	1.9	3.4	0.3	1.4
Machine and electrical fitters	1.7	6.6	0.5	2.4	1.3	2.9	1.4	4.3
Bricklayers and carpenters	0.9	2.9	0.7	2.1	2.5	4.4	0.9	2.5
Dockers	1.6	1.3	0.4	0.4	0.3	3.4	0.9	1.9
Transport workers	3.7	2.6	1.7	2.4	5.3	2.9	2.6	2.9
Not Elsewhere Classified	10.5	5.4	4.9	1.7	13.4	5.8	8.4	4.3
Total No.	1,343	1,569	204	469	321	206	1,746	1,219
%	100.0[b]	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

Note: [a] Major occupational categories exclude labourers not elsewhere classified but proportions of specific occupations include them. As the sub-categories and selected ones, they do not necessarily add up to the main categories.

[b] Rounding error.

farmers (18.6 percentage point difference) and production workers (11.0 percentage point difference). Among R-U migrants, the major Malay-Chinese contrasts are in production (12.1 percentage point difference) and sales (4.0 percentage point difference). It would seem that while Malays in services migrate as or into the armed services, the Chinese move into domestic service. While Chinese are diversified within the production category, the Malays tend to concentrate in transport. The greater dispersal of Chinese in the professional-technical category is shown in the larger number of Chinese engineers, doctors and accountants compared to Malays. The Malay share of the professional-technical category is mainly as teachers and nurses.

The discussion so far has shown that consistently, the U-U stream had the more modern, skilled occupations in the tertiary and secondary sectors. In direct contrast, the R-R migrants were mainly in the primary sector, remaining in more traditional-type work. Both R-U and U-R streams show characteristics from the upper- and lower-circuits, which may be explained by their being transitional between the two- circuits. This section has also revealed that the Malays are generally less diversified industrially and occupationally than the Chinese, being predominantly in agriculture. A break into the upper-circuit by the Malays is almost exclusively into wage-labour sectors of government, transport, utilities and some modern agriculture such as oil palm.

The apparent preference of Malays for wage employment is seen in the type of industries and occupations in which they cluster. The Chinese, on the other hand, congregate in traditionally Chinese-associated industries and occupations, being most obvious in commerce (sales work), manufacturing (production workers), mining and construction. This issue will be discussed further, after an analysis of industries and occupations within the formal and informal sectors.

3.5 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE TWO-CIRCUITS

Socio-demographic characteristics are pertinent to the two-circuit hypothesis because what we expect to find in the upper-circuit or the U-U stream is that they have the mostly highly educated migrants, with literacy in more than one language, are single and mostly males. Consistent with the nature of the two-circuit system, the R-R stream, as the lower-circuit tends to have less-educated migrants, lower proportion of single migrants and fewer males. The R-U and U-R streams which represents the break in the circuits should reflect features of the U-U stream. These socio-demographic

variables are important because they, especially age and sex, affect the economic characteristics. For example, one has to ascertain whether the larger proportion of Malays in the unemployed category of U-U migrants is due to their comparatively younger population structure, or perhaps to the problem Malays face in trying to penetrate the urban labour market. Similarly, if the R-R migrants appear to be less educated we have to control for age in order to compare more accurately between migration streams. Socio-demographic factors directly influence economic characteristics, for example, one of the most obvious, the level of education[4] determining occupation.

3.5.1 Age-Sex Structure of Migrants in the Two-Circuit System

First, let us examine the age-sex structures of the different migration streams for they affect the other socio-demographic variables such as marital status, literacy and level of education of the migrants (Figure 3.2). All streams have more males than females. The R-R migrants have the most balanced sex ratio (104 males : 100 females) while the U-R stream, the most unequal sex ratio (112 males : 100 females). The U-U and R-U streams have a high proportion in the 15-19 and 20-24 age-groups which suggests the importance of single migrants. In contrast, the regularity of the R-R age-sex structure indicates high levels of family migration.

The age-sex structure of ethnic groups in the different migration streams are depicted in Figures 3.3–3.6. The R-R age-sex structure of the Malays is more balanced than that of the Chinese. The Indians have more females due to patrilocality after marriage. Twenty-eight per cent of the Malay R-R migrants are below 10 years old suggesting the prevalence of family migration within this stream. The Chinese have a smaller proportion within this age-group due to less family migration and probably declining fertility.

The U-U migration stream shows a predominance of males among all communities, especially the Malays. The Malays have been drawn most heavily from the 15-19 and 20-24 age-groups (20 per cent compared to 16.5 per cent among the Chinese). The major difference between Malays and Chinese is in female migration. The two major female age-groups for the Malays are 10-14 and 15-19 years while the Chinese

[4] Level of education is defined as: Primary (Year 1-6); Secondary (Year 7-11); Pre-university Year 12-13); Tertiary (Year 14+).

Figure 3.2
Migrants 1965-70: Age-Sex Structure of Migration Streams, 1970

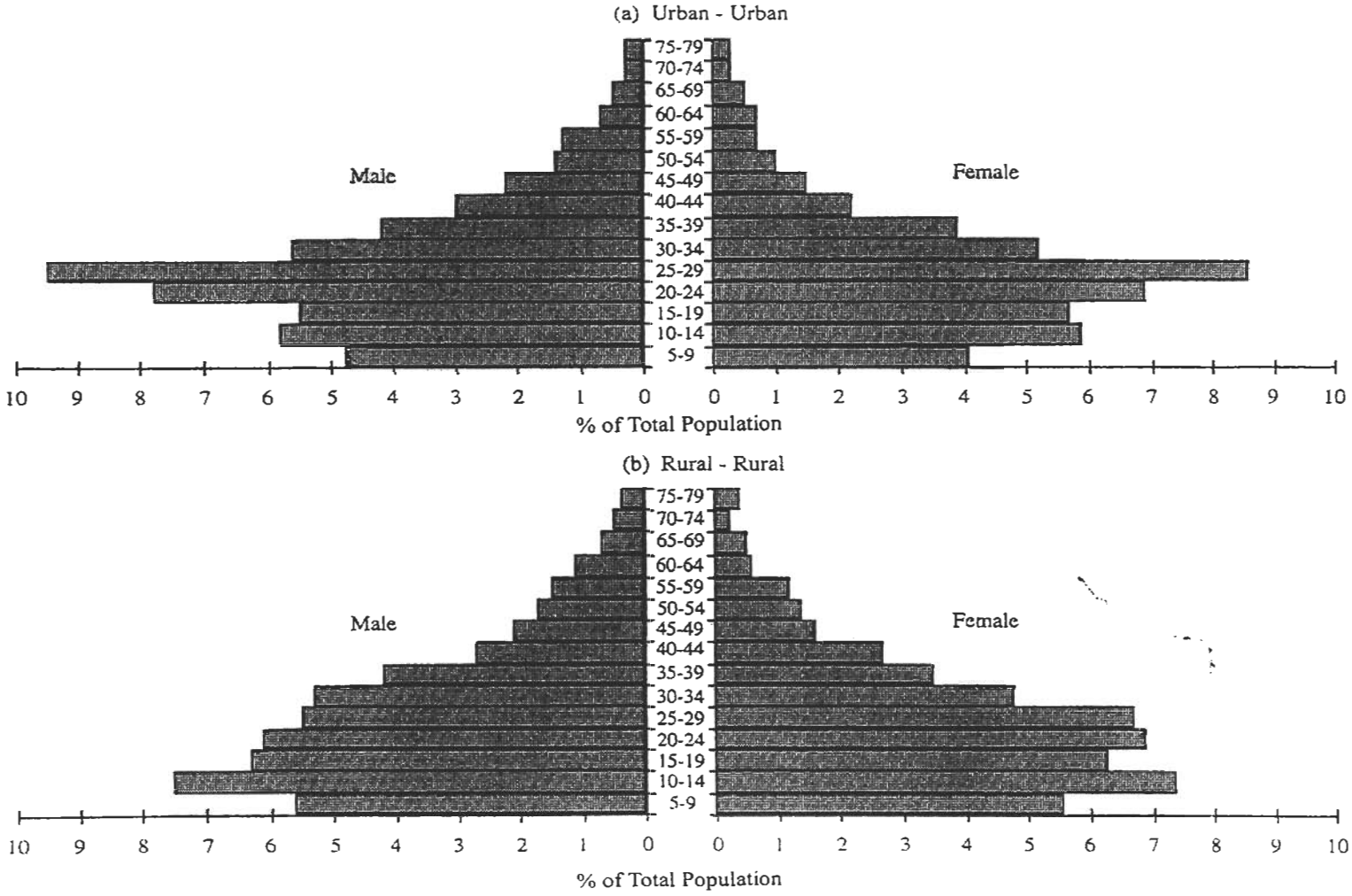
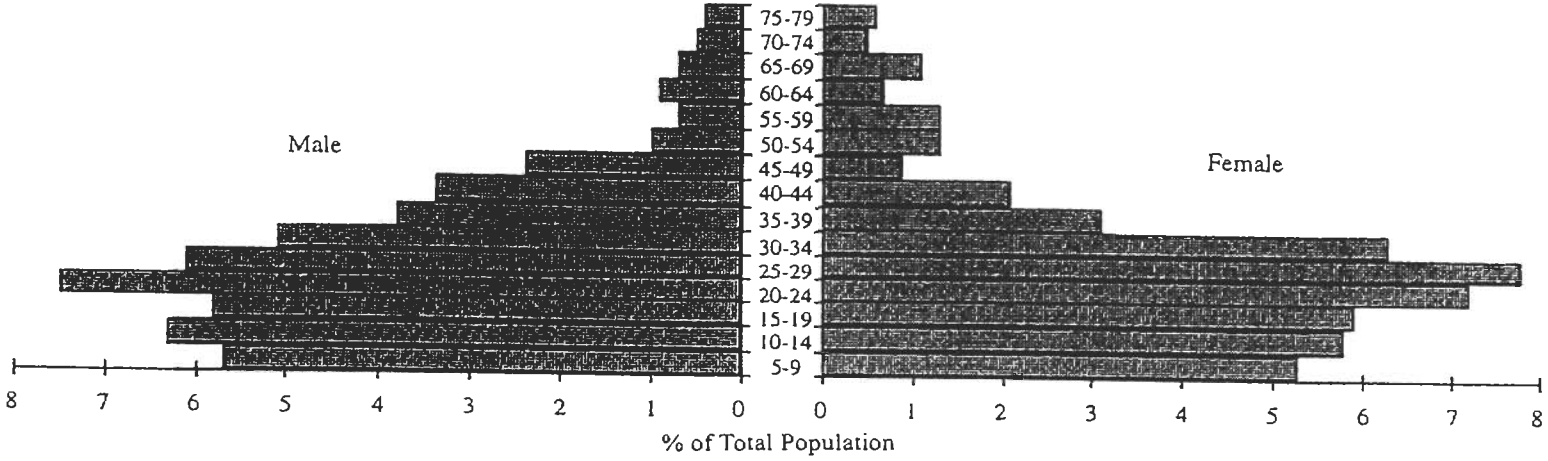
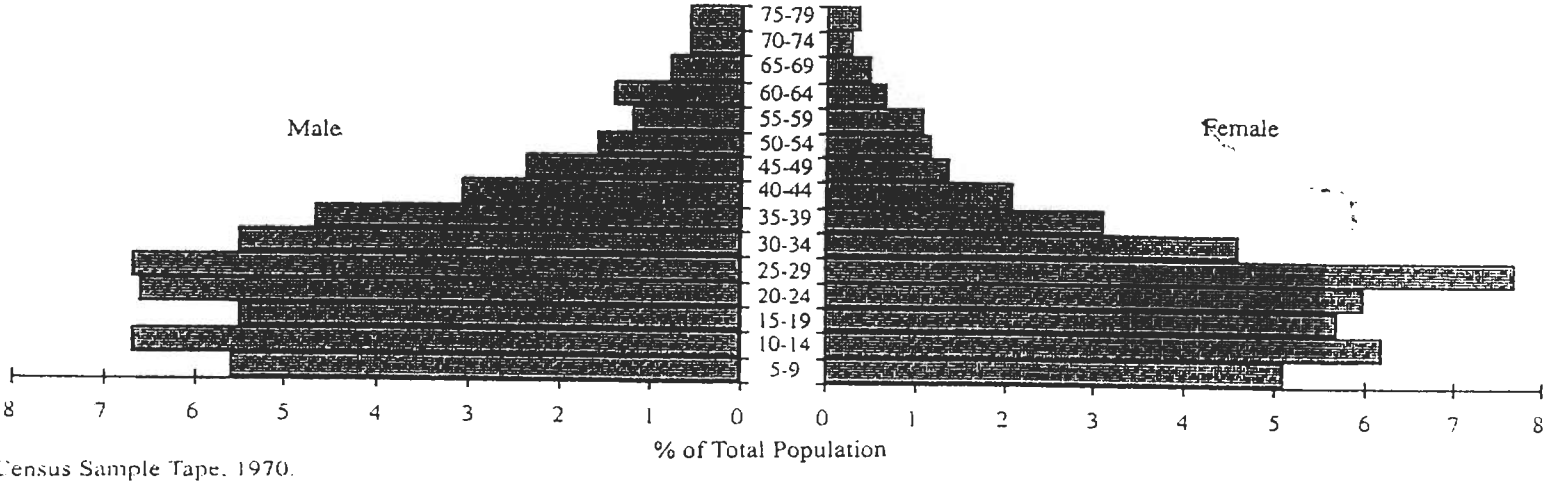


Figure 3.2 (Cont.)

(c) Rural - Urban

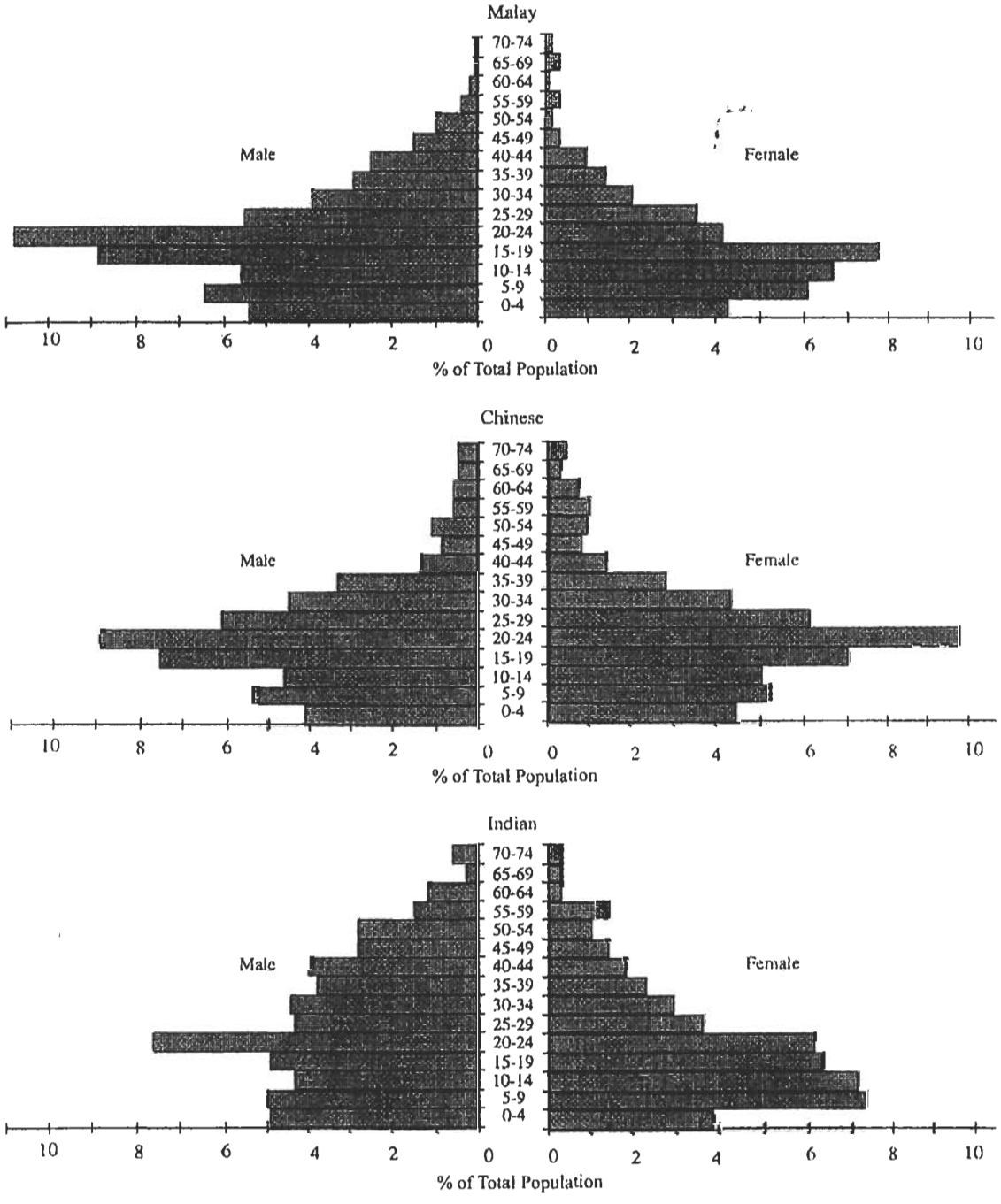


(d) Urban - Rural



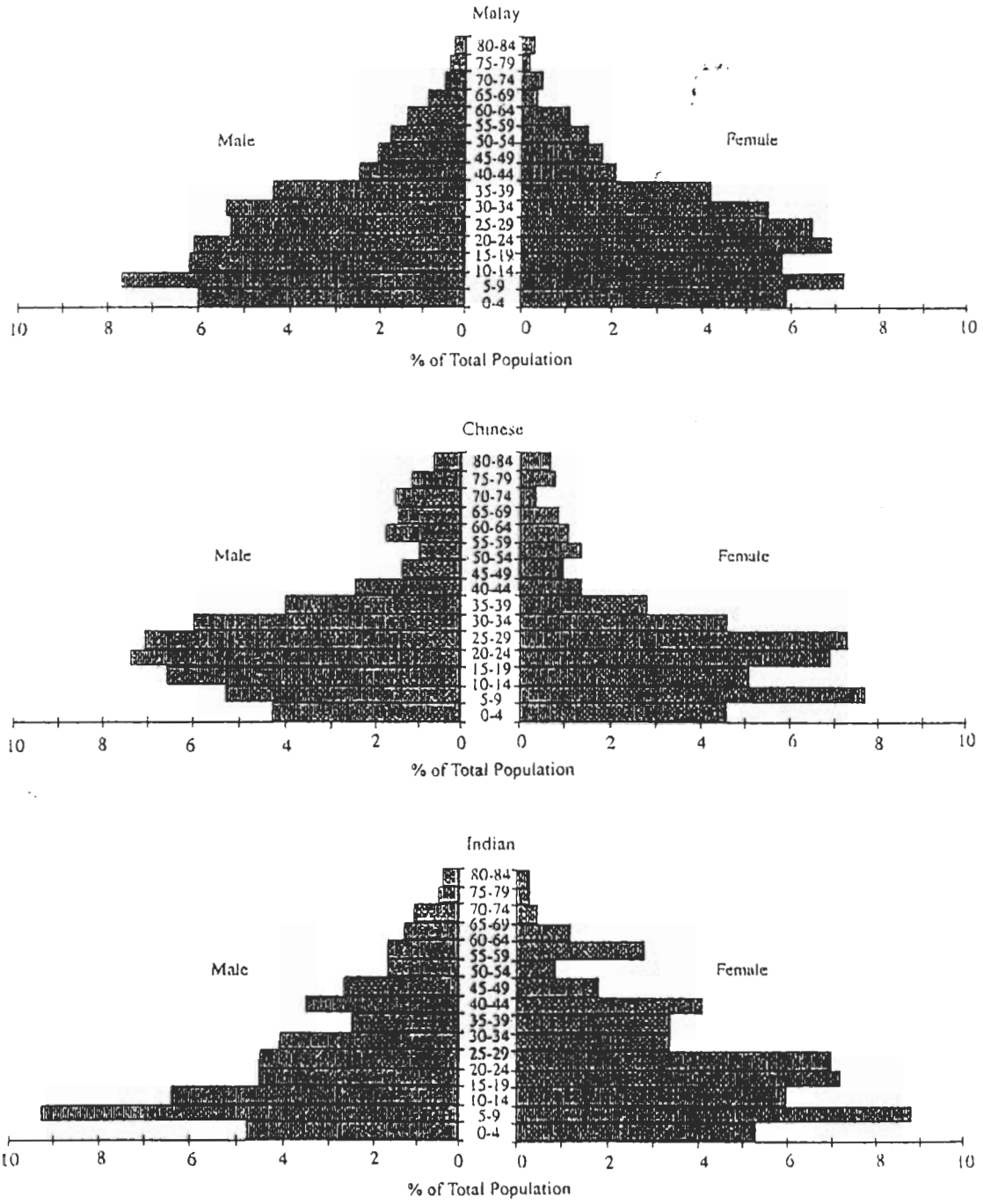
Source: Census Sample Tape, 1970.

Figure 3.3
Migrants 1965-70: Age-Sex Structures of Urban-Urban Migrants by Ethnicity, 1970



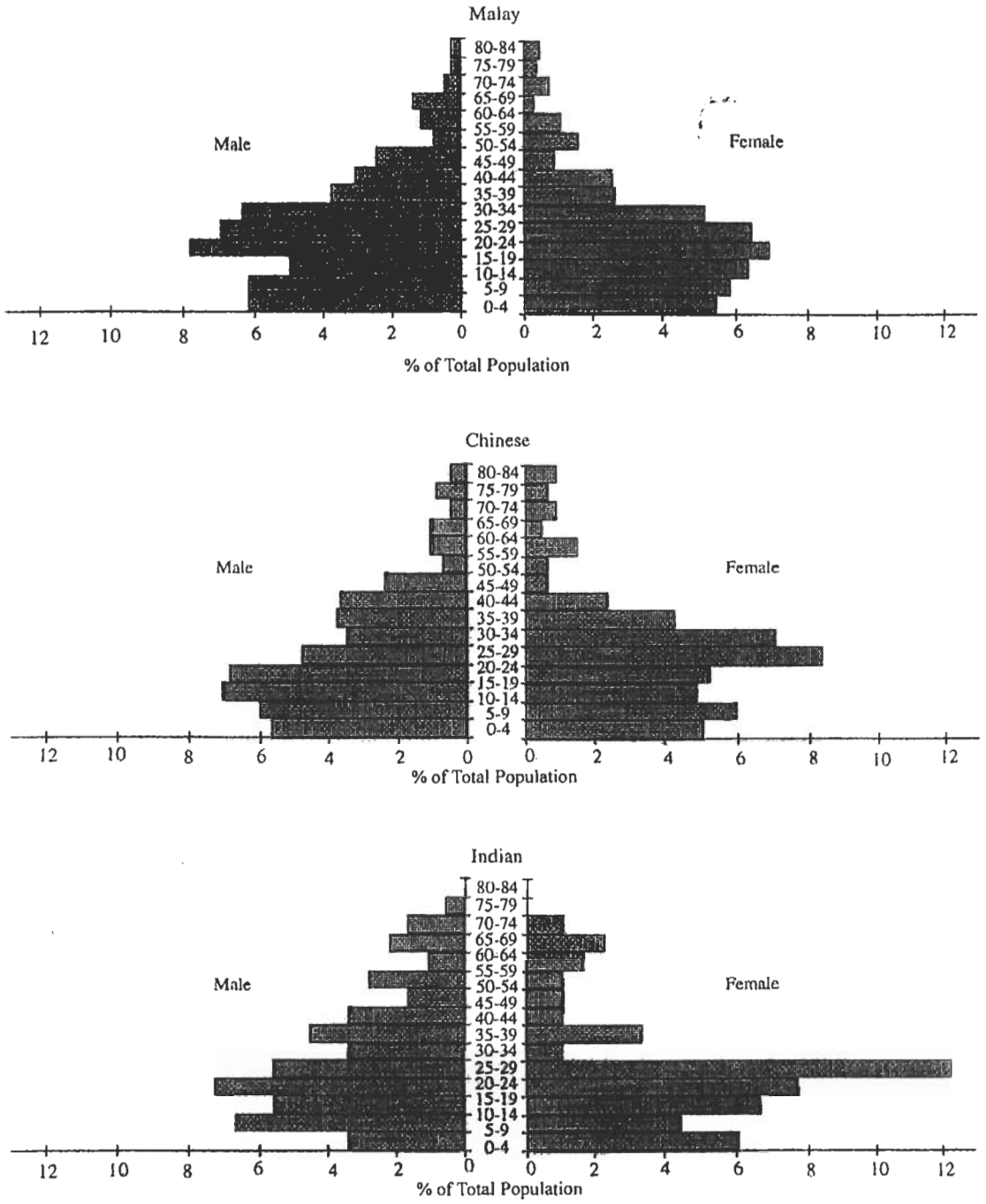
Source: Census Sample Tape, 1970.

Figure 3.4
Migrants 1965-70: Age-Sex Structures of Rural-Rural Migrants by Ethnicity, 1970



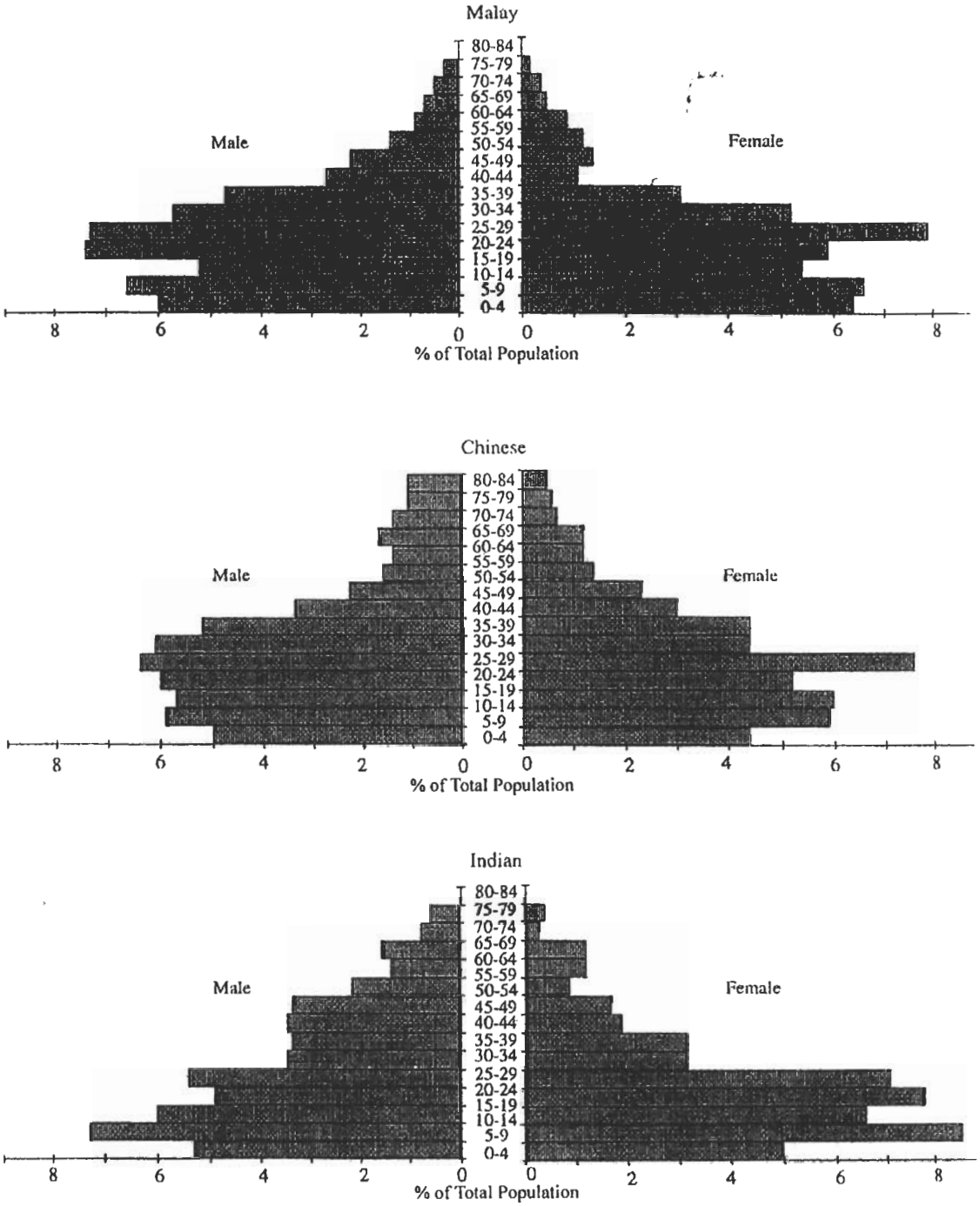
Source: Census Sample Tape, 1970.

Figure 3.5
Migrants 1965-70: Age-Sex Structures of Rural-Urban Migrants by Ethnicity, 1970



Source: Census Sample Tape, 1970.

Figure 3.6
Migrants 1965-70: Age-Sex Structures of Urban-Rural Migrants by Ethnicity, 1970



Source: Census Sample Tape, 1970.

equivalents are 15-19 and 20-24 years. While the proportion for the Malays aged 15-24 is 13.5 per cent, the Chinese proportion for the same age-group is 16.5 per cent.

More Chinese females are migrating independently. The younger age-groups for the Malays may be explained by education and family migration as well as younger age at marriage. There is also a larger proportion of people aged 50 and over in the Chinese U-U stream compared to the Malays (5 per cent versus 1.3 per cent). This may be due to the fact that the Chinese have been in this upper-circuit for a longer period than the Malays (being traditionally the urban community) and by the tendency for urban Malays to retire to their *kampung asal* (village of origin) at the end of their working life with the government (see McGee, 1969; Nagata, 1974). The Indian age-sex structure for migrants shows an ageing male population with a young female proportion, a reflection of the male-oriented immigrant characteristics of the Indian population.

The R-U migration stream displays slightly different characteristics from the U-U stream. While it is male-dominated for the Malays, it is female-dominated for the Chinese and Indians (Figure 3.5). The particular pattern of the non-Malays probably reflects greater female and marriage migration as demonstrated in the heaping of the 15-19, 20-24 and 25-29 age-groups.

The U-R age-sex pyramids are mostly male, with the Chinese having the largest difference (121 males : 100 females) (Figure 3.6). While the Malay age-sex structure shows a predominance of those aged 15-19 and 20-24 years (suggesting government transfers), there is no clear age heaping among the Chinese.

Table 3.13 provides a summary of the salient differences in socio-demographic characteristics among the four migration streams. As alluded to in the discussion on age-sex structures, U-R migrants have the largest male proportion, followed by the U-U migrants. The U-U migration stream has the largest proportion of single migrants, in contrast to the low proportion noted for R-R migrants.

The R-U stream has the next highest percentage of single migrants. These are mainly youths pursuing further education or who have jobs in urban centres. The small proportion of single migrants among the R-R migrants is due to the prominence of family and marriage migration. The fairly high proportion of married migrants in the U-R stream suggests suburbanization and retirement migration by families.

Table 3.13
Migrants 1965-70: Summary of Socio-Demographic Characteristics of Migration Streams, 1970
(in percentage)

Socio-Demographic Characteristics	Migration Stream			
	U-U	R-R	R-U	U-R
Males	52.4	51.0	51.1	52.9
Never Married	51.2	35.8	44.4	41.9
Literate	80.0	60.6	74.2	69.9
One Language	44.2	51.7	51.4	51.8
Two or more Languages	35.8	8.9	22.8	18.1
Primary Schooling	43.6	49.7	47.5	48.4
Secondary Schooling	32.7	9.7	22.4	18.4
University	1.1	0.1	0.5	0.2
Other tertiary	1.8	0.4	0.7	0.7

Source : Census Sample Tape, 1970.

3.5.2 Education and Literacy of Migrants in the Two-Circuit System

As anticipated, U-U migrants have the highest proportion who are literate in comparison to the low levels of R-R migrants. The large number of literates in the U-U stream is because of its share of students (18.7 per cent of U-U migrants) and the more qualified types of occupations in urban centres. R-R migrants are mainly farmers. The fact that 74 per cent of the R-U migrants are literate is due to both the qualifications required for urban jobs and the high student proportion (17.2 per cent of R-U migrants).

Table 3.14 shows the major literacy groups by ethnic composition within the migration streams. For both Malays and Chinese, the largest percentage of illiterates is found in the R-R and U-R streams. A closer examination reveals that the Malays are relatively more literate than the Chinese in all streams. This may partly be explained by the larger proportions of Malay students than Chinese students in all streams.[5] But, more importantly, it is the necessity for Malays to be more educated than the other communities to penetrate the upper-circuit owing to the nature of the types of occupations which they have access to. On the other hand, Chinese are able to migrate to and within urban areas even though they have little education. While the illiterate

[5] The Malay-Chinese percentage point difference in student proportions are 7.9 per cent, 2.0 per cent, 4.0 per cent and 2.0 per cent in the U-U, R-R, R-U and U-R streams, respectively.

Table 3.14
Migrants 1965-70: Major Literacy Groups by Ethnicity by Migration Stream, 1970

Major Literacy Groups	Migration Stream							
	U-U		R-R		R-U		U-R	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Malay	46.0	0.3	53.6	0.5	58.2	0.5	59.4	0.6
Chinese	0.1	35.5	0.0	44.8	0.0	37.7	0.0	39.3
Malay-Chinese	0.0	1.4	0.0	0.9	0.0	1.9	0.0	0.6
English	0.4	6.7	0.0	2.2	0.1	4.3	0.1	4.4
Malay-English	36.9	10.1	6.4	3.3	18.5	7.6	14.6	5.0
Chinese-English	0.0	7.2	0.0	2.6	0.0	5.2	0.0	4.8
Sub -Total	83.4	61.2	60.0	54.3	76.8	57.2	74.1	54.7
Illiterate	11.2	19.6	36.2	32.6	19.9	25.8	22.0	29.3
Total No.	2,968	2,902	3,910	767	710	422	3,724	2,129
%*	94.6	80.8	96.2	86.9	69.7	83.0	96.1	84.0

Source: Census Sample Tape, 1970.
Note: * The remainder from 100 per cent are the semi-literates and Malay or Chinese migrants literate in Tamil (insignificant number).

Malays are left in the rural areas in agriculture (as non-migrants or rural-rural migrants), the illiterate Chinese are able to carve a niche for themselves in the urban employment structure. This is another important factor causing the entrenchment of the two-circuit system. It shows the disadvantages and limited opportunities for economic mobility faced by the uneducated rural Malay. This point is directly related to the nature of job recruitment, job requirements and the racially stratified urban employment structure. The need for the Malay to be better educated than the Chinese to find work in urban areas is evidenced in the higher literacy of Malays within all the streams but mainly in the R-U stream (percentage point difference of 19.6 per cent).

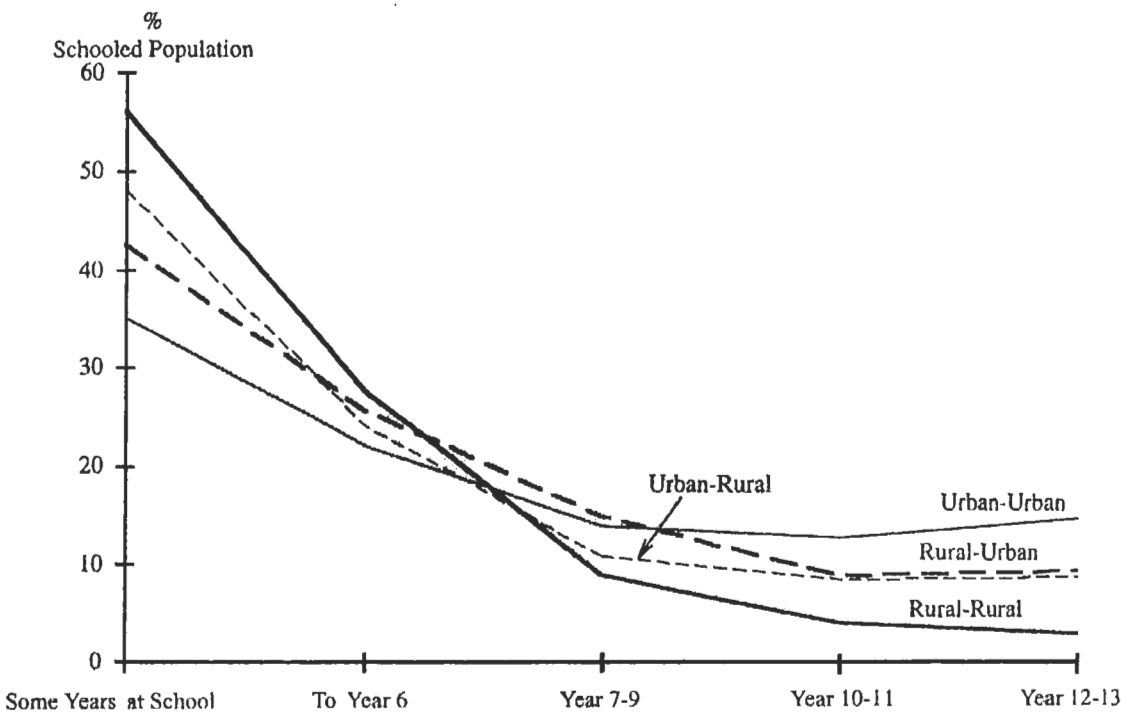
The R-R Malay and Chinese migrants tend to be educated exclusively in one language, usually their own language. For example, there are more bilingual migrants (mainly Malay-English and Chinese-English) in the U-U and R-U streams than the R-R or U-R flows. The Malay-English proportion is larger than the other combinations due to the educational structure. The preference of middle-class Chinese to educate their children in English is clear from the consistently higher proportions noted by the Chinese compared to Malays in all streams. Until the *Bumiputra* policies of recruitment in the 1970s, English was the preferred language for formal employment.

The U-U stream has the highest proportion (32.7 per cent) of migrants with secondary schooling (Table 3.13). The next highest percentage is noted by the R-U migrants. As anticipated, R-R migrants have only 9.7 per cent with secondary schooling. Figure 3.7 illustrates in greater detail the highest level of schooling of migrants in the four streams. R-R migrants have the highest proportion with "some primary school education" and the lowest percentage with university education. Consistently with all the other socio-demographic patterns discussed so far, the U-U migrants are the most educated, followed by R-U migrants.

Figure 3.8 depicts the ethnicity of migrants with the highest level of education in the four migration streams. In all streams, the Chinese have larger percentages than Malays from Form 5 onwards. The difference is greatest in pre-university levels in the U-U and U-R streams.

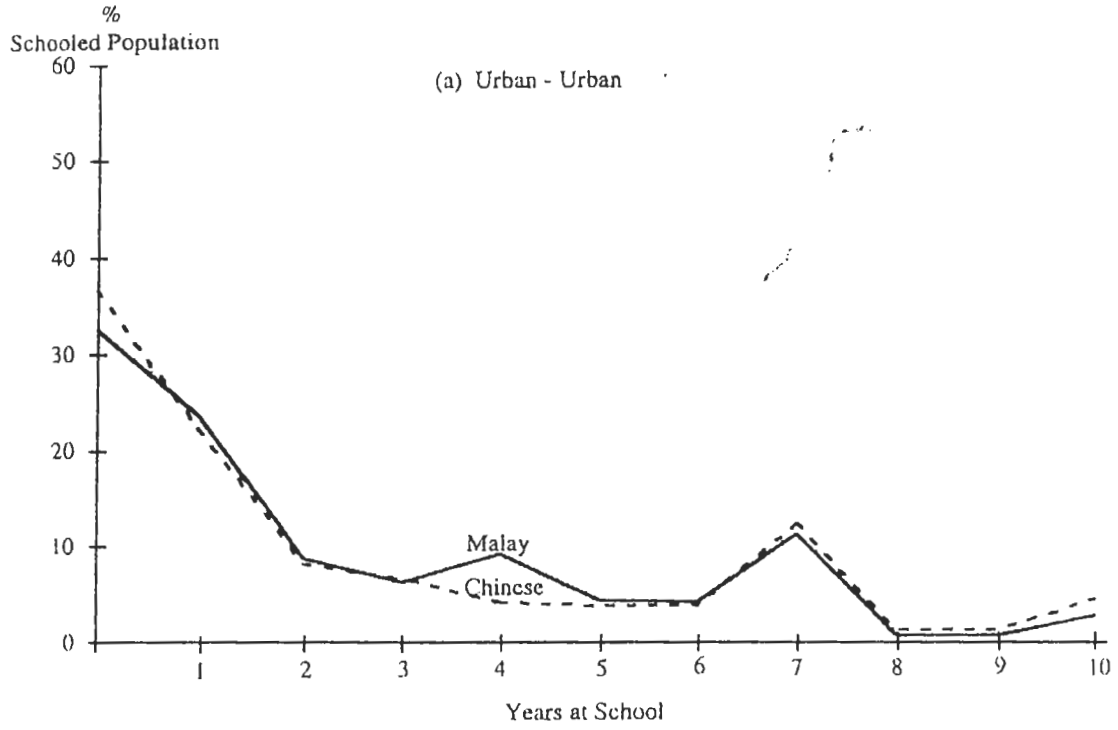
Because schooling is affected strongly by the age structure of the migrants, Figure 3.9 shows the highest level of schooling of Malay and Chinese migrants by the two most

Figure 3.7
Migrants 1965-70: Highest Level of Schooling by Migration Stream, 1970



Source : Census Sample Tape, 1970.

Figure 3.8
Migrants 1965-70: Highest Level of Schooling by Ethnicity by Migration Stream, 1970



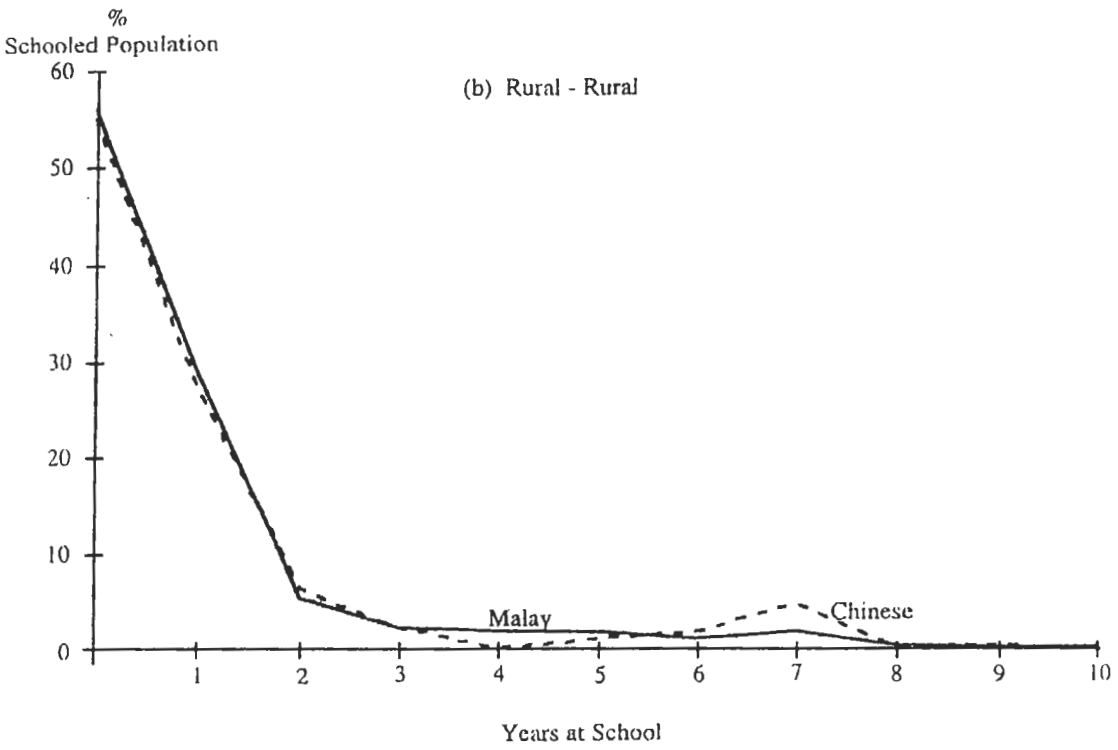
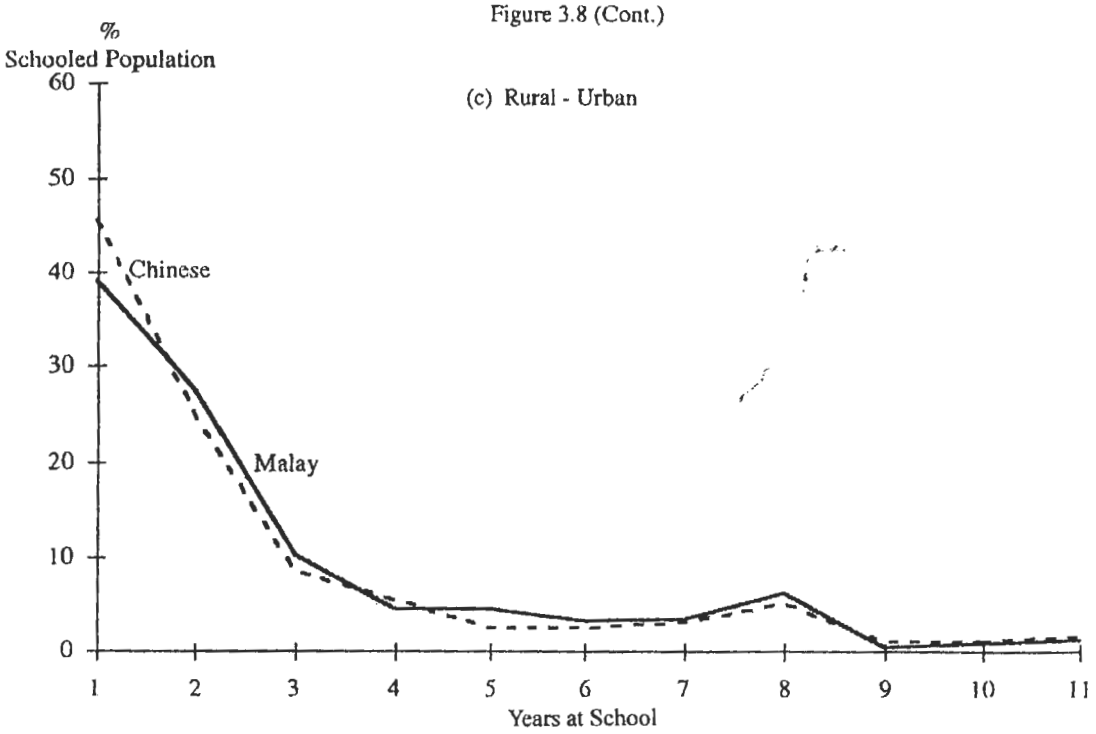
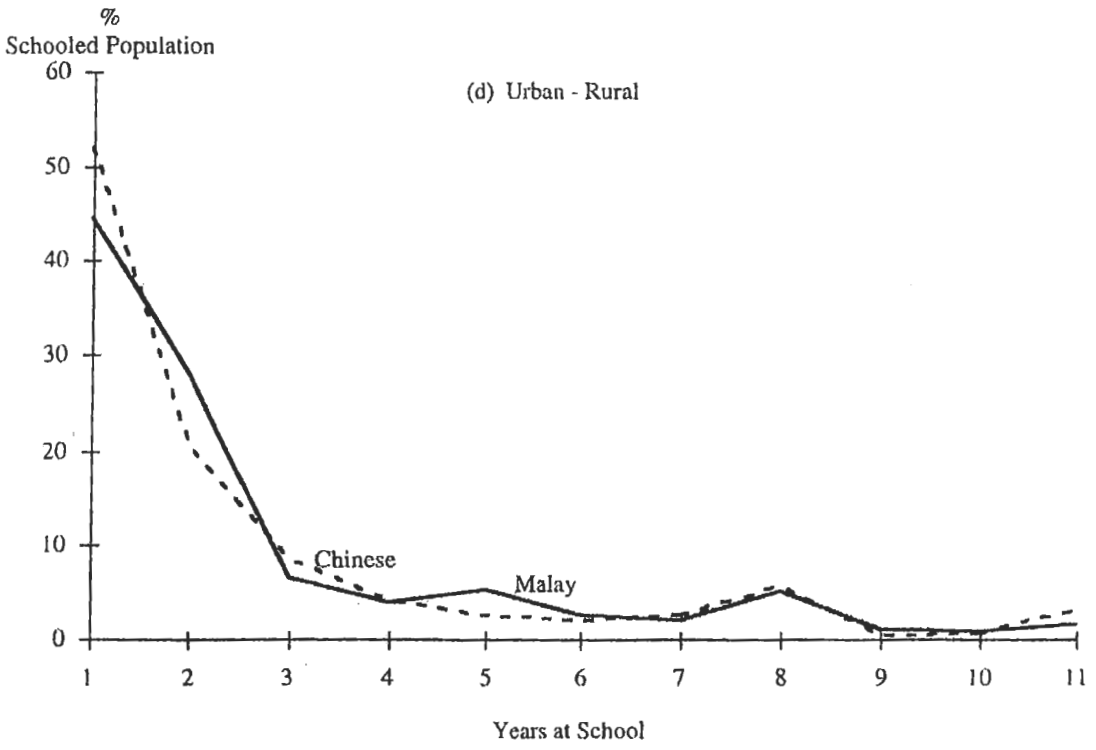


Figure 3.8 (Cont.)





Source: Census Sample Tape, 1970.

Figure 3.9
Migrants 1965-70: Highest Level of Schooling by Age Groups by Ethnicity by Migration Stream, 1970

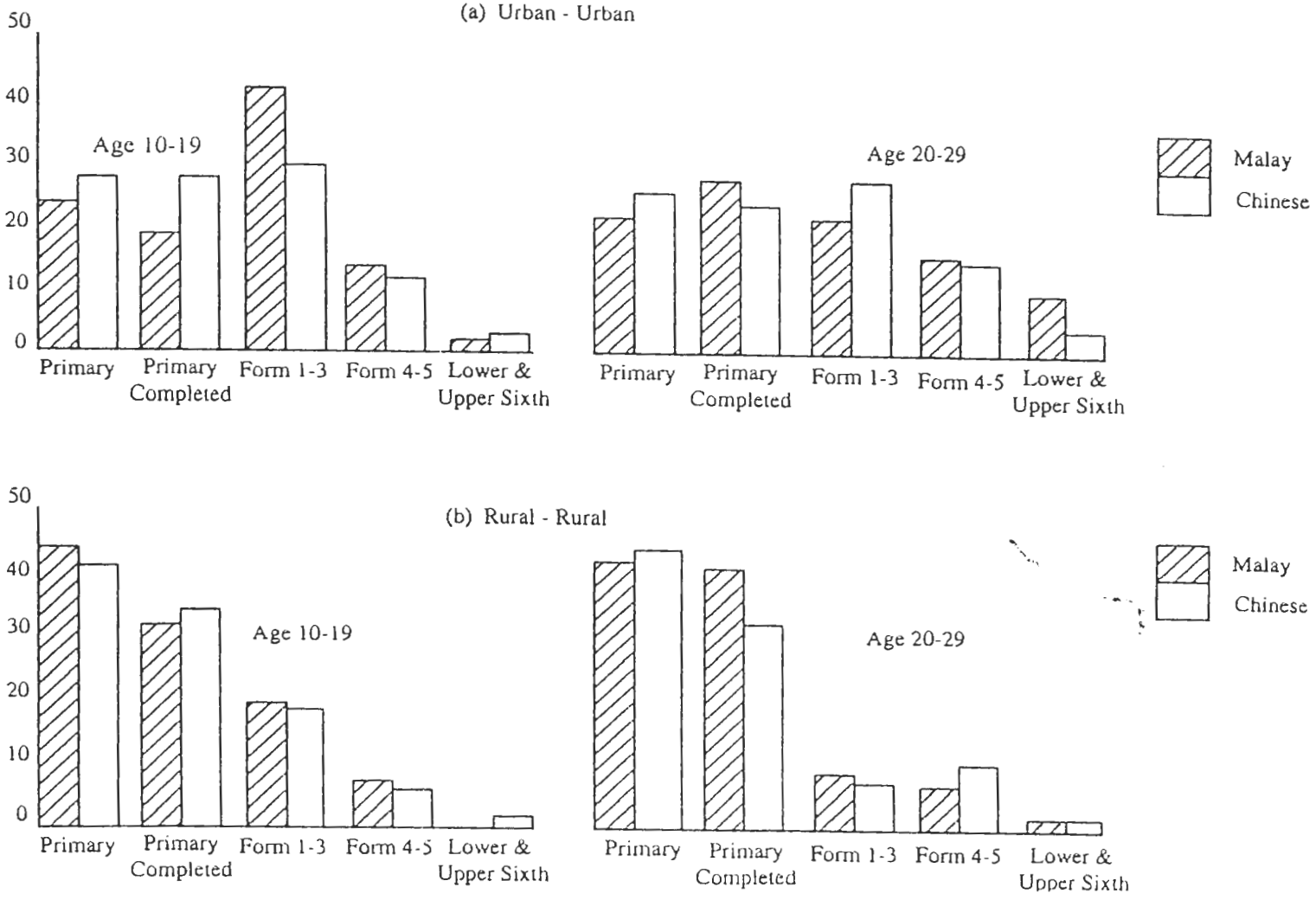
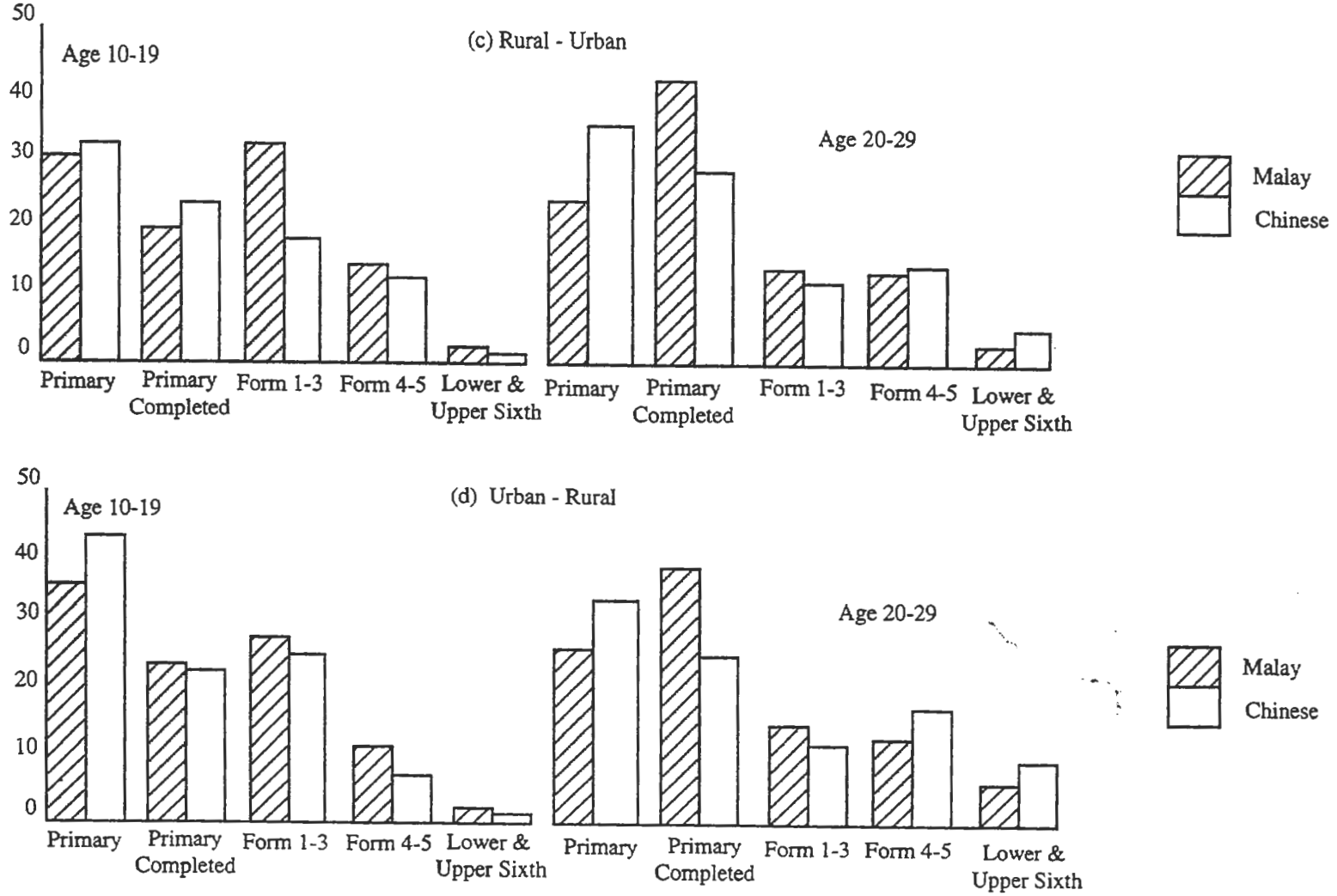


Figure 3.9 (Cont.)



Source: Census Sample Tape 1970.

migration-prone age-groups of 10-19 and 20-24. The significance of these age-groups is that they are the stages when migrants enter the workforce. In all migration streams, there are proportionally more Malays than Chinese in the secondary education levels, the difference being accentuated in the U-U and R-U streams. This finding lends support to the earlier argument on the need for Malays to be more educated than the Chinese if they are to be in the upper-circuit and to penetrate into the urban employment structure. However, consistent with earlier patterns of schooling, the Chinese tend to have higher proportions than Malays in the pre-university levels. Although Figure 3.9 does not include the older age-groups, an examination of migrants aged 30-39 and 40-49 points to the relatively higher education of the Chinese compared to the Malays. The higher proportions of Malays in the 0-9 age-group as well as the 10-19 and 20-29 age-groups indicate the more selective nature e of Malay migration compared to the Chinese and the impact of rural development policies geared to increase Malay education (refer Chapter 2).

Information on tertiary education among migrants of the four streams shows that the U-U migrants have both the highest percentages with tertiary education and university education (refer Table 3.13). In all streams the Chinese have a higher proportion with tertiary education – a reflection of their higher educational attainments and a more diversified tertiary education.

This section has explored the major socio-demographic characteristics of the four migration streams. The U-U stream, or the upper-circuit, with its other spatial ramifications are mainly single males in the younger age-groups of 15-19 and 20-24. They are not only more literate but command literacy in more than two languages. They have the highest education, with secondary and university levels as well as the most diversified tertiary education. In sharp contrast, the R-R migration stream scored lowest for these educational attainments. As expected, the R-U migrants ranked second after the U-U migrants for these positive factors.

When Malays are compared with Chinese, they usually had more secondary education that the Chinese except at the highest level of schooling, such as pre-university and university and are less diversified in their tertiary education.

3.6 MIGRATION STREAMS: FORMAL AND INFORMAL SECTOR ANALYSIS

The previous sections demonstrated that the two-circuit system is inexorably linked to migration streams. The upper-circuit is mainly urban-urban, the lower-circuit is rural-rural while the urban-rural and rural-urban streams represent the dissolution of the two-circuits. Although this is a useful way of analyzing the structural processes underlying the migration streams, it implies that the circuits are merely a product of location. This is obviously too simplistic. The two-circuits model outlined in Chapter 2 suggested that equally critical is the economic sectoral dimensions. For example, even within the lower-circuit of R-R migration there are modern type activities. Similarly, the U-U stream has enclaves of traditional small-scale occupations namely the informal sector, which cannot be adequately dealt with in a simple framework based on migration streams defined by location only. In this section, the analysis is refined by explicitly incorporating the concept of the formal and informal sectors into the characteristics of migration streams.

Although the concept of the formal and informal sectors and its development have been criticized (see McGee, 1978; Kamal, 1980), it does provide some important insights into understanding migration as processes of structural change. As discussed in Chapter 1, there are various ways of operationalizing the concept of the formal and informal sectors, such as income opportunities (type of wages and activities, scale of enterprises and distribution, and types of transfer payments), ease of entry into the activities, reliance on indigenous resources, family ownership of enterprises, labour intensity, and so on. However, as census data are used in this study, the most appropriate way to define the two sectors is by using employment status. Thus, the employer and wage earner are classified as formal while the self-employed and unpaid family workers are classified as informal (see Mazumdar, 1976; 1981). Although such a proxy of membership in the formal and informal sectors is far from satisfactory, it is the best available way within the data constraints. What is sacrificed in terms of a more acceptable way of defining the formal-informal sector is compensated by the larger number of persons involved, that is, the national macro-level database. Besides, using employment status to indicate these two sectors have been used previously by other researchers who examined national patterns and whose sources of data were censuses and large-scale surveys (see for example, Webb, 1975; Mazumdar, 1976; 1981).

3.6.1 Dimensions of the Formal-Informal Sectors in the Two-Circuit System

Table 3.15 shows the proportion of migrants in formal and informal employment within each migration stream. Two points may be highlighted from this table. First, the informal sector among migrants is small by Third World standards (see Mazumdar, 1976; 1981). This is an indication of the higher level of economic development in this country. Second, the selective nature of migrants, in this case towards migrants in the formal sector compared to the total population is clear; the informal sector among migrants is only 24.4 per cent, in contrast to the total population in 1970 of 49.1 per cent.[6] Because the strata of destination of migrants reflect the nature of occupational and industrial characteristics of the migrants, the more traditional sector, the informal sector, is largely in the rural areas.

Table 3.15
Migrants 1965-70: Migration Stream by Sector, 1970

	Sector		Total	
Migration Stream	Formal	Informal	No.	%
U - U	86.1	13.9	3,358	100
R - R	51.7	48.3	1,320	100
R - U	78.4	21.6	583	100
U - R	74.0	26.0	3,524	100
Total	75.6	24.4	8,785	

Source : Census Sample Tape, 1970.

Thus, the upper-circuit or U-U stream has 86.1 per cent, the largest proportion of migrants in the formal sector, followed by the R-U stream with 78.4 per cent.

By contrast, the lower-circuit or R-R stream has the highest proportion (48.3 per cent) in the informal sector. The U-R stream does not fit into this pattern with its large percentage of formal occupations. This may be explained by the sizeable amount of

[6] Calculated from Chander (1977: 424).

suburbanization and government servants' transfer in the U-R streams based only on location in the previous section.

An analysis of the formal-informal sectoral representation as a total proportion of migration streams shows the same pattern, with U-U and U-R dominating the formal sector and U-R and R-R dominating the informal sector (Figure 3.10). The latter observation may be explained by the prevalence of self-employed and unpaid family workers in farming. The insignificance of "urban involution" (see McGee and Armstrong, 1968) and the absence of the phenomenon of flooding of the labour market in the cities by migrants who cannot get absorbed into the formal sector in this country is evidenced in the comparatively low proportion of migrants in the informal sector.

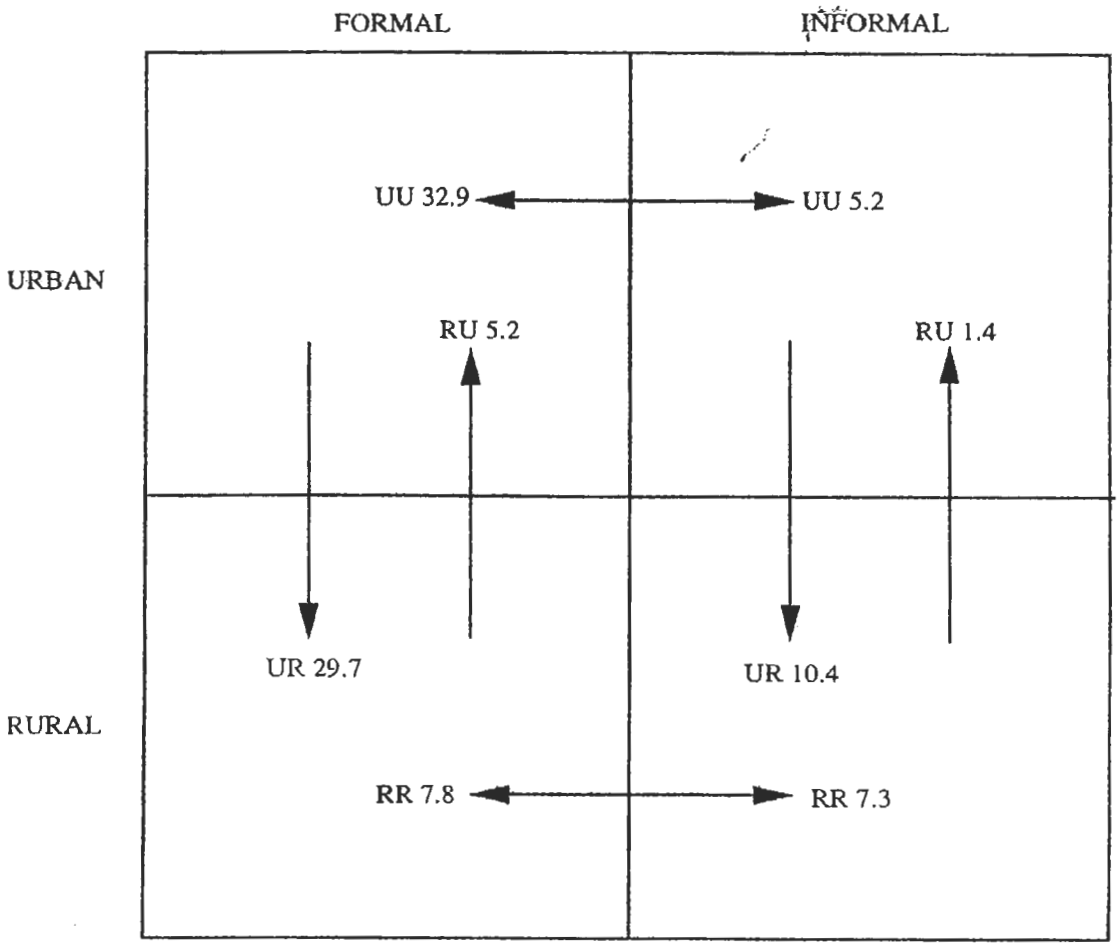
Again this is a product of "structured expansion" of the rural areas in the form of rural development which has held back potential migrants, making the migration experience of Malaysia quite unique compared to other Third World countries. Even the differential of migrants in the informal sector and formal sector in the R-R stream is quite small, only -3.4 per cent.

3.6.2 Ethnic Composition of the Migration Streams by Sector

The ethnic composition by streams provides more insight into the preservation and dissolution of the two-circuits. The dichotomous sectoral pattern of the Malays is demonstrated in their having the majority in both the formal (35.9 per cent as against 30.3 per cent of the Chinese) and informal sectors (15.0 per cent compared to the 7.2 per cent of the Chinese). This is due to their large numbers in government service and farming. The differences between Malays and Chinese are highlighted in the bigger proportion of Chinese in the U-U informal stream compared to the Malays. The opposite pattern occurs in the R-R stream where the Malays are an outstanding majority. Within the U-R informal sector, Malays have twice the proportion of the Chinese, again a result of their agricultural pursuits.

When the relative proportion of each race within the sectors and streams are analyzed, more Malay migrants are in the informal sector (29.6 per cent) than Chinese (19.1 per cent). Corresponding to the earlier findings on the two-circuits, most of the Malay share is in the R-R stream, while the Chinese share is in the U-U stream. Conversely,

Figure 3.10
Proportion in Migration Stream by Sector



Source: Census Sample Tape, 1970.

few Malays in the informal sector are in the U-U stream (2.4 per cent against the Chinese with 7.9 per cent) and few Chinese are in the R-R stream (1.5 per cent against the Malays with 13.4 per cent). Only the R-U and to a lesser extent, the U-R, display similar proportions between Malays and Chinese within the formal sector. The Chinese are mostly in the U-U stream, with 41.4 per cent compared to 27.0 per cent noted by the Malays. The Chinese also have a slight edge over the Malays in the U-R stream. The only stream where Malays have a bigger majority in the formal sector is in the R-R migrant flow where Malays have 11.3 per cent compared to 4.2 per cent of the Chinese.

3.6.3 Socio-Demographic Characteristics of Migration Streams by Sector

Table 3.16 shows three important socio-demographic features of the formal and informal sectors. In all streams, there are far more males in the formal than the informal sector which shows the lower educational and occupational status of women. No where is this more stark than in the U-R and U-U streams. The opposite occurs where there are relatively more females in the informal sector of the R-R and U-R streams due to the absorptive capacity of women in agricultural work.

For all streams, the younger migrants tend to be found in the formal sector while those above 40 years old are concentrated mostly in the informal sector. Owing to their higher education, these younger migrants are able to secure more modern-type jobs.

The only exception to this pattern is the R-R migrants where those aged 10-19 years are mainly in the informal sector as unpaid family workers in farming. For those with only primary education this is likely to be their employment status for some time. The more educated are marking time in the family farm until they get a better job. The greatest difference between the formal and informal sectors is among migrants aged 20-29 in the U-U stream (11.7 percentage point difference). This shows the heterogeneity of urban-type occupations in contrast to the type of work of R-R migrants where the differential for the same age-group is only a 5.4 percentage point.

Schooling is probably the most important factor in determining occupation and consequently, the formal and informal categorization. In all streams, those without schooling dominate the informal sector, this being most conspicuous in the R-R

Table 3.16
Migrants 1965-70: Socio-Demographic Characteristics of Migration Stream by Sector, 1970

Socio-Demographic Characteristics	Migration Stream							
	U-U		R-R		R-U		U-R	
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
Sex								
Male	73.5	73.0	70.3	6.7	71.5	70.4	8.1	68.5
Age Groups								
10-19	15.5	12.9	18.4	22.3	19.6	18.3	15.5	13.8
20-29	47.8	36.1	37.5	32.1	4.4	31.3	39.9	30.3
30-39	22.2	23.3	25.4	19.3	22.1	22.6	24.5	25.3
40-49	9.3	16.3	11.5	11.8	10.9	10.4	11.2	15.4
50+	5.2	11.4	7.3	14.4	6.9	17.3	8.9	15.2
Highest Level of Education								
None	6.6	15.1	28.2	48.4	10.2	30.4	15.7	30.4
Years 1-6	41.3	63.6	57.1	48.4	55.8	58.3	55.6	60.0
Years 7-13	52.1	21.3	14.7	3.3	34.0	11.3	28.7	9.6

Source: Census Sample Tape, 1970.

stream (48.4 per cent). While the R-R migrants are able to attain formal sector jobs with no education (28.2 per cent), this proportion falls to a low of 6.6 per cent among U-U migrants, a result of the more demanding requirements of the urban labour market which needs formal education if migrants are to be absorbed into the corporate sector. Therefore, it is in the U-U stream, within the formal sector, that the most educated migrants are found (52.1 per cent). Furthermore, the U-U informal sector has the largest component of secondary-educated migrants, 21.3 per cent compared to 3.3 per cent in the R-R stream. This may show the higher level of education in the U-U streams where even those with secondary education have to work as self-employed and unpaid family workers. In line with the earlier findings, the R-U migrants also display this pattern.

Table 3.17 shows selected economic characteristics of the formal and informal sectors. It is interesting to note that within the corporate sector, the U-U and R-R streams are remarkably similar. The main difference is the larger proportion of family workers among R-R migrants. As expected, all the other characteristics which denote modernism are most prevalent in the formal sector. However, the relative importance of these variables in each stream varies, showing the complexities within the economic system. Thus, while U-R and U-U formal migrants have low proportions with home-made goods compared to R-R and R-U migrants, they have the highest percentages of home-made goods among informal migrants. This is due to the urban- type jobs of the U-R and U-U migrants. Among informal sector migrants, the R-R stream has nearly 80 per cent working at home, explained by their agricultural work. This is the opposite to the 14.2 per cent of formal U-U migrants who work at home. For the same reasons, 86.8 per cent of R-R informal sector migrants help in the family business compared to 73.6 per cent in the U-U informal stream. While all the formal sector migrants of the other streams have less than 14 per cent helping in the family business, the proportion for R-R migrants is 44.7 per cent. It is the informal sector which has the bulk of irregular jobs, this being most prevalent in the U-R and R-R streams. A comparison of these two sectors within streams again shows the structured nature of migration in the two-circuits. Generally, the U-U formal sector has the smallest proportions of traditional indicators contrasting with the R-R informal sector.

Table 3.17
Migrants 1965-70: Economic Characteristics of Migration Stream by Sector, 1970

Economic Characteristics	Migration Stream							
	U-U		R-R		R-U		U-R	
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
Employment Status								
Employer	3.8	-	3.4	-	5.5	-	7.0	-
Employee	96.2	-	96.6	-	94.5	-	93.0	-
Self-Employed		68.3		57.4		59.1		68.0
Family worker		31.7		42.6		40.9		32.0
Home-made Goods								
Yes	37.7	63.2	68.2	57.9	57.1	33.3	33.0	61.4
Work at Home								
Yes	14.2	45.5	45.5	79.5	18.9	53.0	26.1	64.8
Help in Family Business								
Yes	9.4	73.6	44.7	86.8	11.1	82.4	13.7	81.1
Regular Job								
No	0.8	10.7	4.0	17.2	1.5	11.6	1.2	18.4

Source: Census Sample Tape, 1970.

3.6.4 Usual Industry of Migration Streams by Sector

The two-circuits is best illustrated by integrating the concept of location with sectors. As emphasized earlier, industry and occupation are the most important variables in the analysis of the two-circuits because they constitute the economic structure of the migration streams. Table 3.18 shows the usual industry (main industry of the respondents during the past one year) of migrants by streams and urban sectors. The complexity and rigidities of the two-circuits of migration may be seen in the large differences between formal and informal sectors within the same stream. For example, while the largest proportion of formal sector migrants in the U-U stream are in services (55.4 per cent), the counterpart for the informal sector is commerce (40.4 per cent). In the corporate sector, commerce and the miscellaneous category "other" are next in importance. For the informal sector migrants, the next three major categories are "other", rubber and services. Therefore, while Malays dominate in the formal sector in services (74.3 per cent compared to 37.9 per cent of the Chinese) mainly as government servants, the Chinese belong to the informal sector in commerce (40.8 per cent compared to 29.6 per cent of the Malays).

R-R migrants show more homogeneity than U-U migrants, although there are some important ethnic differences. The major categories for both the corporate and informal sectors are rubber (51.1 per cent and 44.5 per cent, respectively). The formal sector migrants in rubber are mainly estate workers, while those in the informal sector are self- employed smallholders. Malays and Chinese are nearly equally divided in the Malays have 46.2 per cent compared to 32.6 per cent of the Chinese. And where Malays have 41.1 per cent in *padi* the Chinese proportion is only 7.0 per cent showing the importance of self-employed farmers and family workers in *padi* for Malays. As expected, the Chinese are mostly in commerce (32.6 per cent) compared to 3.2 per cent recorded by the Malays. Even within this R-R informal stream, the Chinese display greater industrial diversity than the Malays.

Within the formal sector, services (12.8 per cent, consisting of mostly government and army personnel – where Malays have 17.1 per cent and Chinese only 0.4 per cent), other agriculture (11.8 per cent) and *padi* (10.1 per cent) are the next major categories. In the informal sector, *padi* alone constitutes 39.2 per cent, mostly of self-employed farmers and family workers.

Table 3.18
Migrants 1965-70: Usual Industry by Migration Stream by Sector, 1970

Usual Industry	Migration Stream							
	U-U		R-R		R-U		U-R	
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
Padi	0.2	3.3	10.1	39.2	1.9	12.1	1.6	22.2
Logging	0.9	0.9	2.8	-	-	-	3.8	2.0
Fishing	0.7	3.0	0.3	1.3	0.6	6.6	0.9	2.7
Rubber	3.6	11.7	51.1	44.5	11.7	13.2	26.8	34.3
Other Agriculture	0.7	4.8	11.8	4.5	2.8	5.5	5.9	11.5
Manufacturing	9.1	4.2	3.2	0.9	11.7	7.7	6.7	2.1
Commerce	15.1	40.4	2.3	5.6	11.4	44.0	5.8	9.5
Transport, Communications	5.0	5.1	1.3	0.5	5.3	1.1	2.9	1.0
Services	55.4	11.4	12.8	0.5	43.2	4.4	28.1	3.1
Other	9.3	15.3	4.3	2.9	11.4	5.5	17.6	11.5
Total No.	2,367	234	603	553	359	91	2,180	703
%	100	100	100	100	100	100	100	100

Source: Census Sample Tape, 1970.

However, it is in the R-U and U-R streams that the dissolution of the two-circuits is discernable. The R-U migrants display more diversity than the R-R migrants, having more similarities with U-U migrants. Like the U-U stream, the formal and informal sectors in the R-U stream belong to different industries. As much as 43.2 per cent of the corporate sector migrants are in services, where the Malays (mostly army personnel) constitute 58.3 per cent compared with the Chinese proportion of 22.8 per cent. The next important categories are nearly equivalent proportions of 11.5 per cent each of manufacturing, rubber, commerce, and others. But the major category in the informal sector migrants is commerce, 44.0 per cent, comprising mostly Chinese in petty trading (48.4 per cent compared to 38.2 per cent of the Malays).

The R-R stream displays sharp differences between formal- and informal-type industries, but the stream has an interesting mix of U-U and R-R characteristics. For example, in the formal sector, services (28.1 per cent) and rubber (26.8 per cent) constitute nearly 60 per cent of the total. As in the previous findings, services is mainly transferred Malay government servants from urban to rural areas (41.8 per cent compared to 16.6 per cent Chinese). They have a slight edge over the Chinese in rubber. In the informal sector, a picture similar to R-R migrants emerge.

3.6.5 Occupational Structure of Migration Streams by Sector

Certain important patterns emerge in Tables 3.19 and 3.20. First, as in the case of usual industry, it is clear that the U-U and R-U streams have a diversity of occupations within both formal and informal sectors, not displayed by the R-R and to a lesser extent, U-R streams. For example, while the major occupations of the U-U formal-sector migrants is service work (29.7 per cent), followed by production work (24.1 per cent) and professional-technical (17.0 per cent), the ranking in the informal sector is sales (29.7 per cent), production work (22.0 per cent) and agriculture (21.5 per cent). In the formal sector of the R-U stream, the major occupations are production workers (27.5 per cent). These are the new factory workers migrating to work in newly-established industrial estates which have emerged in the major towns of Kuala Lumpur and Penang in the late 1960s. The informal sector in the R-U stream is primarily in agriculture (35.7 per cent) and sales (26.1 per cent). However, the chief occupations in both the formal and informal sectors of the R-R and U-R streams are agriculture, even though this proportion is relatively smaller in the formal sector of both streams. Second, while services, production and professional technical workers are the major types of

Table 3.19
Migrants 1965-70: Selected Occupations[a] in the Formal Sector by Migration Stream, 1970

Occupation	Migration Stream			
	U-U	R-R	R-U	U-R
Professional & Technical	17.0	4.6	15.4	8.6
Teachers	8.8	4.0	10.7	4.4
Administrative & Managerial	1.7	0.9	0.5	0.3
Managerial	1.1	0.9	0.4	0.3
Clerical Workers	14.4	1.2	8.4	6.9
All clerks	10.3	1.0	5.5	4.7
Sales Workers	7.3	1.4	6.5	3.2
All salesmen	6.3	1.1	5.0	2.4
Working proprietor (sales)	0.3	0.1	0.4	0.2
Service Workers	29.7	6.5	26.1	14.0
Cooks & maids	10.3	1.4	11.2	2.9
Hairdressers	1.0	-	0.4	0.1
Protection services	15.2	4.7	11.1	9.7
Working proprietor (service)	0.2	-	0.4	0.1
Agricultural Workers	5.8	74.0	15.6	37.2
Farm managers	0.2	1.0	0.9	1.7
Farmers	0.2	1.6	-	0.9
Animal husbandry	3.9	66.0	11.8	29.0
Forestry workers	0.5	1.2	0.7	2.0
Fishermen & hunters	0.6	0.3	0.4	0.7
Production Workers	24.1	11.3	15.7	29.8
Foremen	0.9	-	-	1.0
Miners	0.5	-	0.4	8.0
Wood processers	0.8	1.8	1.1	1.2
Chemical processers	0.4	1.8	1.1	1.6
Food processers	0.4	0.9	2.8	1.0
Tailors	2.1	0.3	2.0	0.3
Machine & electrical fitters	4.2	1.0	2.0	2.9
Production Workers				
Rubber plastic	1.0	-	0.4	0.5
Bricklayers & carpenters	1.9	1.0	2.8	1.5
Stationary operators	0.9	-	-	1.3
Dockers	1.8	0.6	2.0	1.5
Transport	3.3	2.3	5.0	3.5
Not Elsewhere Classified	8.3	5.3	11.8	7.7
Total No.	2,893	682	457	2,607
%	100.0[b]	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

Note: [a] Major occupational categories exclude labourers not elsewhere clarified but proportions of specific occupations include them. As the sub-categories are selected ones, they necessarily add up to the main categories.

[b] Rounding error.

Table 3.20
Migrants 1965-70: Selected Occupations[a] in the Informal Sector by Migration Stream, 1970

Occupation	Migration Stream			
	U-U	R-R	R-U	U-R
Professional & Technical	5.4	0	0.9	1.5
Teachers	1.3	-	-	0.7
Administrative & Managerial	1.0	0	1.7	0.7
Clerical Workers	3.0	0.2	1.7	0.7
All clerks	2.1	-	1.4	0.7
Sales Workers	29.7	5.4	26.1	11.3
All salesmen	14.0	2.5	14.3	3.9
Working proprietor (sales)	11.4	2.7	9.5	5.9
Service Workers				
Cooks & maids				
Working proprietor (service)				
Agricultural Workers	21.5	90.2	35.7	71.0
Farmers	8.2	47.6	12.7	33.9
Animal husbandry	8.0	37.9	13.5	25.6
Fishermen & hunters	2.4	0.6	6.3	2.4
Production Workers	22.0	3.3	18.3	9.3
Wood processers	0.2	-	-	1.1
Food processers	1.3	0.3	2.4	1.1
Tailoring	6.0	0.6	4.0	1.9
Machine & electrical fitters	0.9	0.2	2.4	-
Bricklayers & carpenters	2.1	0.2	1.6	0.8
Transport	2.6	0.6	1.6	1.0
Not Elsewhere Classified	13.1	4.4	8.7	12.4
Total No.	465	638	126	917
%	100.0[b]	100.0	100.0	100.0

Source: Census Sample Tape, 1970.

Note: [a] Major occupational categories exclude labourers not elsewhere clarified but proportion specific occupations include them. As the sub-categories are selected ones, they do not necessarily add up to the main categories.

[b] Rounding error.

occupations in the formal sector of all streams, the informal sector is made up of agriculture (in rural areas) and sales (in urban areas).

A discussion of the main types of occupations within these major categories will further reveal some of the structural processes of the two-circuits. Not only do the migration streams display occupational niches but the formal-informal sectors also illustrate the predominance of certain occupations. Ethnicity seems to further differentiate occupational categories. An analysis of the detailed formal occupations indicate the preservation and conservation of the two-circuits. Chinese are not only more diversified but they continue to dominate in occupations which traditionally have been associated with them such as commerce, sales and production work.

The U-U migrants are mainly in services (29.7 per cent). Malays are over-represented with 43.2 per cent compared to 18.0 per cent of the Chinese. While Malays are almost exclusively government servants and military personnel, the Chinese are servants and cooks. Within production work (24.1 per cent), the Chinese have 31.7 per cent compared to 16.2 per cent recorded by the Malays. While the Chinese are concentrated in the heavier industries such as machine and electrical fitters, the Malays tend to be in light industries such as transport and food. Skilled work like tailoring and electricians which allows self-employment are almost exclusively Chinese. Such skills are acquired through informal channels of apprenticeship based on kinship and contact. While 12.3 per cent of the Chinese are in sales, the Malay share is only 2.5 per cent.

Nearly three-quarters of R-R migrants in the formal sector are agricultural workers; mostly as farmers and engaged in animal husbandry. In this sector, Malays are over-represented in agriculture, 76.4 per cent compared to 59.2 per cent among U-R migrants. While Malay migrants concentrate in agriculture (37.5 per cent), the Chinese are mostly in production work (46.9 per cent). The R-U stream also has a fair proportion of farmers and migrants engaged in animal husbandry. Chinese migrants are widespread in production work (34.9 per cent, compared to Malays 23.4 per cent) while Malays are mainly in services (33.5 per cent, compared to Chinese 15.8 per cent). The Chinese are mainly tailors, bricklayers and carpenters.

The break of the two-circuits is shown in the formal sector of R-U and U-R migrants. R-U migrants concentrate in services (26.1 per cent) as domestics (Chinese) and military personnel (Malays). The latter has been a major way of take off from the rural areas for partially educated Malay men, while the former has been a typical pattern of rural-urban

migration for Chinese females. As these have been the traditional ways in the break of the two-circuits, it would be interesting to explore how recent inroads have been made into the modern sector.

Production workers are an important category in the dissolution of the two-circuits. However, even here, the ethnic segregation prevails. While Malays concentrate in transport (5.0 per cent) and as stationary operators (2.8 per cent), the Chinese are tailors (2.0 per cent), mechanics and electrical fitters (2.0 per cent), and wood and chemical processers. However, there are large numbers of Malays in the professional and technical category, mainly as teachers and clerks.

The U-R pattern is harder to interpret owing to the suburbanization process operating alongside more meaningful U-R movements. This stream has mixes of both U-U and R-R characteristics. As agricultural workers constitute 37.2 per cent, the majority is in animal husbandry followed by production workers (29.8 per cent). The largest sub-category within this group is the miners who are nearly all Chinese. Some Malays are found in transport and stationary operators although most of the processors are Chinese. Unlike the U-U stream, service and clerical workers make up smaller proportions.

In the informal sector, there is more homogeneity between streams – agriculture dominating in R-R, U-R and R-U streams. The U-U and R-U migrants are similar in that sales and production workers are important categories. In the R-U stream, Chinese and Malays have nearly equal proportions in agriculture, production and sales. The Chinese are primarily in production (26.6 per cent against 19.4 per cent recorded by the Malays) while the Malays are in agriculture (23.5 per cent compared to 21.5 per cent noted by the Chinese).

The R-R stream has over 90 per cent agricultural workers, mostly as self-employed farmers and in animal husbandry. While Malays have 92.7 per cent in agriculture, the Chinese proportion is 60 per cent. Sales is important for the Chinese (33.3 per cent to 3.8 per cent). The R-U stream is nearly a replica of the U-U stream. But when the occupations are detailed, it is a mirror image of the U-U migrants, Malays in agriculture (47.8 per cent) and sales (26.1 per cent) and Chinese in production work (26.8 per cent) and sales (22.0 per cent). Among U-R migrants, Malays are in agriculture with 84.0 per cent, while the Chinese display a more varied structure, with 51.6 per cent in agriculture, 19.3 per cent in sales and 5.0 per cent in production work.

3.6.6 Age and Education by Sector and Migration Streams

We have seen in Table 3.16 that most of the informal sector migrants are older in all streams. As age affects education which in turn affects the type of occupation which Malays and Chinese concentrate in, it is necessary to disaggregate this variable further. Table 3.21 shows age-groups by race, sector and streams. Although some of the cells may have too few cases for analysis, certain generalizations can be made. In all streams, there is a larger proportion, ranging from 22.0 per cent to 35.6 per cent, of migrants above 40 years for both Malays and Chinese in the informal sector. The Malays have a slight edge over the Chinese except in the R-R stream where 35.6 per cent is above 40 years. This may be due to the small total (45 persons) and the spilling over of those aged 30-39 into this category. An interesting contrast is the larger proportion of Chinese migrants compared to Malays aged 10-19 in the informal sector in all streams. This may be showing the greater problems faced by young Chinese penetrating the formal sector. The Malay proportion in this age-group in the formal sector of all streams is smaller. This is also explained by the larger percentage of Malays who remain in school compared to the Chinese. On the whole, the formal sector of the U-U stream has the largest proportion of migrants aged 10-29 years. While the Malay proportion in the formal sector of this group is larger than the Chinese in the U-R stream (60.4 per cent against 53.1 per cent) owing to young Malays in government service, the R-R stream displays the opposite (54.8 per cent against 65.6 per cent), due to older Malays in agriculture.

It was argued in the section on migration streams and education that Malay migrants tend to be more educated than Chinese migrants. The types of modern jobs which Malays move into demand formal education. Therefore, it would be interesting to examine the difference in level of schooling between Malays and Chinese in the different migration streams by sector (Table 3.22). Within the formal sector, the Malays are substantially better educated than the Chinese in U-U, U-R and particularly, the R-U stream (10.7 percentage point difference for migrants with secondary schooling). In these streams, there are larger proportions of Chinese without schooling and with primary schooling while the Malays consistently have higher proportion with secondary education. The only exception to this pattern is that of R-R migration where Malays without schooling is 30.1 per cent compared to 18.4 per cent

Table 3.21
Migrants 1965-70: Age by Ethnicity, Sector and Migration Stream, 1970

	U-U				R-R				R-U				U-R			
	Formal		Informal		Formal		Informal		Formal		Informal		Formal		Informal	
Age Group	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
10-19	13.9	18.4	8.2	16.0	18.0	23.2	21.4	31.1	14.8	25.0	15.9	24.4	14.3	17.1	14.3	15.4
20-29	48.9	49.6	40.8	39.2	36.8	42.4	32.8	28.9	45.5	36.2	31.9	31.7	46.1	36.0	30.1	31.9
30-39	21.9	21.2	22.4	22.8	25.3	21.6	20.6	4.4	22.5	19.1	26.1	19.5	25.2	22.8	26.2	24.0
40+	15.3	10.8	28.5	22.0	19.9	12.8	25.1	35.6	17.3	19.7	26.0	24.4	14.3	24.1	29.5	28.8
Total No.	1,100	1,247	98	237	462	125	548	45	209	152	69	41	1,106	913	489	254
%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Census Sample Tape, 1970.

Table 3.22
Migrants 1965-70: Schooling by Ethnicity by Migration Stream by Sector, 1970

	Formal								Informal							
	U-U		R-R		R-U		R-R		U-U		R-R		R-U		U-R	
Education Level	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
No Schooling	3.8	8.3	30.1	18.4	8.6	11.8	12.0	15.8	20.4	11.4	50.2	20.0	34.8	24.4	31.3	28.7
Primary	41.5	42.4	57.4	59.2	53.1	60.5	55.6	58.6	57.1	69.2	46.5	75.6	58.0	56.1	62.0	57.1
Secondary	54.6	49.3	12.6	22.4	38.3	27.6	32.4	25.6	22.4	19.4	3.3	4.4	7.2	19.5	6.7	14.2
Total No.	1,100	1,247	462	125	209	152	1,106	913	98	237	548	45	69	41	489	254
%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Census Sample Tape, 1970.
Note: Education level is defined as primary (1-6 years) and secondary (7+ years).

recorded by the Chinese. And a greater proportion of Chinese are educated at secondary level (9.8 percentage point difference) compared to Malays in the R-R stream. This may be explained by the larger number of wage earners in the formal sector, especially the R-U stream where Malays who migrate to urban areas have to be far more educated than the Chinese.

In line with the earlier observation, the informal sector migrants are far less educated. The most educated are in the U-U and R-U streams. The Chinese in the informal sector are more educated than the Malays, the greatest difference being in the R-U stream (12.3 percentage point difference). This is due to the large number of Chinese who are family workers or self-employed in kinship-based enterprises; for example, as much as 19.5 per cent and 14.2 per cent of Chinese migrants in R-U and U-R have secondary education. The one exception is the U-U stream where Malays have a slight edge over the Chinese for those with secondary education. However, the other extreme is that compared to the Malays, nearly twice the proportion of Chinese are those without schooling.

The educational differences between Malays and Chinese in major occupational groups within streams have been selected for further examination. Within the formal sector of the U-U stream, the Chinese have larger proportions of migrants with secondary education. They are mostly in the professional and technical, clerical and production work groups. Over 90 per cent of the Chinese have secondary education in the professional and technical categories.

A different pattern emerges in the services. Again this shows the dualism within the services sector – Malays are more educated than the Chinese (6.4 percentage point difference). While Malays work in the government sector which demand secondary schooling as a pre-requisite, the Chinese are mostly domestics and cooks. Similar patterns are displayed in the other streams. Similarly, production workers in the R-U and U-R streams have more educated Malays than Chinese. This is due to the formal nature of Malay recruitment compared to the family-oriented Chinese enterprises. It suggests that the Chinese have relative ease in penetrating these occupations compared to Malays. Only in agriculture, in the formal sector of the R-R migration stream, that the Chinese are more educated than the Malays.

In the formal sector, most of the totals in the U-U, R-U and R-R streams are too small for meaningful comparison. In the U-R stream the same pattern as that of the corporate

sector emerged, that is, Malays tend to be more educated than the Chinese only in services. In agriculture, production and sales, the Chinese have higher education.

3.6.7 State of Destination and Origin of the Migration Streams by Sector

Finally, Figure 3.11 (a-d) shows the present state location (destination) of migrants in the formal and informal sectors for the four streams. The developed states of the west, particularly Selangor, Perak and Negeri Sembilan have a pre-ponderance of U-U migrants in the formal sector compared to the underdeveloped east coast states and Kedah. This pattern is repeated in the R-U and U-R streams. For R-U migrants, the informal migrants to Selangor and Perak is half of the formal migrants which points to the positive selectivity of R-U migration in Peninsular Malaysia. Only in the lagging states like Kelantan, Terengganu and Kedah is the informal sector migration far larger than the formal sector. This is true also for U-R migrants although the informal sector migration in the developed states are larger and those of the depressed states very small. The R-R pattern shows the importance of the large estate sector in Johor, with its huge formal sector migration. An opposite form exists in Kelantan where the informal sector migration is over twice that of the formal sector, explained by its traditional agriculture and petty trading. However, Kedah has nearly equal proportions of each, due to *padi* and rubber as well as the labour wage earners within the agricultural sector. An examination of the migrants by previous state location (origin), Figure 3.12 (a-d) shows that the pattern is similar to that of the current location.

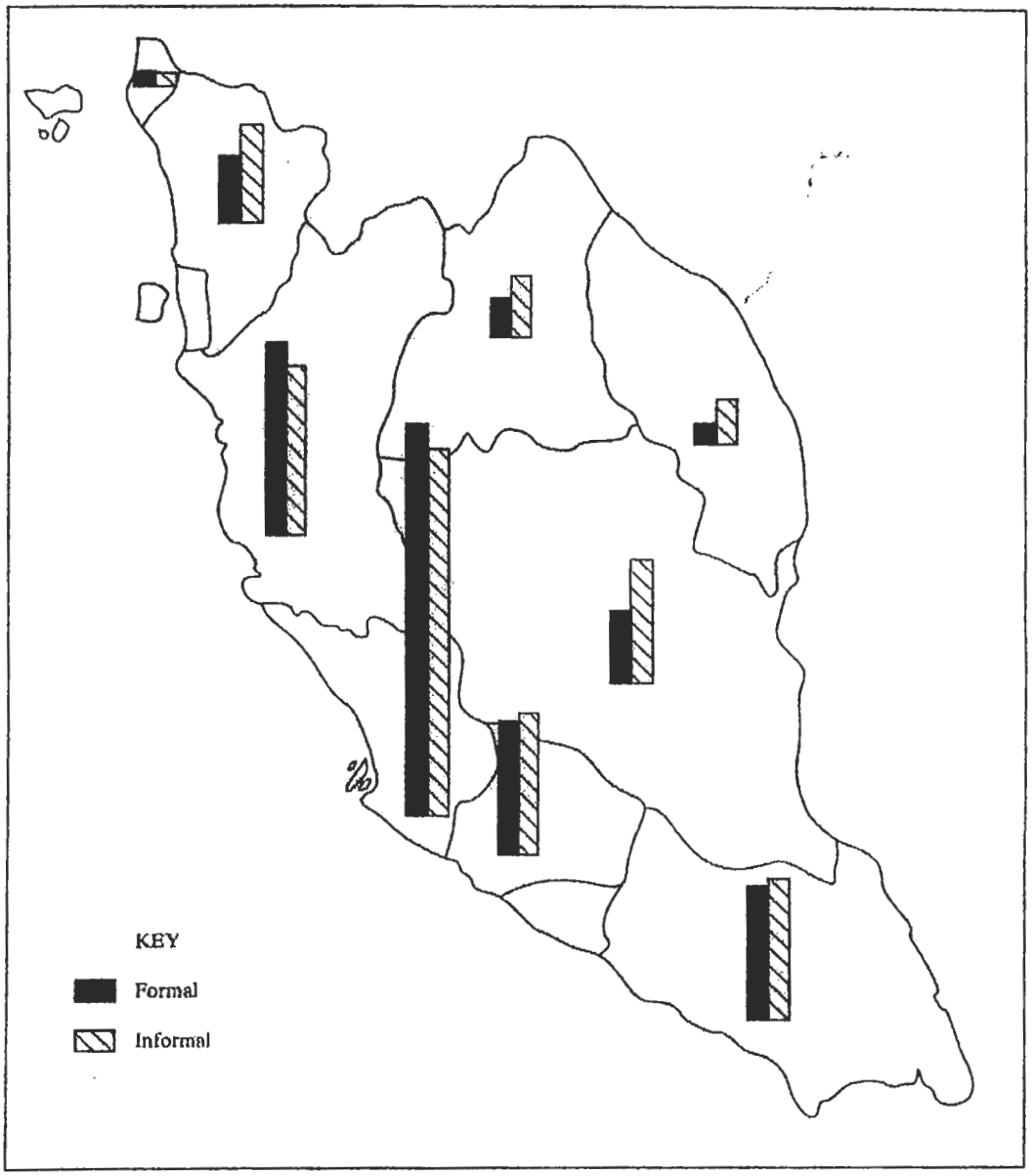
3.7 CONCLUSION

This chapter sought to analyze the structure of the two-circuit system of migration by relating it to the four migration streams based on strata. It also examined this structure of migration in terms of the formal-informal sectoral classification.

The first task was to examine the spatial, socio-demographic and economic characteristics of the four migration streams. Table 2.1 of Chapter 2 summarizes these major characteristics of the two-circuits, as analyzed in this chapter. The importance of ethnicity in the structure of the two-circuit system is clearly evident. Within this two-circuits framework of migration, the Malays tend to dominate in the R-R stream which encompasses circulation within the depressed states. The Chinese are mainly in the U-U stream which tends to operate in the developed west coast

Figure 3.11(a)

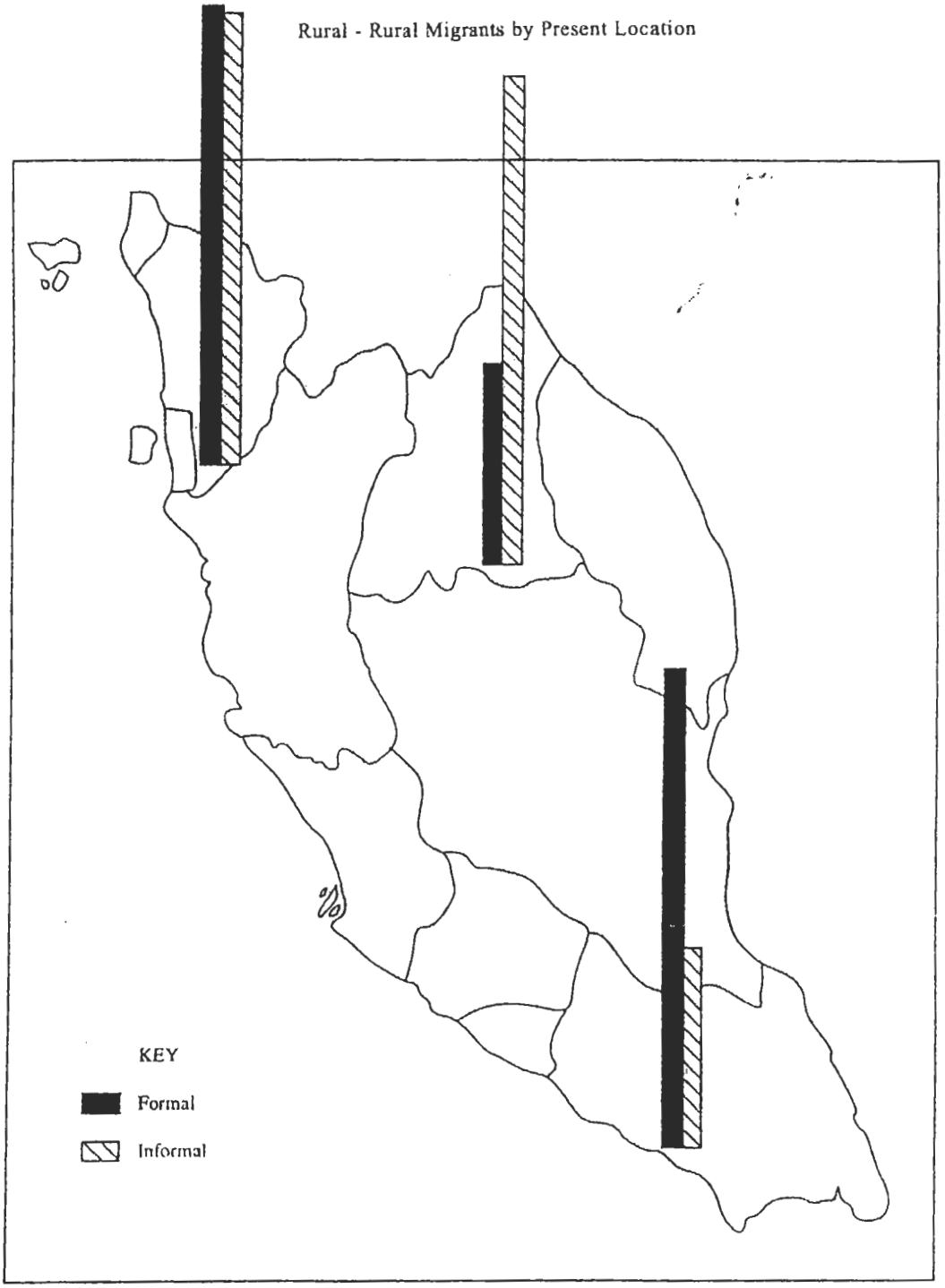
Urban - Urban Migrants by Present Location



Source: Census Sample Tape, 1970.

Figure 3.11(b)

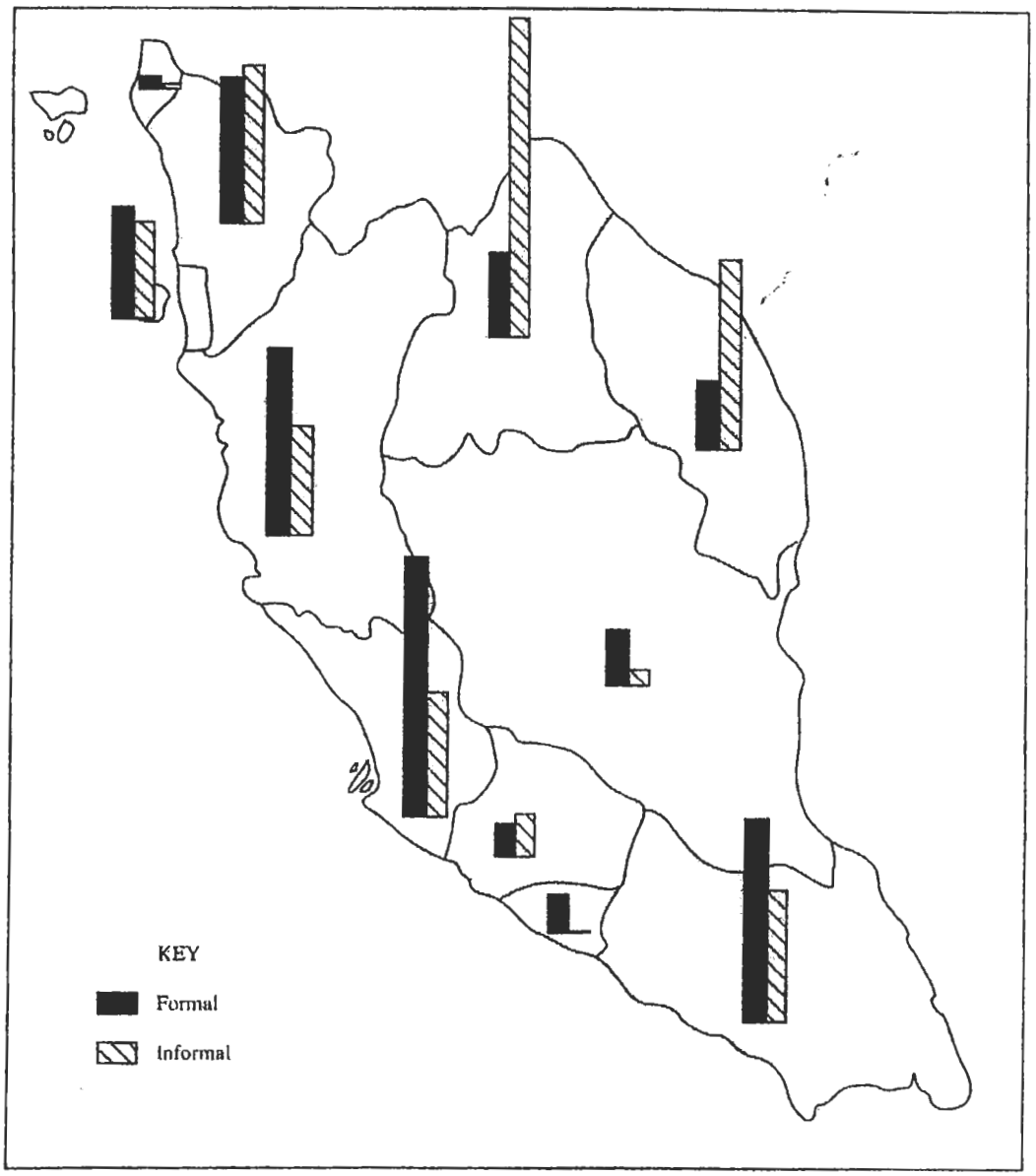
Rural - Rural Migrants by Present Location



Source: Census Sample Tape, 1970.

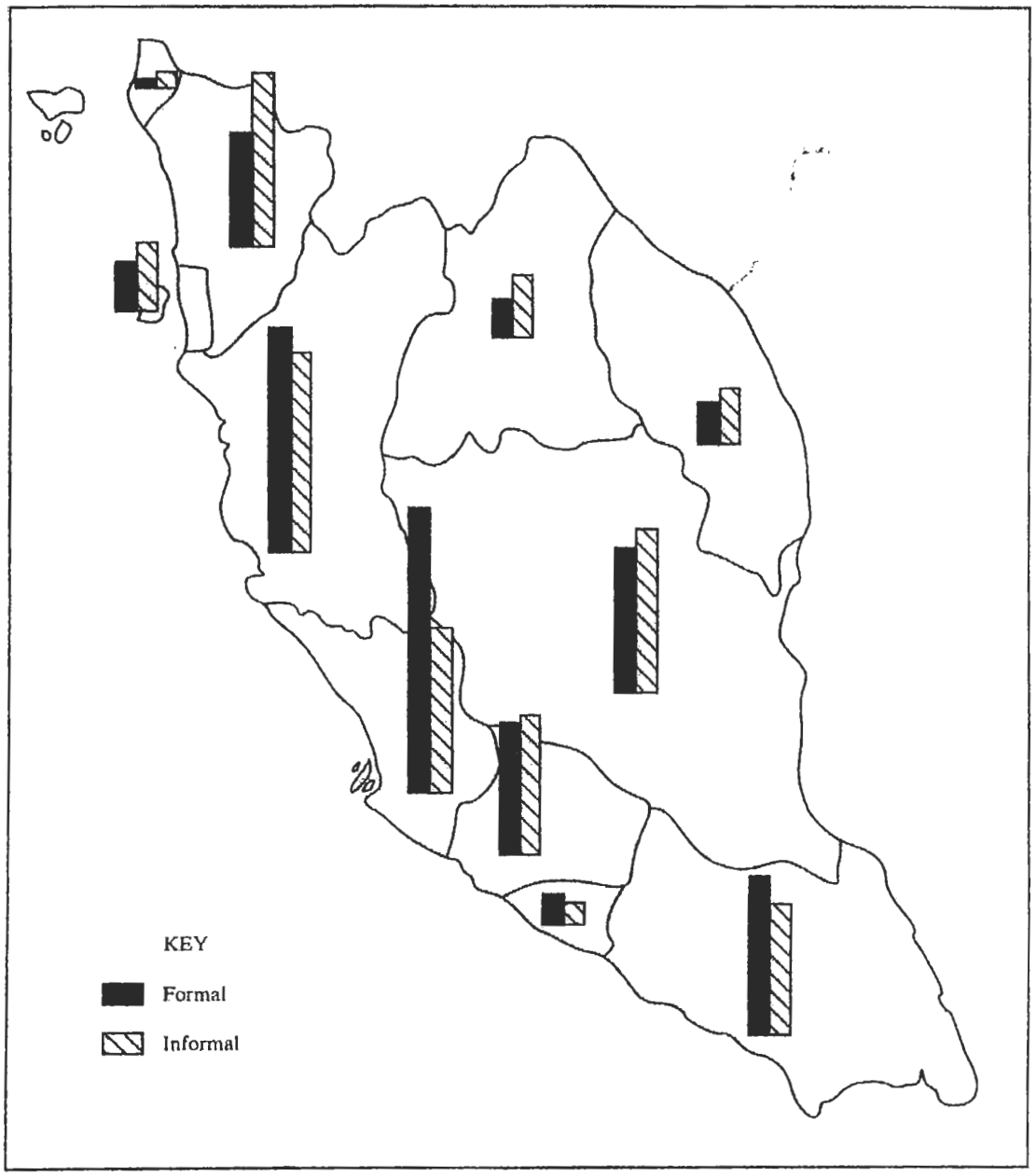
Figure 3.11(c)

Rural - Urban Migrants by Present Location



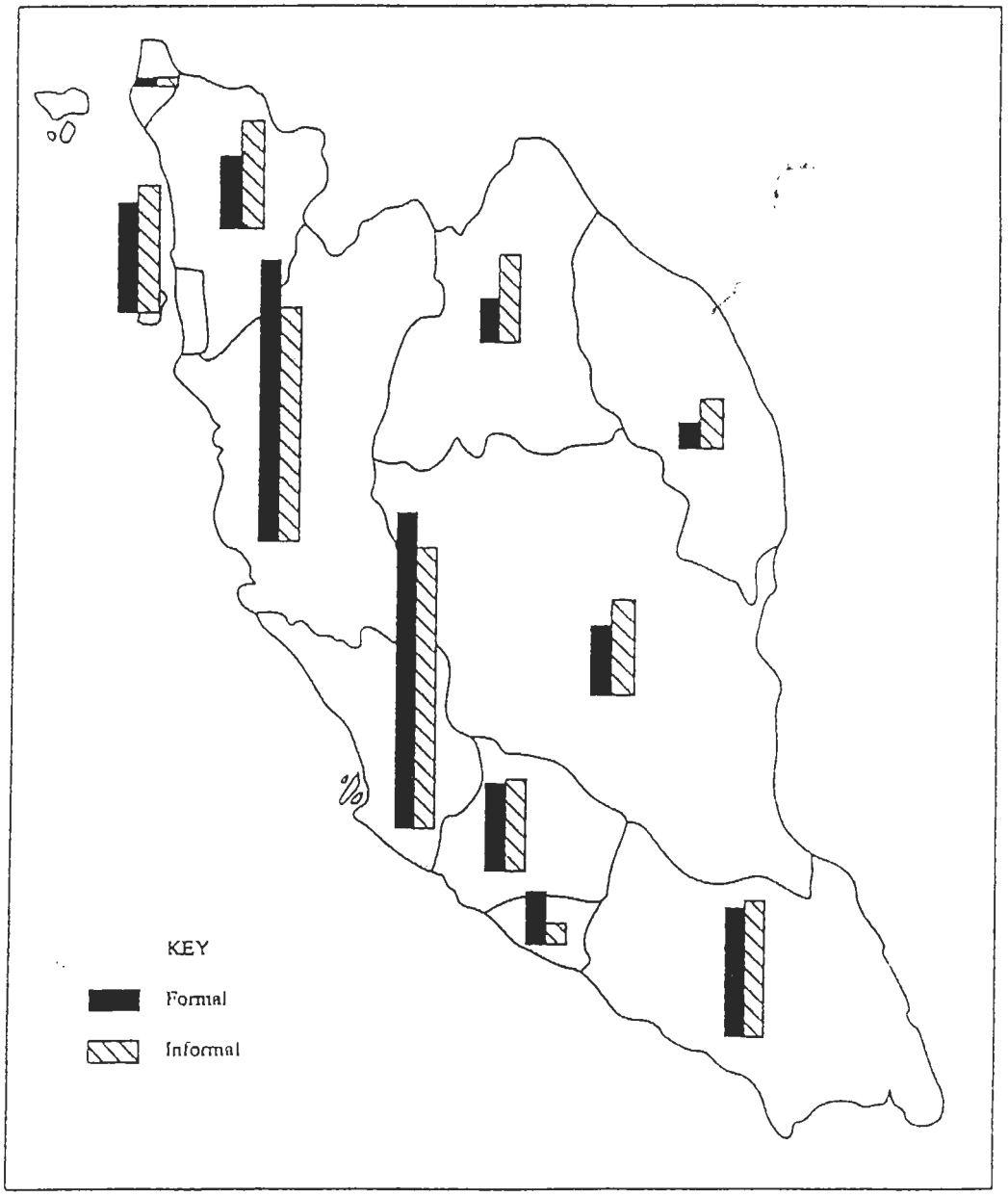
Source: Census Sample Tape, 1970.

Figure 3.11(d)
Urban - Rural Migrants by Present Location



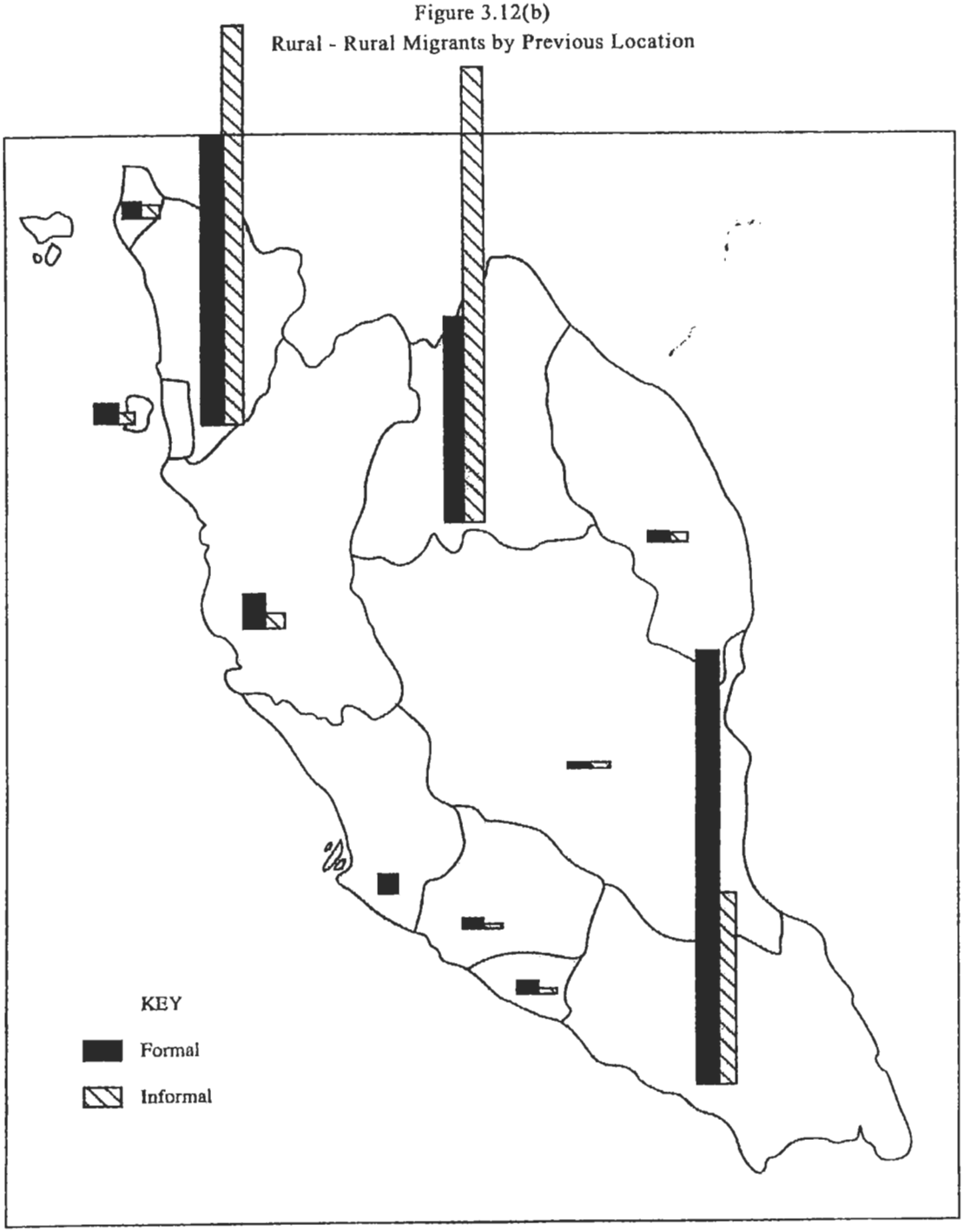
Source: Census Sample Tape, 1970.

Figure 3.12(a)
Urban - Urban Migrants by Previous Location



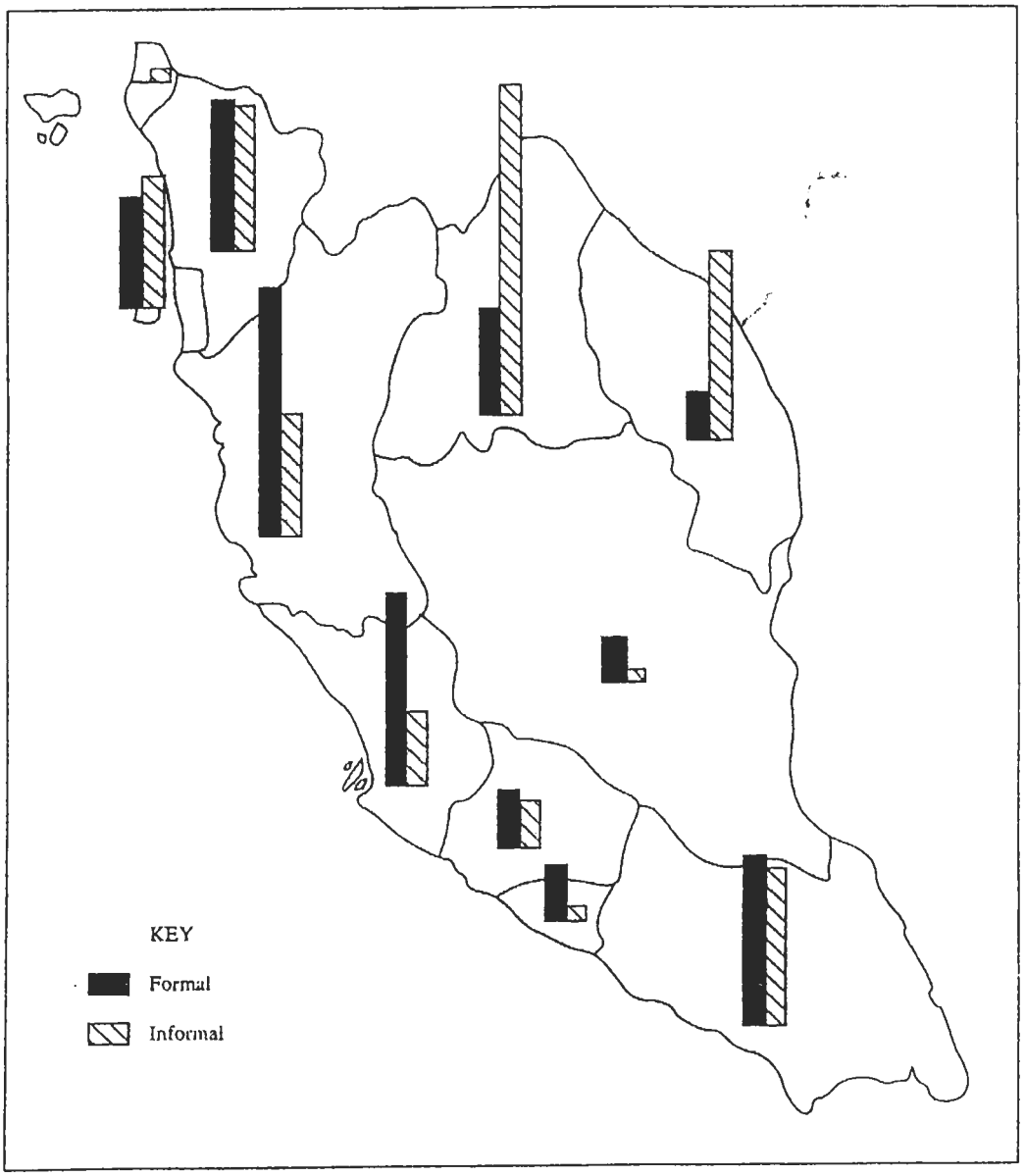
Source: Census Sample Tape, 1970.

Figure 3.12(b)
Rural - Rural Migrants by Previous Location



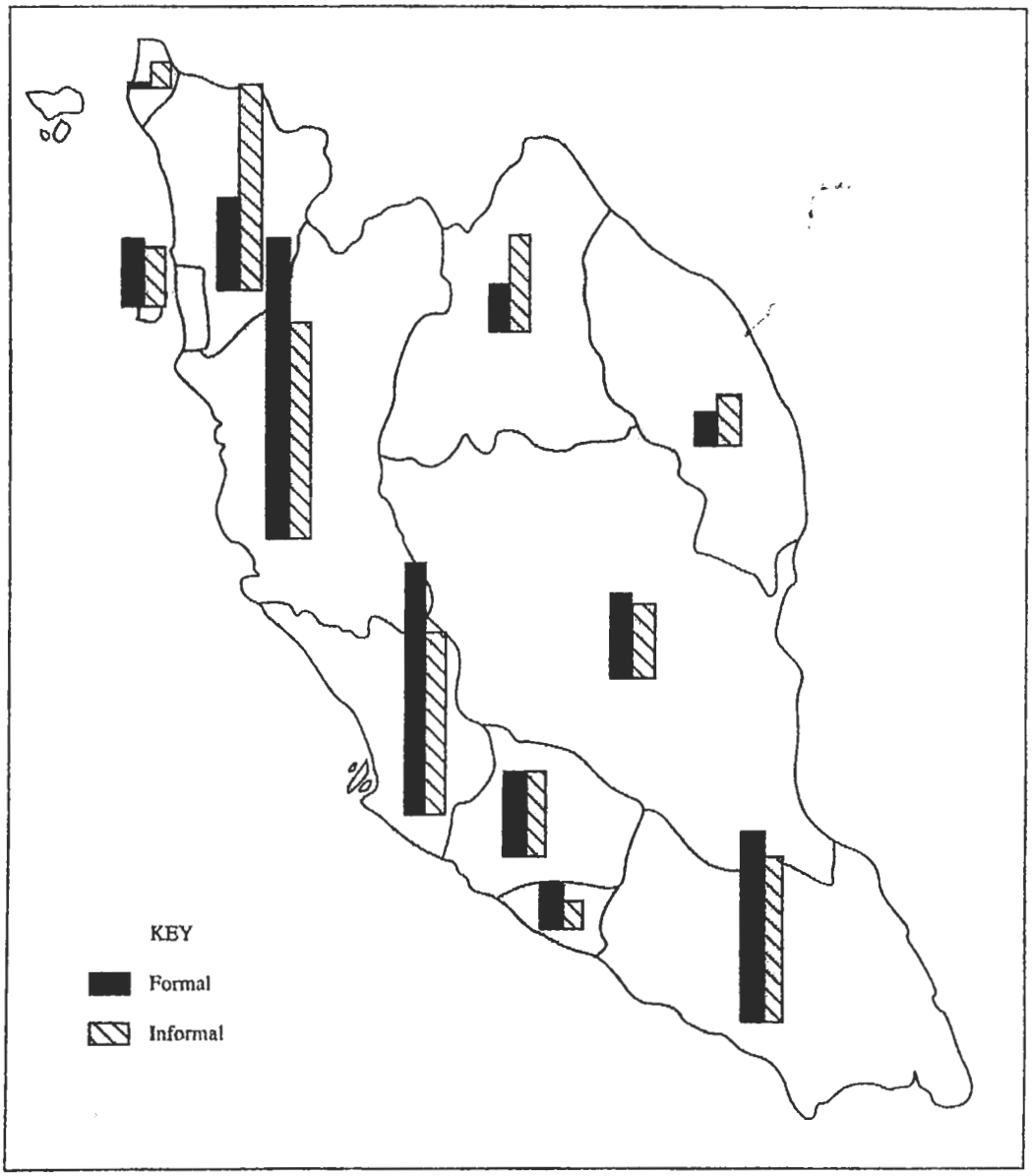
Source: Census Sample Tape, 1970.

Figure 3.12(c)
Rural - Urban Migrants by Previous Location



Source: Census Sample Tape, 1970.

Figure 3.12(d)
Urban - Rural Migrants by Previous Location



Source: Census Sample Tape, 1970.

states. This basic pattern is also related to socio-demographic characteristics. The U-U stream tends to be male, younger (15-29 years), single, with high literacy and ability to speak and write in more than two languages, with more schooling and a more diversified education. In contrast, the R-R stream tends to be family migrants who have less schooling, lower literacy and tertiary education. R-U and U-R migrants who represent the transformation of the two-circuit system reflect characteristics from the U-U and R-R streams, respectively. It was clear from this analysis that migration selectivity for both urban and rural areas were different due to the opportunities and requirements of the different economies.

The comparison of R-U Malay and Chinese migrants led to the hypothesis that because Malays are recruited mainly in government and other public sector jobs, they needed formal education to break the two-circuits, unlike the Chinese. An analysis of occupations by level of education in the R-U stream for both Malays and Chinese provided more evidence to back this argument. Services and production work, the two major sectors for Malays and Chinese respectively in the R-U stream were selected for comparison. While 20.8 per cent of the Malays in services had secondary education, the proportion for the Chinese was only 8.0 per cent. In marked contrast, while 39.2 per cent of the Chinese in production work had primary education, the proportion of the Malays was only 24.3 per cent. In the U-U stream, this pattern is even more concentrated. Nearly 38 per cent of Malays with secondary education were in services compared to 9.2 per cent of the Chinese. While 40.8 per cent of the Chinese in production work had primary education, the Malay proportion was only 24.6 per cent. This shows the dualism that exists even within the industrial structure.

Migrants of different streams who exhibit different economic features have long been theorized and empirically tested. This chapter has shown that consistently, the U-U stream had the more modern, skilled occupations in the tertiary and secondary sectors. In sharp contrast, the R-R migrants were mainly in the primary sector, retaining traditional work characteristics. On the other hand, both the R-U and U-R streams reflect features from the U-U and R-R streams which may be explained by their being transitional between the two streams.

However, this analysis has shown that despite the general characteristics shared by both Malays and Chinese in each of the streams, a response to the demands of the labour markets and economies at the destination, some Malay-Chinese differences are retained even within the same stream. It has revealed that the Malays are less diversified

industrially and occupationally than the Chinese, being predominantly in agriculture. Even within the R-R stream, proportionally more Chinese are in commerce and manufacturing as sales workers and production workers than Malays. It is mainly within the R-U stream that Malays show greatest diversity. A break into the modern sector by the Malays is almost exclusively into wage-labour sectors of government, transport, utilities and some modern agriculture such as oil palm.

The structuring of migration streams in terms of the two-circuit hypothesis as evident in the analysis of the census data of 1970 reinforces the importance of ethnicity and its strong relationship to locational distribution in Malaysian society. It shows the unevenness of development which led to the 1969 riots. It was to address these inequalities that the NEP was formulated in 1970 which aimed to restructure society as one of its two strategies.

The structured migration hypothesis, brought out by analysis of the locational, socio-demographic and ethnic factors, and the economic characteristics of the migration streams, was reinforced further by the examination of the formal-informal sector classification which formed the other basic dimension of the two-circuits framework.

We had envisaged that the formal-informal sector classification should cut across ethnic boundaries and represent a further breakdown of all the economic sectors, regardless of streams. While the census data utilised for the formal-informal sector classification may not be wholly satisfactory, it is clear that the ethnic factor does play an important role in this dimension as well. The Chinese are mainly in the formal sector, within the U-U and U-R circuits. Malays have a larger proportion in the informal sector, most of which are in the R-R and U-R flows. In the dissolution of the two circuits, more rural Malays are breaking into the urban formal sector than Chinese as shown in the R-U stream.

It was also shown that the Chinese occupations are more diversified in both the formal and informal sector, even though they continue to dominate in commerce, sales and production work. The differentiation between formal and informal sector migration flows according to origin and destination states, reinforces the earlier findings by reconfirming the uneven development manifested in economic and socio-demographic structure between the east coast underdeveloped states and those of the west.

Herein, perhaps, lies the crux of the complex problem of Malay-Chinese economic differences. Obviously, there are obstacles to the smooth absorption of Malays into

modern business sectors. It is suggested here that while some of these difficulties are socio-cultural, others are of a structural nature, characteristic of a transitional colonial economy.

Why have Malays failed to penetrate the occupations dominated by the Chinese? This is mainly because of the nature of recruitment. These firms tend to be small family enterprises run on a traditional kinship-basis, the proprietors even discriminating against non-family members and Chinese of different dialect groups. Besides, apprenticeship to skilled jobs such as tailoring, hairdressing, mechanics, carpenters and electricians are through informal channels where the apprentice is expected to live and eat with the proprietor. This in itself excludes Malays.

The major entry point by Malays into the tertiary sector is not into the petty trading, informal, marginal jobs, so characteristic of Third World urbanization (Hirschman, 1979). Instead it is mainly into the government, as petty officials and protection services. Why do Malays display this preference for government employment? One reason is their preference for government jobs owing to the security, regularity of income, retirement benefits and a certain prestige.[7] Hussein (1975; 1972) argues that the government bureaucracy is an extension of the feudalistic structure of Malay society which has not been disrupted by colonialism. Tham (1977) suggests that the Malay social structure emphasized loyalty for social mobility and the government is after all, an extension. The second reason may be due to their inability to penetrate the more urban informal channels. Government recruitment is mainly through application with stated educational qualifications, all the features of formal recruitment. Third, the government for political reasons and being paternalistic would see its role in creating jobs for the Malays. All these factors have contributed to Malay predominance in the government sector.

[7] Fieldwork data on Malay and Chinese job preferences.

CHAPTER 4
MOBILITY AND MIGRATION IN THE VILLAGE
THE TWO-CIRCUITS IN THE REGIONAL-LOCAL CONTEXT

4.1 INTRODUCTION

The national patterns of migration operating within the two-circuits were discussed in the previous chapter. This chapter complements the macro-patterns by examining in greater depth, at the micro-level, the patterns and processes of mobility and migration at the village. Because the study is from the source-end, it is able to capture the whole village[1] population examining the issue of migration from a total mobility structure (including stayers, and commuters) who are usually excluded from census and other large-scale surveys. These different mobility groups can be analyzed within a life-cycle framework, elucidating their inter-relationships, further adding to our knowledge of outmigration itself.

The underlying question is: to what extent is the pattern of mobility and migration viewed from the village perspective similar to the two-circuit system found in the earlier chapter on the migration streams between 1965-70, bearing in mind that six years have elapsed since the implementation of the NEP. Related to the first question is: what are the processes, which can be studied at this level, that influence the particular nature of migration in the village. Integral to this issue is the extent to which this village-level pattern is defined by ethnicity as a determinant of this mobility structure. The analysis will also attempt to examine the two-circuit hypothesis through isolating the impact of the life-cycle, such as age, marital status and related factors, and the contribution of schooling to the breaking of the two-circuit as measured by urban destination and formal sector-type occupations.

The relationship between socio-demographic factors, such as the life-cycle, and ethnicity and education as they affect the employment characteristics within the two-circuit structure of migration and mobility may be examined in a number of ways. The macro-approach in Chapter 3 had examined the four streams of migration in terms of strata and sector. Using data from the field survey the approach in this chapter is cross-sectional, analyzing micro-level mobility data at one point in time. Bearing in mind the inherent inadequacies of this type of data, the last section and Chapter 6, will examine the migration question from the longitudinal life-history retrospective approach.

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[1] For convenience "village" refers to all the study villages of Simpang Empat, Kedah.

The structural analysis of village mobility involves a two-step methodological strategy. First, a typology of mobility groups has to be constructed which is incorporated into the two-circuit framework. Second, the characteristics of these mobility groups, in terms of their socio-demographic and economic factors are studied. This is integrated as processes which tend to destroy or preserve the two-circuit structure of migration from the village.

The first section of this chapter sets the background to the study area.[2] It briefly highlights the development of the state of Kedah, deemed as one of the poorest. Not surprisingly, this state has Malaysia's largest *padi* growing region, Muda, where the most highly invested *in situ* project, that of the Muda Agricultural Development Authority, MADA, is located. The characteristics of the six *kampungs*, generally called Simpang Empat in this thesis will be discussed. In the next section, the typology of mobility groups and its relationship to the two-circuit framework which is to be verified at a village-level is explored theoretically. The socio-demographic characteristics of the mobility groups are examined in order to analyze the impact of the life-cycle factors on the structure of migration and mobility. The next section considers the employment and economic characteristics of the mobility groups. Ethnicity formed an integral component of the analysis of the earlier chapters and in this section, its interplay with sectoral, and locational factors continue to feature as importantly, especially in the question of the preservation and dissolution of the two-circuit structure of migration.

In the final part, the links between micro-level decision-making with the macro-level structural factors are analyzed through application of a concept of critical moves. Subjecting this index to a classificationary device allows for analysis of common profiles that incorporate the structural breaks associated with a locational-job move. An analysis of the pre- and post-1957 cohorts and the Malay and Chinese cohorts are also carried out.

4.2 KEDAH STATE AND THE MUDA REGION: THE VILLAGES IN CONTEXT

The villages that were studied are located in Kedah, a lagging state in Peninsular Malaysia, which displays most features of the lower-circuit system. The most important

[2] All the national level data for this chapter goes up to the 1970s. They have not been updated on purpose as they describe the study area at the time of the survey research.

factor which has contributed to Kedah's relative economic progress compared to the other underdeveloped states in the east coast is its location. Being on the west coast, Kedah is more accessible than Kelantan and Terengganu, and being close to Pulau Pinang meant that Kedah has enjoyed some of the economic spillover. For the same reasons, Kedah has larger proportions of Chinese and Indians than the underdeveloped states of the east coast.

The physical features of Kedah have influenced its economic and urban structure. Most of Kedah is coastal plain, below 10 feet above sea level. To the north, the plain continues into Perlis and the flat landscape is disrupted by monolithic limestone outcrops. To the south, the plain ends abruptly in the forest of Gunung Jerai (4,000 feet above sea level). The soil is sedimentary clay with a slight tendency to being acidic. It is mainly suitable for *padi*. Rubber is grown along the undulating foothills of the Main Range towards the east and south-west. Fishing is carried out along the coast and estuaries while fresh-water fishing occurs along the canals and *padi* fields. The latter is mainly for home consumption. The climate is tropical with the monsoon beginning from May to September, high humidity (about 80 per cent) and high uniform temperatures of around 70° - 95°F.

Table 4.1 shows the major socio-demographic, economic and urban characteristics of Kedah compared to the other states in the peninsula. Kedah is both the fourth most populous and densely settled state in Peninsular Malaysia with a mostly Malay population. The age-sex structure of Kedah is similar to the national one, with a high dependency ratio. The Chinese and Indians are displaying fertility declines. The sex ratio is balanced. Kedah, like the rest of the lagging states has a higher proportion of divorced persons, probably due to the large Muslim Malay population. An indicator of underdevelopment is low educational levels of which the mainly Malay states, including Kedah, have a high proportion.

The low economic development of the state is evident in the large proportion of the labour force engaged in *padi*, as agricultural workers who are self-employed or work as family labour. The secondary and tertiary sectors, particularly manufacturing and commerce, are underdeveloped in Kedah and the other east coast Malay states. Furthermore, the small proportion of Kedah's population using electricity and gas as a cooking fuel (in contrast to charcoal and wood), and not owning a car or motorcycle points to its disadvantaged economic position in comparison to the developed states.

The economic structure of the state affects urban development. Being a basically rural

Table 4.1
Peninsular Malaysia: Socio-Demographic, Economic and Urban Characteristics of Population by State, 1970

	Underdeveloped States				Developed States						
	Kedah	Perlis	Kelantan	Terengganu	Selangor	Penang	Perak	Negeri Sembilan	Johor	Melaka	Pahang
Socio-Demographic											
Population											
Total population 1970	954,947	121,062	684,738	405,368	1,630,366	776,124	1,569,139	481,563	1,277,180	404,125	504,945
Population density											
Per sq.ml	262	394	119	81	515	1945	193	188	174	634	36
Community (%)											
Malay	71.0	78.3	92.3	53.1	34.4	31.7	43.3	44.1	53.1	53.1	61.4
Chinese	20.0	17.8	5.9	5.7	46.5	55.9	42.4	39.6	39.0	39.4	31.0
Indian	7.6	1.5	0.6	0.9	18.4	11.3	14.0	16.0	7.4	6.8	7.4
Sex (%)											
Male	50.1	48.2	50.0	50.8	51.0	50.2	50.1	49.7	50.2	48.5	52.2
Marital Status (%)											
Single	41.6	38.8	34.2	36.8	47.2	47.0	45.6	45.0	47.2	49.1	41.2
Married	51.0	52.9	55.6	54.4	47.2	45.8	47.5	47.4	46.7	44.0	52.0
Schooling (%)											
No schooling	44.1	40.6	54.7	51.7	35.7	35.3	38.3	37.2	40.1	37.4	42.4
Primary	45.0	47.2	35.2	37.8	44.1	45.7	47.2	47.5	46.5	47.5	45.9
Secondary	10.9	12.2	10.1	10.5	20.2	18.9	14.5	15.3	13.4	15.5	11.6
Economic Structure											
Usual Industry (%)											
Padi	41.6	65.4	44.0	35.7	5.5	10.1	12.9	8.3	0.8	5.0	15.5
Rubber	28.2	4.8	22.4	15.3	12.5	6.8	24.8	46.4	41.8	35.7	34.4
Occupation (%)											
Agricultural workers	74.6	76.1	70.5	62.2	28.0	26.8	48.9	60.8	59.8	48.5	65.5
Production workers	7.0	6.2	11.9	18.1	27.8	24.2	21.3	12.7	15.5	16.8	14.4

Table 4.1 (continued)

	Underdeveloped States				Developed States						
	Kedah	Perlis	Kelantan	Terengganu	Selangor	Penang	Perak	Negeri Sembilan	Johor	Melaka	Pahang
Employment Status (%)											
Self-employment	32.8	37.4	44.8	45.4	17.4	21.89	25.4	22.6	21.5	23.1	30.2
Employee	37.3	19.7	23.8	30.6	63.3	56.5	50.7	50.1	54.2	55.6	44.7
Family worker	23.5	36.8	26.0	18.7	8.6	10.4	15.1	15.5	15.7	10.8	19.1
Cooking Fuel (%)											
Electricity and gas	4.8	5.3	4.8	5.7	15.7	15.1	9.5	7.3	7.2	8.3	6.5
Vehicle Ownership (%)											
Car	8.0	6.7	7.8	9.1	23.1	14.8	12.0	16.5	10.8	13.7	16.6
Motorcycle	17.1	13.7	13.5	15.7	24.5	25.5	21.0	21.7	20.2	17.4	21.1
Urban Structure											
Proportion urban	13.0	-	15.0	26.6	44.9	51.0	27.3	22.0	26.0	24.7	19.1
Towns sizes											
> 100,000	-	-	-	-	2	1	1	-	1	-	-
10,000 – 99,999	3	-	5	5	5	4	7	3	6	2	4
5,000 – 9,999	3	1	3	1	14	5	19	4	8	2	3
Total	6	1	8	6	21	10	27	7	15	4	7

Source: Malaysia, Department of Statistics, 1974.

population, both urbanization and the proportion living in a conurbation are low. There are only six urban centres compared to comparable-sized states such as Perak and Selangor with totals of 27 and 21, respectively, in 1970. Another indicator of Kedah's mainly rural population is the common feature of periodic markets (usually weekly) which serve a mainly agricultural community.

4.2.1 The Muda Region

Bearing in mind the aims of the thesis, three criteria were used to select the study area. The criteria were: an area where there was mobility and outmigration; with a Malay-Chinese ethnic composition for a comparative study; and a region of relative physical and economic homogeneity to ensure that both population characteristics and population components are not so susceptible to chance variation.

The Muda region of Kedah, located in the north-west coast of Peninsular Malaysia, fulfilled these criteria (see Figure 4.1). There is evidence of outmigration from this region. Farm land sizes in the area have not decreased significantly in the last 20 years despite natural population increase (Jegatheesan, 1976: 24-6). Although the national average annual population growth rate was 3.1 per cent between 1957-70, the rate of increase in 26 *padi mukims* in Kedah was only 1.54 per cent over the inter-censal period. Studies in the FTZs in Bayan Lepas, Penang (Chapter 5) suggest that at least 27 per cent of the labour force is from Kedah. An analysis of the flow of interstate lifetime and variable-period migrants[3] from the 1970 Population Census showed that Kedah ranked third in the country with a total of 103,765 lifetime migrants and 81,487 variable-period migrants. Kedah ranked fourth with 212,296 intrastate migrants. These figures suggest the importance of both long and short distance migration. Pre-survey discussions with local authorities, agricultural officers, and local leaders reinforced the evidence of relatively high rates of migration.

Initial field work revealed that the purposive selection of a village with both Malays and Chinese for comparison would make the study atypical. Instead, a more likely and typical Malay-Chinese population would be found in an area consisting of a *pekan* (small town of under 5,000) populated mostly by Chinese and its contiguous *kampungs* of almost exclusively Malays.

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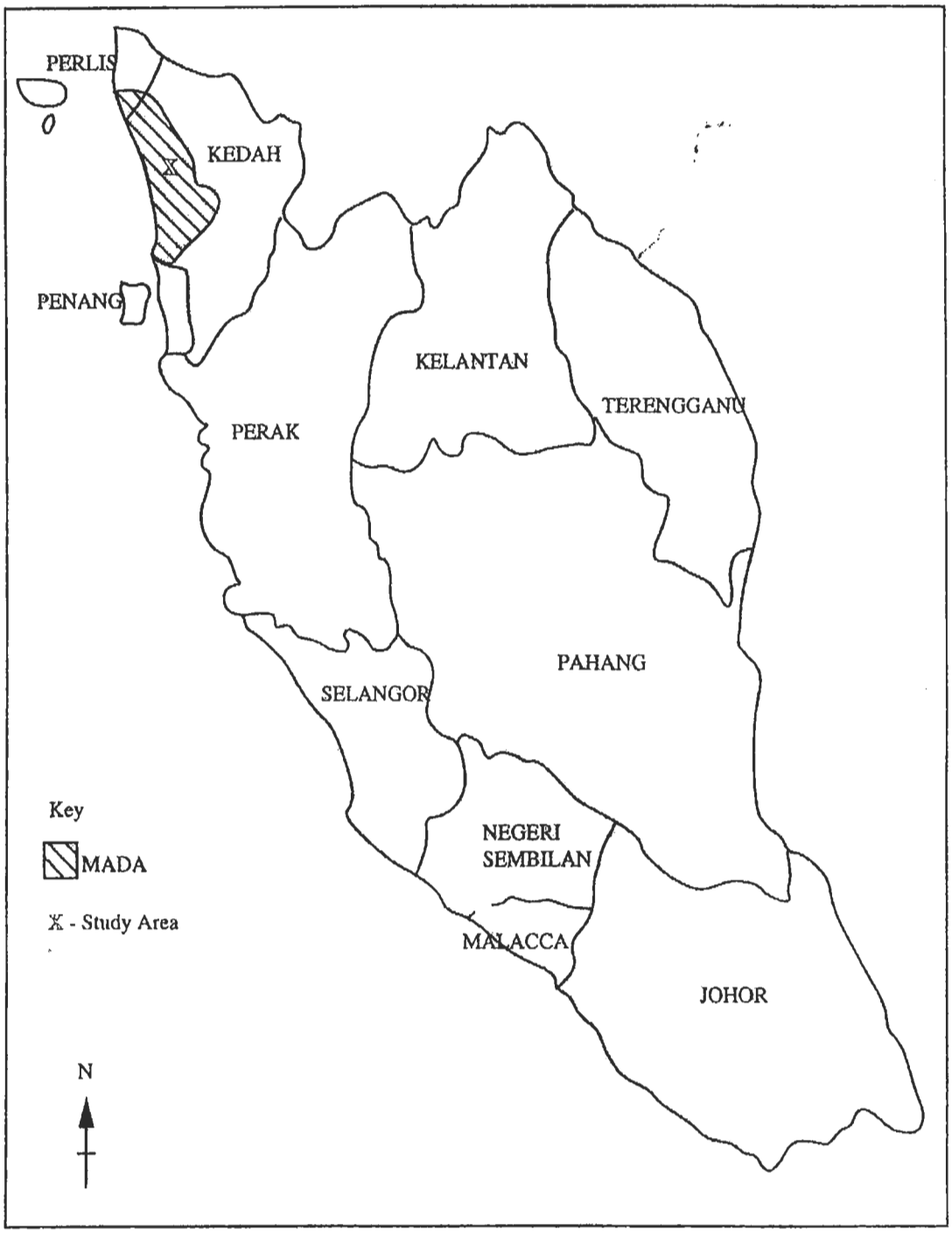
[3] Interstate migrants are defined as migrants whose state of birth was different from the state of enumeration during census-taking. Variable-period migrants are defined as migrants whose state of previous residence was outside the state of enumeration during census-taking.

Figure 4.1
Location of Study Area, MADA Region, Kedah, Peninsular Malaysia



The Muda region is relatively homogeneous. It is an old-established rice-growing area in which political, economic and social changes have been relatively uniform over a long period. Physically, it is a large, flat, coastal plain of about 263,000 acres, fed by the Sungai Muda. Known as the "rice bowl of Malaysia", it has been associated with rice-growing from as early as 1 A.D. and during the kingdoms of Langkasuka, Srivijaya and Majapahit (Afifuddin, 1973: 2).

Most of the Muda region consist of the Muda Irrigation Scheme, a product of the physical output phase of Malaysian rural development.[4] It was conceived in the early 1960s. The engineering costs alone totalled RM227.8 million (RM135 million loaned from the World Bank) making it at that time the most heavily invested *in situ* development scheme in Peninsular Malaysia.[5] There were many reasons for developing the Muda region. The population was predominantly Malay engaged in *padi*-farming. To raise *padi* production was a direct attack on a major poverty group. It was politically expedient to increase the incomes and living standards of a large rural community of Malay voters. Therefore, despite the fact that rice could be more cheaply bought from the rice-surplus neighbours of Thailand and Burma, Malaysia launched a rice self-sufficiency policy and subsidized local rice production.

The Muda region is Malaysia's largest contiguous rice-growing area (26 per cent of Peninsular Malaysia's rice acreage). It has traditionally been the rice granary of the country being a source of outmigrants to the other major rice-growing areas of Prai, Krian and Tanjong Karang. The region encompasses all of the coastal plains of Kedah and Perlis extending 263,000 acres and 60 miles from north to south and 20 miles from east to west (Figure 4.1). Agriculture in the scheme is characterized by almost complete dependence on *padi* cultivation which accounts for 77 per cent of land use and constitutes the major source of income for 50,000 farm families and over 325,000 persons (MADA, No. 20, 1972). Double-cropping was launched in 1970 and by 1974 this region contributed 33 per cent of Peninsular Malaysia's cropped *padi* acreage and 44 per cent of the domestic rice production.

The Muda Agricultural Development Authority (MADA) was formed in 1970 with the aim of "promoting, stimulating, facilitating and undertaking economic and social

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[4] This occurred in the 1960s, soon after Independence in 1957 when much of government spending was geared towards infrastructural development in the neglected rural areas.

[5] See MADA No. 2 (1970) and No. 19 (1972) for a discussion on the background to the development of the Muda Irrigation Scheme.

development in the Muda region". This was achieved through increased *padi* production (double-cropping and higher yielding varieties) and adoption of modern farming technology. The approach to development was coordinated and integrated with amenities (piped water and electricity), community facilities (health clinics and schools) and infrastructure such as transport (over 500 miles of bund road), marketing and rice-drying facilities, and support activities for agriculture (especially mechanisation and credit facilities) being developed alongside education extension, cooperatives and farmers' associations (27 in MADA).[6]

Owing to the recency of these developments (except schools, health clinics and utilities), much of the effect of double-cropping on the region occurred after 1970. For example, Alor Setar, the capital of Kedah, has grown from 60,000 in 1970 to an estimated 75,000 in 1975 (per. comm., Department of Statistics, Malaysia, 1976). Although there are economic variations between areas within the MADA region,[7] signs of affluence are noticeable.

There has been a steady growth of small centres such as Simpang Empat, the survey area, which, due to accessibility and location, service an area with a radius of over 10 miles. One notices the new shops added to these urban settlements. Driving through the region, one is struck by the number of new houses, additions to houses, and the relocation of Malay houses along major roads. Other evidence of wealth are the good condition of the houses, the array of new consumer products, including the upsurge of Honda motorbikes. Although spending power is affected by the seasonality of *padi* production, the size and business of the *pasar minggu* (weekly markets), of daily trading in the market, food stalls and shops in Simpang Empat, and the number of farmers participating in the Saturday night visit to Alor Setar all point to increasing prosperity. Furthermore, the number of Malays making the *haj* and the growing number of villagers joining guided tours to other parts of Malaysia, Thailand and Singapore all attest to the prosperity enjoyed by this region in the last five years compared to similar *padi*-growing areas straddling similar arterial roads, for example, the Krian region in Perak.

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[6] See MADA, No. 15 (1972) for discussions on integrated planning and implementation of agricultural development and institutional building in the MADA region. For an examination of the organizational structure and management policy, see MADA, No. 3 (1970). Aspects of integrated technology of rice cultivation are dealt with in MADA, No. 10 (1970). For sociological perspectives (attitudes, values, leadership and farming behaviour), see MADA. No. 18 (1972).

[7] The major causes of income disparities are farm sizes, soil types (24 per cent of the MADA region has acid sulphate soil which has to be heavily limed to produce higher rice yields -- see MADA, No. 5, 1970), tenancy, traditional rice varieties (see MADA, No. 6, 1970 and MADA, No. 11, 1971, for discussions on seed and fertilizer experiments), and cultivation practices (MADA, No. 4, 1970).

Therefore, it is in a dynamic region, undergoing tremendous changes as a result of agricultural development with overt signs of affluence, that the micro-study is located. Migration is of great interest to MADA as it holds important implications for the following issues. The first problem is land pressure, felt most noticeably in the last 5-10 years. This has been caused mainly by population increase although government resumption of land for irrigation canals, roads, rice-drying warehouses, and more landlords taking up farming again have all added to the problems of land-hungry farmers. Thus, of major concern to the planning authority is how to alleviate land pressure.[8]

The second but equally important problem which relates to migration is that of labour shortage which has been aggravated by the rigid time-table of double-cropping. Even in the days of single-cropping there was a labour shortage. Farmers have tried to stagger the periods of peak labour demand of planting and harvesting (due to the seasonality of rice production) by growing the same or different maturing rice varieties at different times. The fact that the monsoon rains take about three months to cross the region has also helped to even out the peak periods of labour demand. Besides, additional seasonal labourers from Kelantan and Pattani in South Thailand (11,600 persons between 1961-69 for an average duration of two months' stay) eased the traditional labour shortage. But with the onset of double-cropping which meant the strict adherence to an inflexible schedule, the planting and harvesting periods have been shortened by at least six weeks. Also, it has meant that in order to keep to the irrigation time-table, the same type (short maturing variety) of *padi* must be grown at the same time. Meanwhile, the development of double-cropping in Kelantan and the restriction by the government of seasonal Thai hired labour has cut off this vital supply of labour. Thus, the MADA region is short of labour during both planting and harvesting, in spite of the presence of unemployed youths registered in the labour exchange in Alor Setar. The seasonal labour shortage problem has important implications for MADA's goal as it affects the costs of production and, therefore, farmers' income. The importance of labour cannot be underestimated for labour inputs comprise between 55 and 64.4 per cent of the total costs of production (MADA, No. 15, 1972: 28-32). Evidence suggests that the labour shortage problem is going to increase. The average family size is estimated to be 6.0, with a balanced sex ratio. If the working age is assumed to be 16-60 years, then only

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[8] See Jegatheesan (1976; 1977) for a discussion on land tenure and its implications for productivity, income distribution and reform policy and Lim *et al.* (1975) for the nature of land tenancy in one locality in the MADA region. Horii (1972) studied one village and its land tenure system while Kuchiba (1977) analyzed the socio-economic changes and structure of a Malay village in Kedah.

49.5 per cent of the population falls into this category (MADA, No. 1, 1970). Thus, mechanization is imperative if farmers are to increase their incomes.[9]

The final problem which faces MADA, and has bearings on migration is the paradoxical situation of unemployment amidst an area of labour under-supply, especially at peak demand periods. Even if these unemployed youths worked during the harvesting season (planting is almost exclusively a female task), for the greater part of the year they remain unemployed or underemployed. High unemployment is related both to the mismatch of education and labour needs, and to the rising expectations and aspirations of the new generation of youths who are reluctant to work in *padi*.

This fact, and the increase in population has made it necessary for MADA to develop agro-based industries such as strawboard manufacturing to absorb the children of farming families. There are also government and private-sector joint-ventures for shoe manufacturing, bicycle assembly, livestock breeding, and fish culture in the region.

Evidence suggests that outmigration from this region has been occurring for some time. MADA has accepted the fact that the labour deficit in the scheme cannot be filled by local youths and that mechanization is inevitable for increased productivity. Despite the close inter-relationships between these factors and migration up to 1976, there has been no research specifically on migration in this region. Thus, the micro-study should contribute to knowledge in this sphere with implications for policy and planning.

4.3 THE SURVEY AREA: CHARACTERISTICS OF THE SIX *KAMPUNGS*

The previous sections have discussed Kedah and Muda, providing the background for the survey villages (*kampungs*). The aim of this part is to examine some of the major characteristics[10] of the six survey villages of Kampung (Kg.) Simpang Empat, Kg. Jalan Tokai, Kg. Selarong Panjang, Kg. Selarong Batang, Kg. Benua and Kg. Pisang (see Appendix B).

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[9] For the arguments for mechanization see MADA, No. 7 (1970), No. 14 (1971), No. 20 (1972), No. 25 (1974), No. 22 (1973) and for studies of different types of machines appropriate for the Muda region see MADA No. 8 (1970), No. 9 (1970) and No. 12 (1971).

[10] Households were classified into four groups: stay and eat together (94.7 per cent), stay together, eat separately (3.6 per cent), stay separately but eat together (0.8 per cent – old Malay parents living in a separate house next door), and share the same head of household (0.8 per cent – polygamous Malay men).

Three major factors influence the nature of these villages. They are located in MADA, a large development scheme where most of the facilities and amenities of modern living have been available since the mid-1960s. Consequently, they are undergoing unprecedented changes. With the exception of Kg. Pisang, these villages are situated near or along the north-south arterial road which means they enjoy easy accessibility and exposure. Their proximity to Alor Setar (8-10 miles) further enhances the villagers mobility and their perception of urban conditions. The range of shops (wholesale and retail) and services (private clinics, car and motorbike mechanics, petrol station, hairdressers, photographers and tailors) are illustrations of Simpang Empat's economic diversity.

The population from these villages may be treated as a group for mobility and migration analysis for the following reasons. First, all the villages, except Kg. Pisang, are contiguous covering an area of 5.2 square miles. Although Kg. Pisang is not adjacent to the rest of the villages, it is merely separated by a wide expanse of *padi*-fields. Second, these settlements are close enough to each other to share similar features. Third, the first survey was a complete census of the *kampungs* (as against sampling) which statistically validates the population of these villages to be combined for analysis.

Table 4.2 shows some of the basic household characteristics of the six *kampungs*. In terms of distance from Alor Setar,[11] most of the *kampungs* average between 8-10 miles, with the exception of Kg. Pisang. A similar pattern occurs when distance is calculated from the nearest *pekan* (Simpang Empat and Kota Sarang Semut – another nuclear settlement four miles south of Simpang Empat). Data on the total persons ever-lived, currently living and having left the household show differences between villages caused by the higher proportion of Chinese families in their total number of households. The Chinese have larger means than the Malays for total persons ever-lived in a household (10.6 persons and 6.7 persons), currently living in the household (8.3 persons and 5.2 persons) and having left the household (3.6 persons and 2.8 persons). Kg. Jalan Tokai, Kg. Benua and Simpang Empat have higher proportions of Chinese households (91.7 per cent, 54.6 per cent and 52.7 per cent, respectively) which result in the higher means for household size in these *kampungs*.

[11] Distance from Alor Setar was measured from the house location by road to the boundary of the township of Alor Setar.

Table 4.2
Simpang Empat: Characteristics of Households by Ethnicity, 1976

Characteristics		Malay	Chinese
Distance			
*Distance from Alor Setar (mls)	mean	7.7	6.8
F = 45.9	standard deviation	1.4	0.8
*Distance from nearest *pekan* (mls)	mean	0.9	0.4
F = 32.7	standard deviation	0.9	0.4
Household			
*Total no. ever lived in household	mean	6.7	10.6
F = 68.1	standard deviation	3.1	5.6
*No. currently in household	mean	5.2	8.3
F = 65.7	standard deviation	2.5	4.4
*No. left household	mean	2.8	3.6
F = 12.6	standard deviation	1.8	2.5
	N	315	246
Migrants			
**Sets of family migrants	mean	1.5	1.4
F = 0.5	standard deviation	0.9	0.0
	N	23	33
**No. of married male migrants	mean	1.7	1.0
F = 2.4	standard deviation	1.2	0.0
	N	34	12
Income			
*Total household income per month	mean	316.3	530.3
F = 12.0	standard deviation	330.3	773.8
	N	591	370
*Average household income	mean	68.7	75.1
per month	standard deviation	81.8	98.2
F = 0.5	N	591	370
Land			
**Average cultivated land (relung)	mean	9.7	9.0
F = 0.6	standard deviation	8.0	10.0
	N	372	110
**Average owned land (relung)	mean	8.2	10.3
F = 1.5	standard deviation	6.4	13.1
	N	140	21
N		592	377

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.
Note: + Where N is not shown it is similar to the household totals of each of the *kampungs*.
* P<0.01 ** P>0.05

An investigation of he sets of amily migrants, and number of married male migrants who have left the households in the villages shows that the village

means are not significantly different.[12] Similarly, the averages for total household income and average household income between villages are not significantly different although Kg. Pisang has the lowest average and Simpang Empat the highest average.[13] However, the mean amount of cultivated land varies between *kampungs*, with Kg. Jalan Tokai recording the lowest (5.1 *relung*[14]) and Selarong Panjang the highest (14.2 *relung*). A reason for this is Kg. Jalan Tokai consists mainly of Hokkien and Teochew vegetable gardeners (who use less land as it is intensive) compared to the Hakka and Cantonese *padi*-farmers of Selarong Panjang.[15] The average amount of owned land is less than the average amount of cultivated land (which include rented land) in all villages. Kg. Jalan Tokai, Kg. Benua and Simpang Empat recorded smaller averages for owned land due to the larger family-size and greater density of population. Besides, Selarong Panjang and Kg. Pisang recorded high means for Chinese land ownership (19.5 *relung* and 34.5 *relung*). Overall, although there are some variations between the *kampungs*, generally, they share many similarities which can justify their amalgamation into one population.

Ethnicity is of far greater importance than location in explaining the differences within the sample (see Table 4.2). The Chinese tend to live closer to urban centres than the Malays. Although they have larger families than the Malays, the Chinese have fewer sets of family and male married migrants. These differences are due to cultural factors. Chinese tend to be rigidly patrilineal, setting up nuclear households on marriage (except for the Teochews who prefer laterally extended families). On the other hand, Malays tend to be bilocal, with a preference for matrilocality. It is not unusual to find newly-wed daughters living with their husbands in the wife's parents' house among Malay households.[16] The Chinese on average enjoy higher incomes than the Malays, although there is considerable variation within the Chinese. While the Chinese farmers cultivate, on the average, a slightly larger amount of land than the Malays, in fact, few Chinese

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[12] Sets of family migrants are numbers of joint families which have left the interviewed household. Married male migrants are men who got married, and continued living in the interviewed household before leaving it.

[13] Total household income is the total stated income of all current members of the household earning an income. The stated income was checked against our own estimates. No provisions were made for family labour, home-produced food, etc. Average household income is the total household income divided by the number of current members of that household.

[14] One *relung* is equivalent to 0.7 acres.

[15] Market gardening is intensive agriculture with higher returns per relung than double-cropping *padi*. See Huang (1975) for an analysis of the profitability of *padi* cultivation.

[16] The same finding is reported by Horii (1972) in his detailed analysis of land tenure in a Malay *kampung* in Muda.

own land (5.6 per cent of all Chinese households compared with 23.6 per cent of all Malay households). But where Chinese do own land, the mean is 13.1 *relung* compared to the Malay's 6.4 *relung*. Thus, a few Chinese families own a large amount of land.[17] These are the descendants of the earliest Chinese settlers in the area who, very early on, decided to invest in land and made Malaya their home rather than return to China. The inequitable distribution of land among the Chinese is caused by their inability (all expressed the desire to acquire more land) to buy land from Malays due to the Malay Land Reservation Act.[18] Land owned by the Chinese was bought before the Act or acquired by the Chinese (in Kg. Benua and Simpang Empat) from Malays who pawned their land and lost while gambling in *kerbau* (water buffalo) fighting.

4.4 A TYPOLOGY OF MOBILITY GROUPS

The aim of this section is to construct a typology of mobility groups in an attempt to take a holistic view of migration. Although it is argued that the pattern of migration in Malaysia operates within a two-circuit system, a meaningful micro-study of migration should be extended to encompass the other mobility groups. The reason for this approach is the contention that migration represents one aspect (albeit more important in the context of the two-circuit because of its potential to break the circuits) of a broader mobility continuum or spectrum. Understanding the other forms of mobility within a total village mobility situation will help to throw light on migration and reveal the complexities of the migration process as well as the intricacies of the two-circuit system. These forms of mobility usually escape the normal census-taking owing to time and money constraints faced by governments (see Cho, 1976; Cho and Hearn, 1984). Not only is migration the only mobility data collected in most censuses but the definition of it is based on convenience; migration being usually defined by birthplace or place of previous residence (see Appendix A). Thus it is usually in surveys collected by researchers with the explicit aim of studying temporary movements that the issue of mobility in the form of circulators or commuters is raised.[19] However, a review of the

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[17] For example, the Chinese land-owner with the largest amount of land in Selarong Panjang has 40 *relungs* while the Chinese farmers of Kg. Pisang average 34 *relungs* owned land.

[18] The Malay Land Reservation Act forbade the purchase of Malay-owned land by non-Malays. Land owned by non-Malays, if sold to Malays revert to Malay alienated land. In an environment of land pressure owing to population increase, aggravated by rising profitability through double-cropping, insufficient land becomes a severe limitation for Chinese farmers.

[19] In recent years, more interest has been paid to mobility (different forms of circulation) in countries other than Africa where it had been documented since the 1940s. See for example, Elkan (1967) and Gugler (1969) and Mitchell (1969). For examples in the Pacific see Bedford (1973) and Chapman (1976); for

plethora of research on migration in Third World countries will show the tendency for researchers to either examine migrants exclusively, or at most, within a mover-stayer framework.[20] In all cases, there has been no attempt to interrelate all these mobility groups into a stayer, commuter, intending migrant and outmigrant continuum.

4.4.1 Concepts, Definition and Data Source

Before devising the typology of mobility groups from the village-level, it is important to discuss the concepts and definitions.

The concept of the mobility groups may be divided into the following categories: inmigrants, stayers, commuters, intending migrants, outmigrants and return migrants. But owing to the cross-sectional nature of the survey of the village which categorized the whole village population at the time of the survey, the actual village population consisted only of stayers, commuters, and intending migrants. Although outmigrants were derived from household reconstruction during the village survey, their current mobility status at the time of study was as outmigrants even though they were technically not the current village population (as they were no longer living in the village).

For the same reason that the definitions were based on the status at the time of the survey, inmigrants could have become any of the above mobility groups (i.e. an inmigrant who came to the village in 1962 is now categorized as a stayer). Likewise, a return migrant would also have fallen into one of the other mobility categories (i.e. a return migrant came back to the village in 1974 but is now, at the time of survey, a commuter). Thus, the time element is a crucial consideration in the definition of a mobility group.

The data for this chapter are derived from the Simpang Empat Mobility and Migration Survey, I (see Appendix B for a discussion of the background to the selection of the field area and the questionnaires) which are cross-sectional in nature. As such they suffer from the limitations of a transverse study. But as the main aim is to examine a profile of the total village mobility groups at one point in time, the survey serves its

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Papua New Guinea see Curtain (1981) and Young (1978); for Indonesia see Forbes (1979), Hugo (1975) and Jellinek (1978) and Mantra (1977); for Thailand see Lauro (1979) and Textor (1956).

[20] In particular, see Amin (1974); Caldwell (1969); Connell *et al.* (1976), Findley (1977); Lipton (1980); and Simmons *et al.* (1977) for some studies and reviews on Third World migration.

purpose. The life-history matrices which constitute part of the Stage II data are longitudinal and will provide the complementary historical perspective through individual migration experiences.

Mobility group is used as a generic term to encompass inmigrants, stayers or non-migrants, commuters or circulators, intending migrants or potential migrants, outmigrants and return migrants. However, the total village population at one point in time consists only of stayers, commuters and intending migrants, their definitions being listed in Table 4.3.

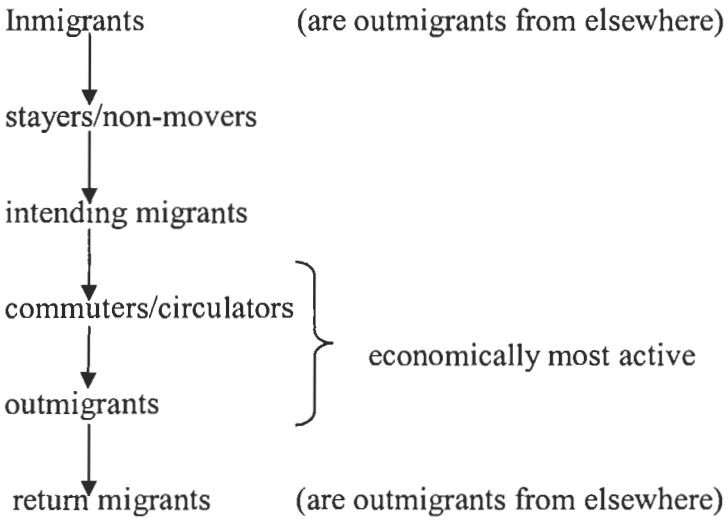
Table 4.3
Definition of Mobility Groups

Type of Mobility Group		Definition of Status		
1.	Stayer	Person who has no declared intention of leaving the *kampung*.	Current Village Population	Ever-lived In Village Population
2.	Intending Migrant	Person who has stated intentions of leaving the *kampung* to live elsewhere within the next six months.		
3.	Commuter/ Circulator	Person who journeys to work outside but returns nightly, or at least three nights to sleep in the *kampung*.		
4.	Outmigrant	Person who has left the *kampung* to live elsewhere on a permanent basis, returning mainly for social visits.		

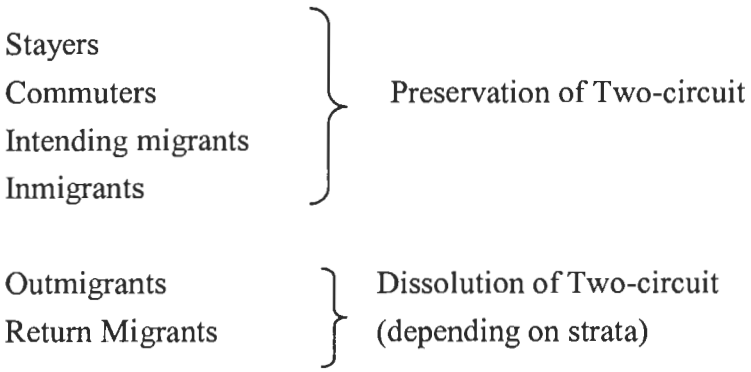
One is aware of the problems associated with stated intentions as a defining factor for intending migrants, who in fact are non-migrants at the time of the survey. But the objective here is to get some idea of who are the people who have some plans of leaving. This does not assume that all who state they want to leave would eventually leave. Similarly, some become outmigrants even without saying they plan to leave. So technically, the non-migrant population in a village are the stayers, commuters and intending migrants. The reason for distinguishing non-migrants beyond a simple migrant-non-migrant framework is to extricate some of the more complicated processes

which may be disguised within a simple mover-stayer dichotomy.

The typology of mobility groups sets the framework for the two issues discussed in this chapter. First, the argument that the different patterns and characteristics of the mobility groups are interrelated, linked by the stages of the life-cycle in a mobility continuum which can be distinguished by their socio-demographic characteristics. This is set out below:

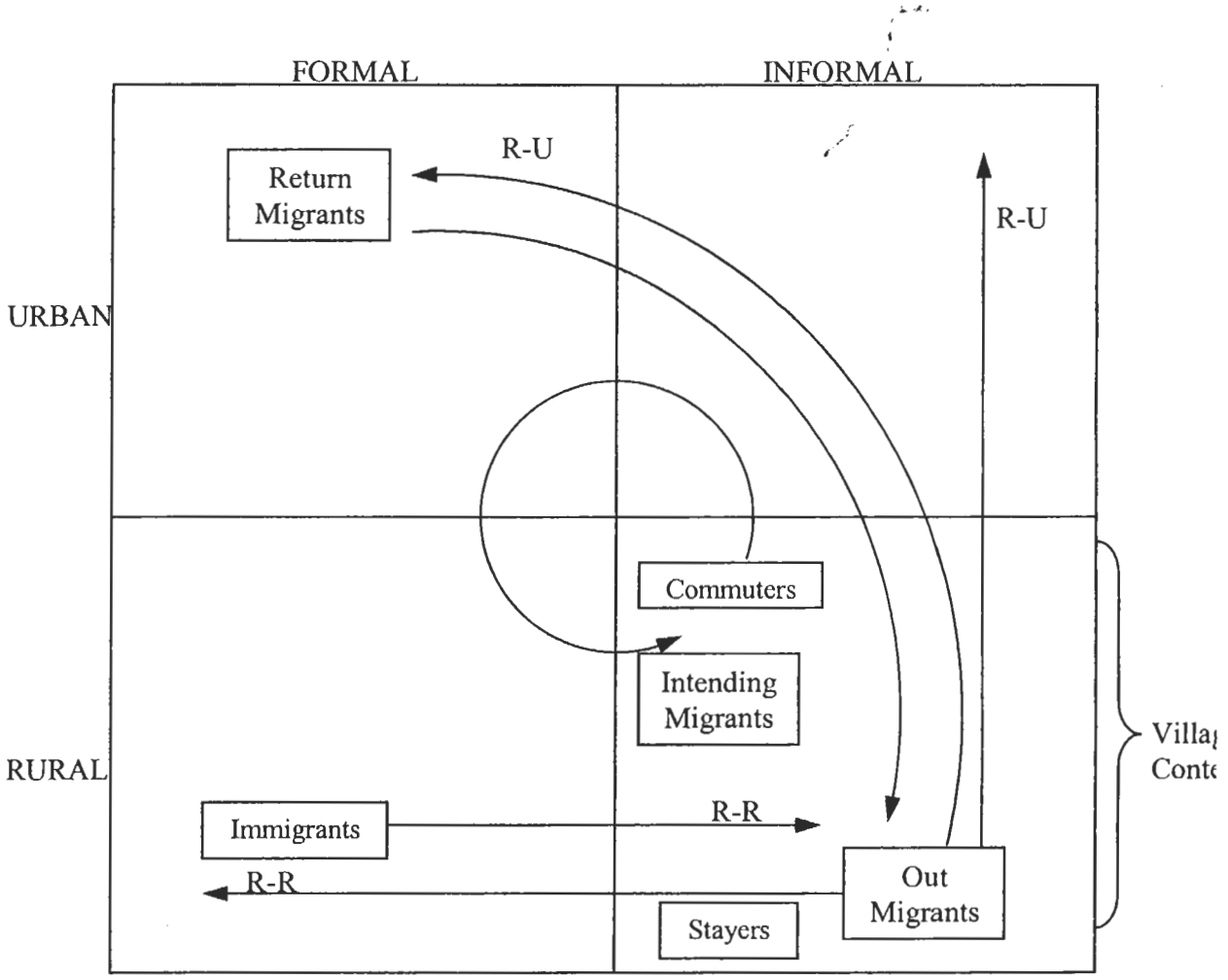


Second, in terms of the two-circuit system, these mobility groups may be classified according to whether they are part of the preservation or the dissolution of the two-circuits as shown below:



If the two major determinants of the two-circuit framework, namely strata (urban or rural) and economic sector are used, then these relationships can be formulated as in Figure 4.2. This represents the cross-sectional view of the mobility and migration structure at the village-level with the different mobility groups arranged according to the mobility continuum or life-cycle stage, and the preservation-dissolution processes of the two-circuit framework.

Figure 4.2
Mobility Groups and the Two-Circuit System



The first part examines the extent of these mobility groups as an introduction to the rest of the chapter. The second analyzes the socio-demographic characteristics of these mobility groups as they are linked through the life-cycle. The third section develops this theme further by discussing their economic features, arguing that these mobility groups are better understood if viewed within their economic roles. It is here that the two-circuit system can be assessed and see how it reflects the patterns discussed in the previous chapters. A special section is devoted to outmigrants as they constitute the major group which breaks the circuit.

4.4.2 Mobility at the Village Level

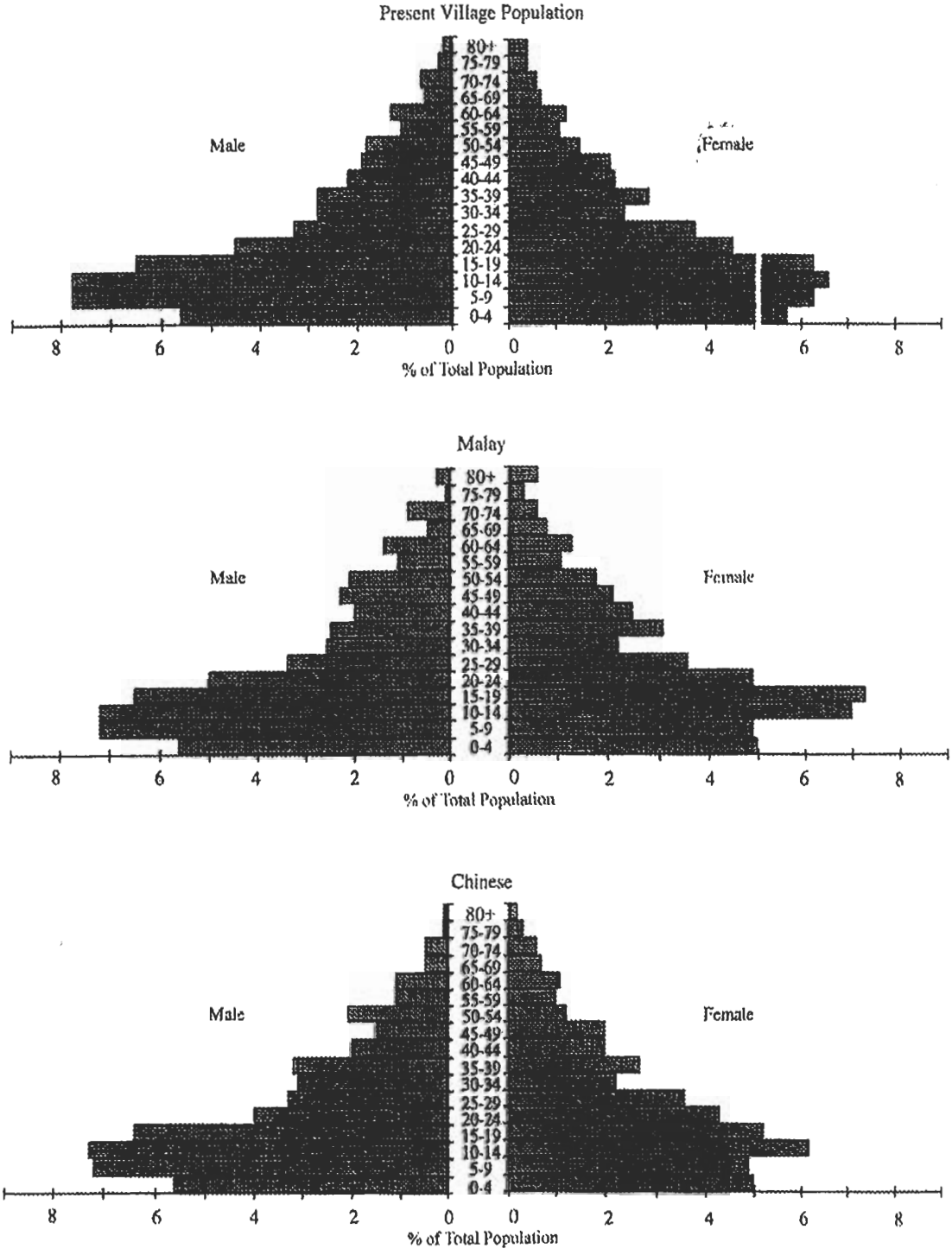
The village population consisted of a total of 6,297 persons, 49.9 per cent were Chinese and 48.6 per cent were Malays. The Indians and others comprised 1.5 per cent, too few to be included in the analysis for the rest of the study.

Before reviewing the different mobility groups it is useful to look at the age-sex structure of the total village population, as this determines to a certain extent, the demographic structure of the mobility groups (Figure 4.3). The age-sex structure is that of a young population (39.5 per cent under 15 years) which is male-dominated (104:100). The male dominance is a remnant of the immigrant characteristic of the Chinese population. This is clearer when the population is examined separately for Malays and Chinese. The Chinese have fewer females than males (121:100) compared to Malays where the sex ratio was 103:100. This may be explained by the immigrants among the older segments of the Chinese population, but more importantly, by the larger proportion of female Chinese who migrate out of the village to work (20-29 years). Although both communities display the impact of falling fertility, larger shrinkages are occurring among the Chinese in the 0-4 age-group. The Malays have a smaller dependent population under 15 years (36.9 per cent) than the Chinese (42.5 per cent). This may be explained by the larger proportion of younger Malays who migrate with their family.

A comparison of the age-structure of the six *kampungs* illustrate similar features to those of the total village population: a young population, male dominance (especially among the Chinese), and possibly declining fertility (Figure 4.4). Small variations between villages tend to be caused by the differing Malay-Chinese composition of the village population.

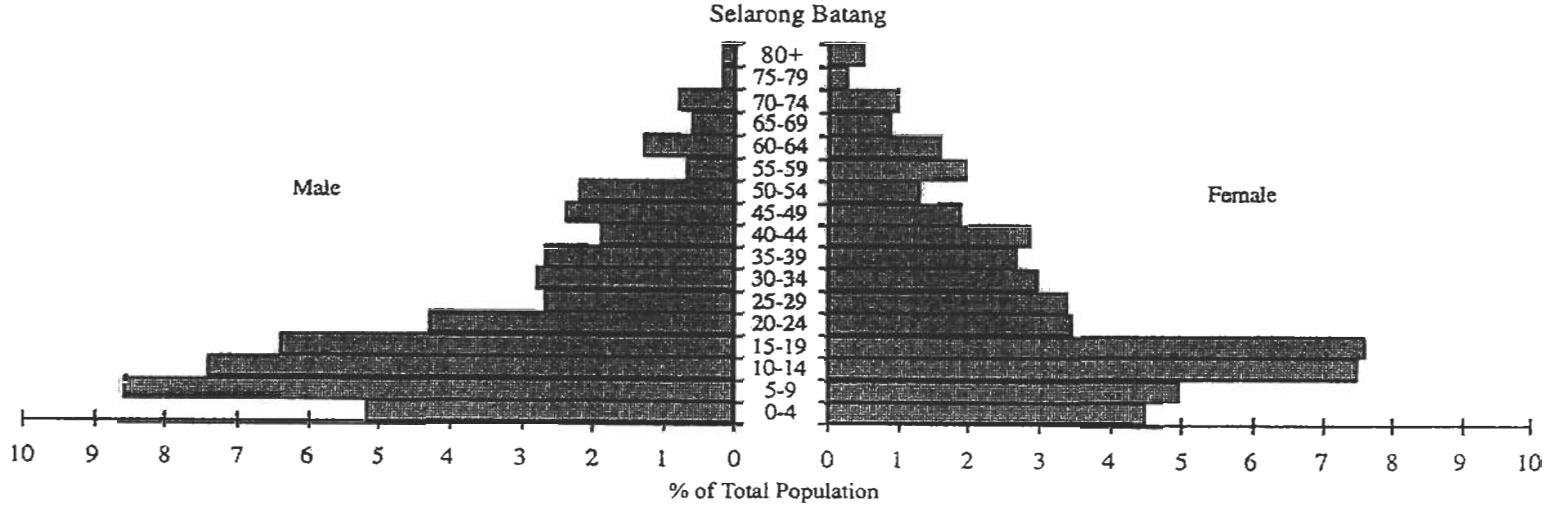
Figure 4.3

Simpang Empat: Age-Sex Structure of the Total Village Population, 1976



Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Figure 4.4
Simpang Empat: Age-Sex Structure of the Different Villages, 1976



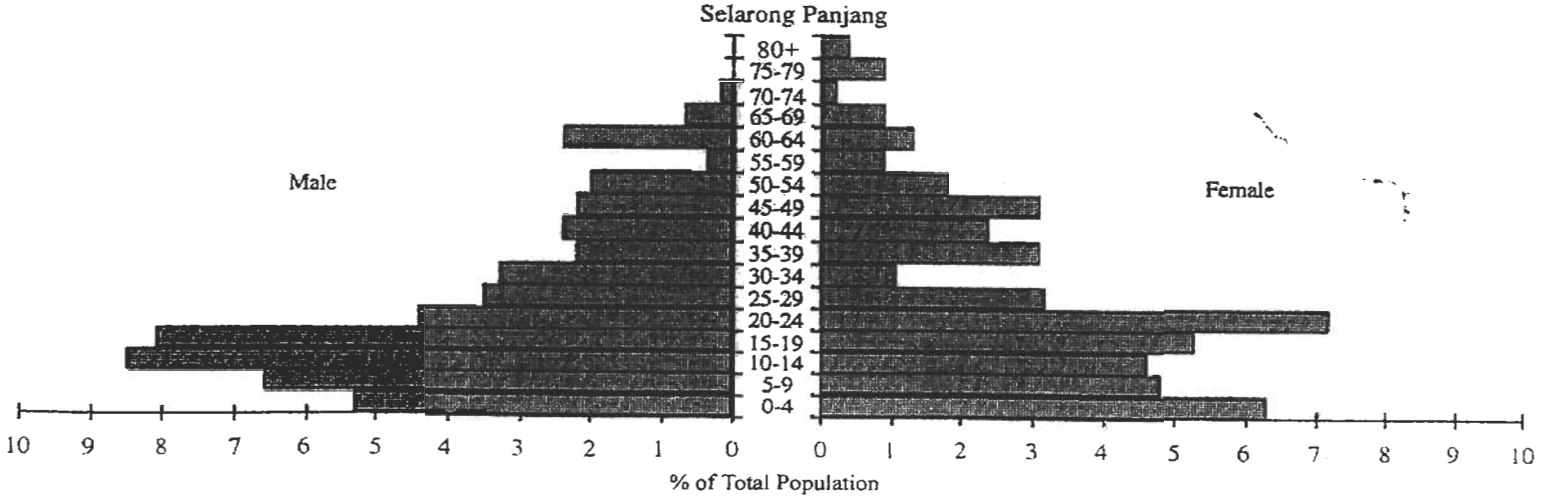
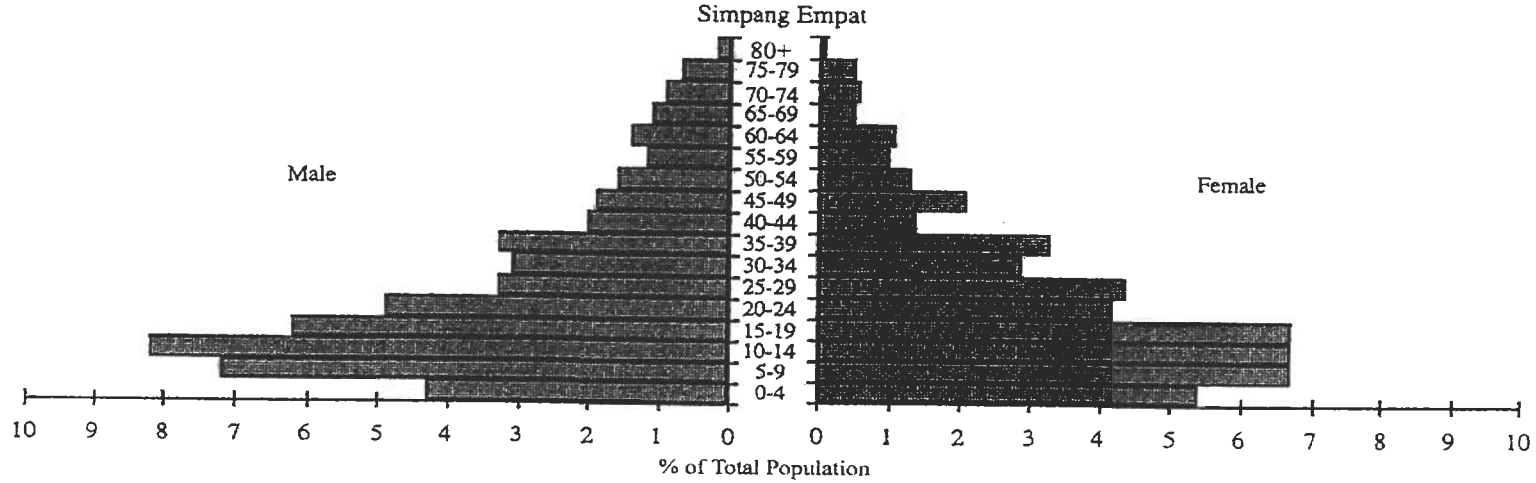
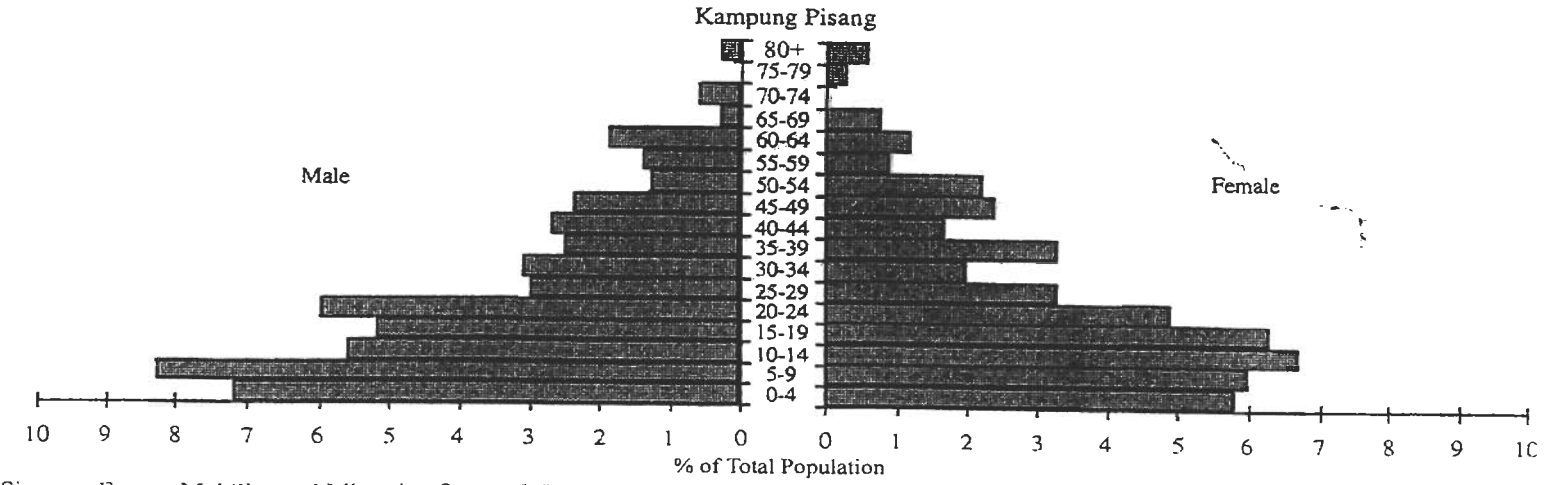


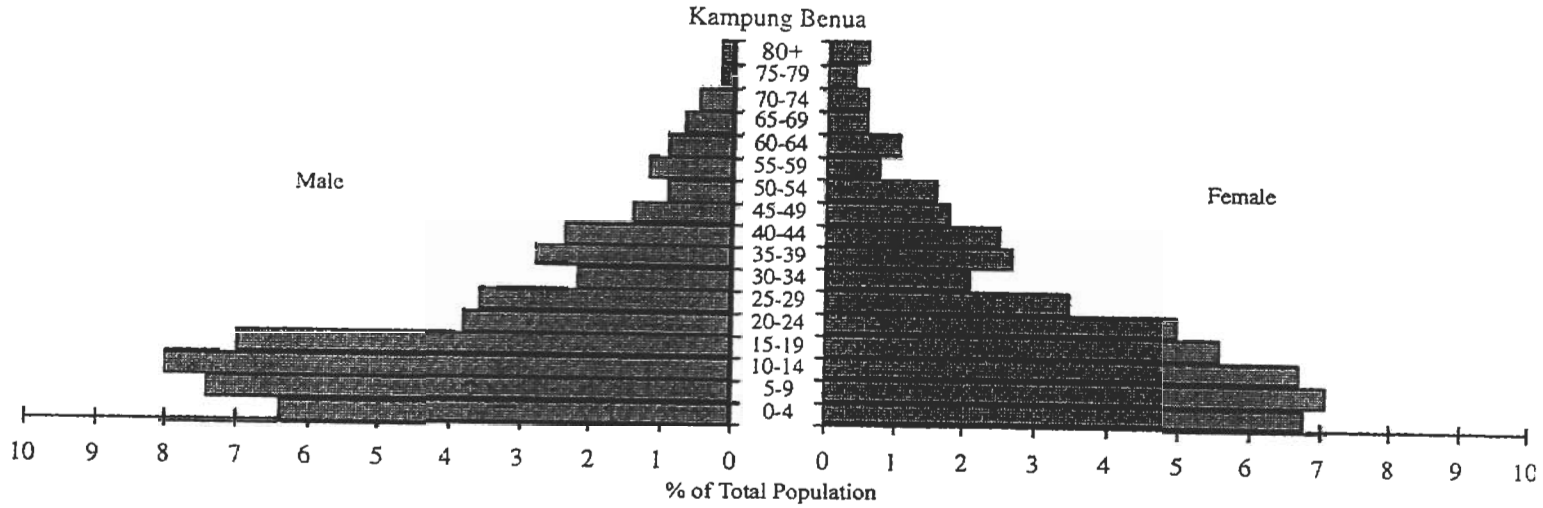
Figure 4.4 (Cont.)

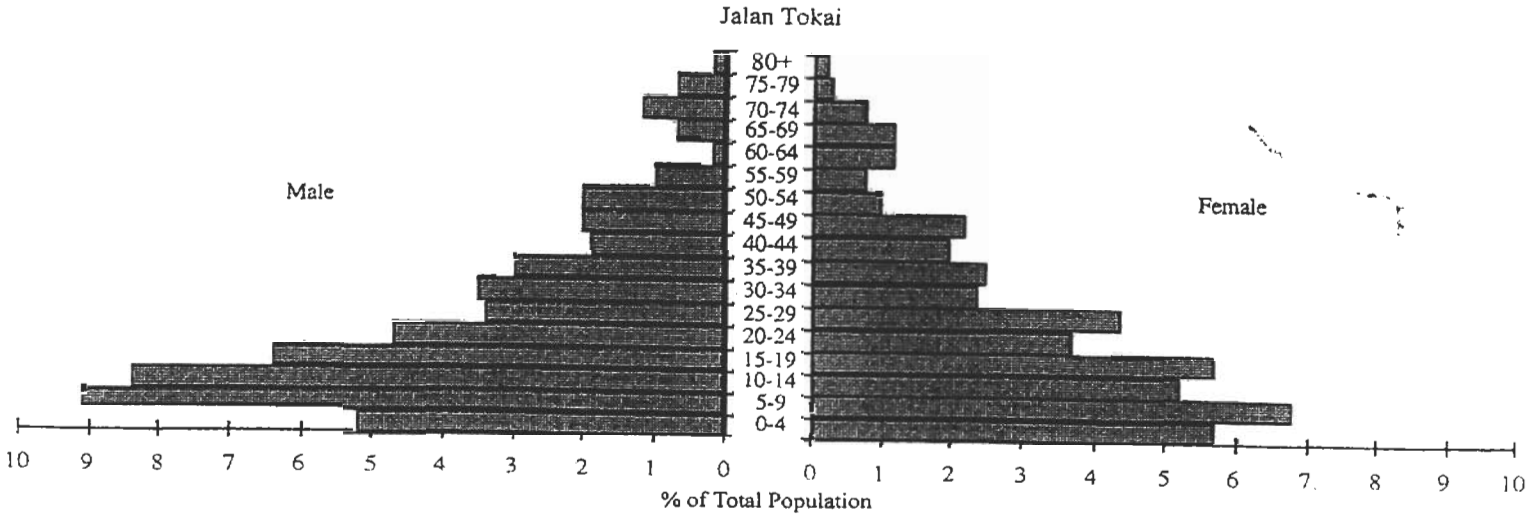




Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Figure4.4 (Cont.)





Stayers constitute about 80 per cent of the village population, with commuters and intending migrants taking up the rest, of 12 per cent and 8 per cent, respectively (Table 4.4 and 4.5). There are more Chinese than Malay stayers, due mainly to the larger proportion of intending migrants among Malays. There are three reasons for the large proportions of intending migrants among Malays. They generally have a higher job expectation level than the Chinese (see McGee, 1969 for Malay job expectations among youths in Kuala Lumpur and Malay aspirations concerning education). This is particularly obvious among those with higher secondary education. The second reason pertains to those with little or no schooling. Unlike the Chinese, Malays have far more opportunities to migrate to other agricultural land owing to land development schemes like FELDA, and more contacts (relatives and friends) in rural areas.

Finally, at marriage Malays of both sexes may migrate owing to family circumstances and available opportunities within the kinship framework of bilocality. For the Chinese, marriage means leaving to start a new home with the husband or to live with the husband's family.[21]

The bigger proportion of commuters among Malays is due to the larger number of students in this group who commute daily to school outside their *kampungs*. This is particularly true of Kg. Pisang which is less accessible and predominantly Malay. It has schools and a commuter rate of 24.8 per 1000. Owing to its undiversified economic structure (98 per cent in padi farming) all who work outside agriculture have to commute or migrate. Selarong Batang has a low stayer rate due to its high rates of intending migrants, which can be attributed to its higher levels of education. In contrast, the high stayer rate in Selarong Panjang is a result of the relatively lower educational levels of the Malays there and the availability of land for farming. On the whole, the mobility differences between *kampungs* may be explained by their economic structure.

Age is perhaps the most important demographic factor affecting the nature and extent of mobility groups. Figure 4.5 illustrates the age-specific mobility rates of stayers, commuters and intending migrants. The stayer curve has an inverse pattern

[21] To illustrate the strictly patrilocal and extended nature of Chinese families as compared to Malays, 32.2 per cent of Chinese families in the village population were patrilineal compared to 9.0 per cent noted by Malays. While 33.5 per cent of the Chinese came from extended families, the proportion for the Malays was only 17.5 per cent.

Table 4.4
Simpang Empat: Mobility Groups by Ethnicity, 1976
(in percentage)

Mobility Group	Ethnicity		Total
	Malay	Chinese	
Stayer	76.5	83.8	80.2
Commuter	12.9	10.4	11.6
Daily[a]	(11.4)	(9.0)	(10.2)
Other[b] (1.5)	(1.4)	(1.4)	
Intending Migrant	10.6	5.6	8.2
Total No.	3,156	3,173	6,329
%	100	100	100

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Note: [a] Commuter who returns each day to sleep in the village.

[b] Commuter who returns to sleep in the village at least three nights a week.

Table 4.5
Simpang Empat: Proportion of Mobility Groups by Ethnicity, 1976

Mobility Group		Proportion of Mobility Group as Percentage of Village Population				
		Malay	Chinese	Indian	Other	Total
Total Present Village Population		48.6	49.9	1.5	0	6,297
Stayer		46.9	51.7	1.3	0	5,145
Commuter		53.1	45.1	1.8	-	738
Intending Migrant		62.6	34.6	2.8	-	532
Total Village Mobility Groups	No.	3,139	3,177	97	2	6,415
	%	48.9	49.5	1.5	0	100

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Figure 4.5(a)
Simpang Empat: Community Age-Specific Mobility Rates of Stayers, 1976

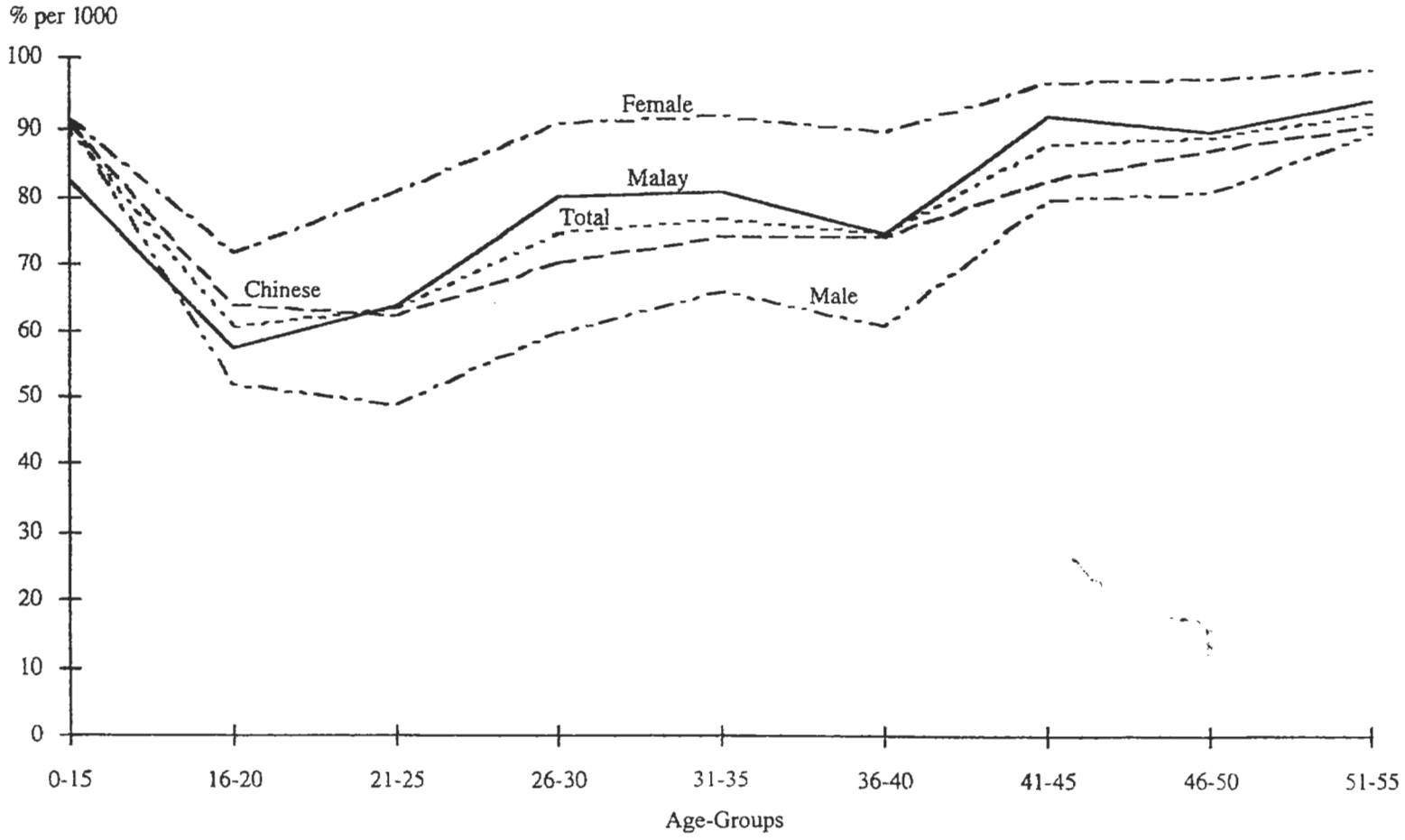


Figure 4.5(b)
Simpang Empat: Community Age-Specific Mobility Rates of Commuters, 1976

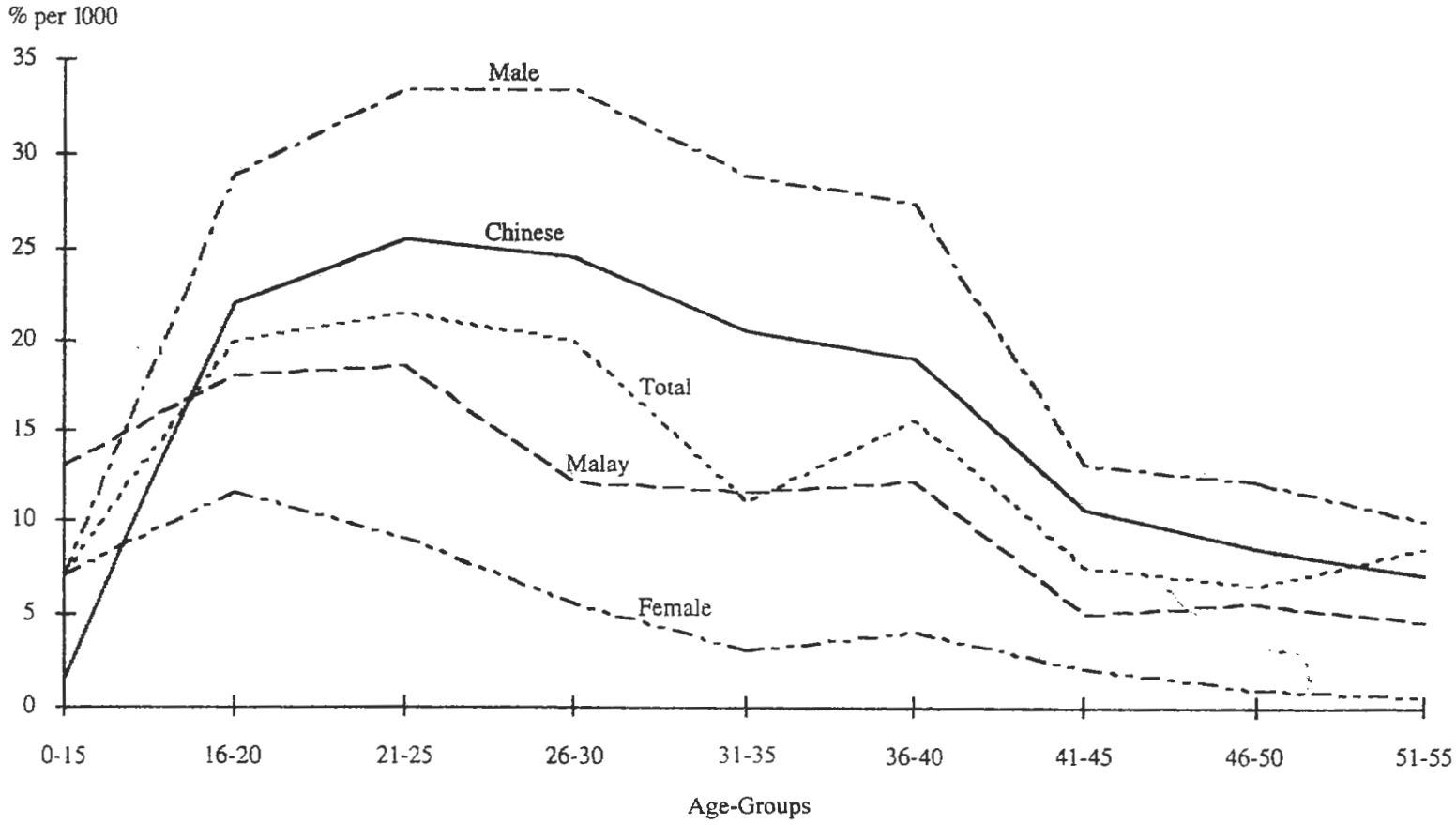
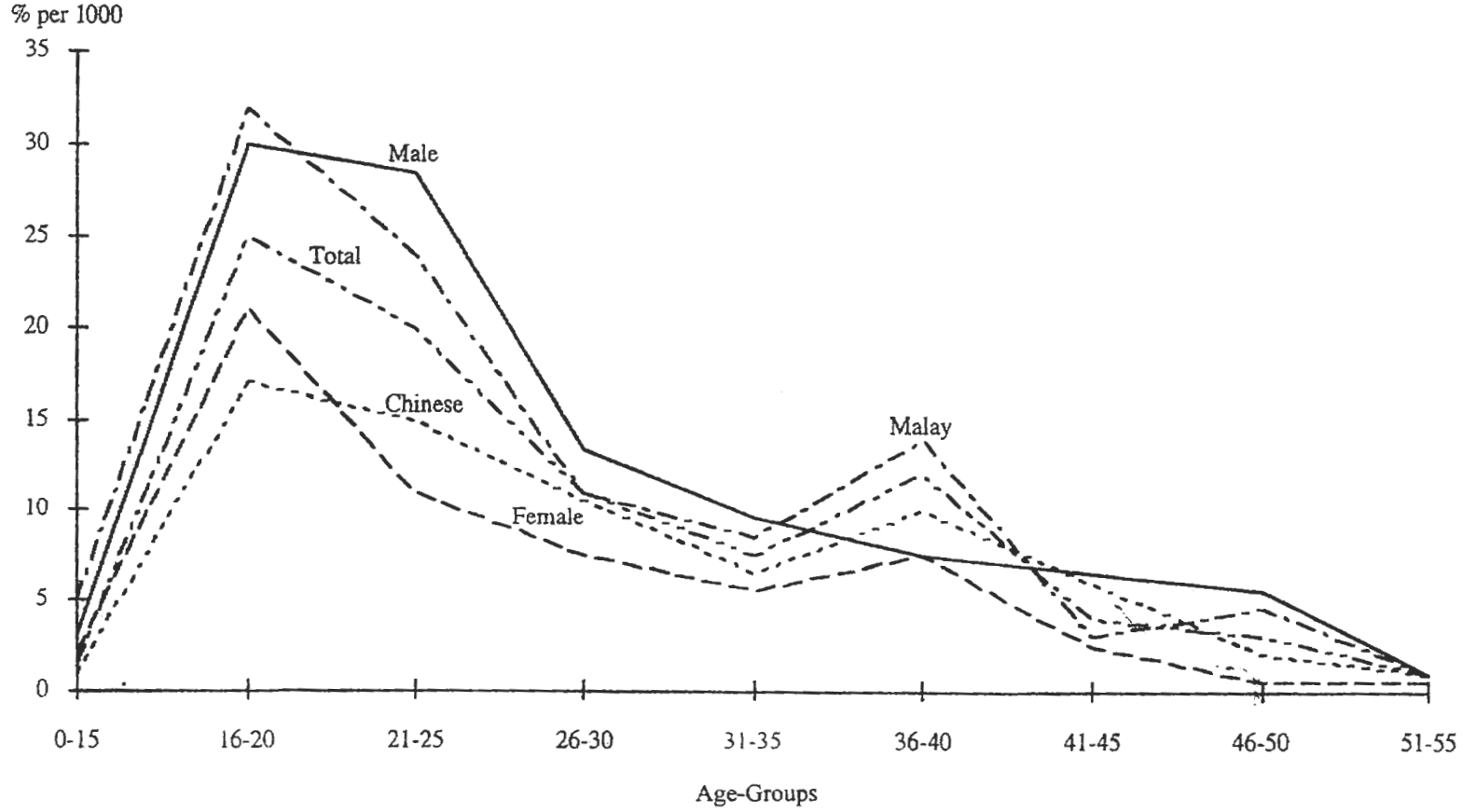


Figure 4.5(c)
Simpang Empat: Community Age-Specific Mobility Rates of Intending Migrants, 1976



Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

to that of commuters and intending migrants. Stayers are found mainly among those aged 0-15, being lowest among the most mobile ages of 16-25. Another low is found among those aged 36-40, a mirror image of the peaks for commuters and intending migrants. These 'kinks' are related to the second major stage of the life-cycle when people are about to venture into a better job. From the age group of 36-40, the stayer rates increase steadily with advancing age, reaching the highest rate of 93 per 1000 among those aged 51-97. Thus stayers are mainly the very young and the old.

In contrast, intending migrants peak at ages 16-20 and again at 36-40, declining with increasing age. The importance of school children among commuters is clear from the rate of 7 per 1000 among those aged 0-15 years. The other peak, aged 36-40 consists chiefly of working men. As we shall see in the next section, these mobility groups represent certain phases of the life-cycle.

Ethnic factors, depicting different socio-cultural norms and economic opportunities affect mobility. The Chinese have higher stayer rates than Malays among the young of 0-15 and 16-20. This is due to the higher outmigration of young Malays following their families which is possible as they join the government or open new land elsewhere. From the age of 16-20, the stayer rate of the Chinese is lower than that of the Malays, caused by the larger proportion of commuters among the Chinese. The major difference between Malay and Chinese commuters in that there is a far higher rate of Chinese who are commuting to work. As shown previously, there are fewer Chinese intending migrants at all ages, except in the 36-40 age-group.

The importance of perceived expectations and opportunities among Malays, compared with that of the Chinese is clear from the very high rates of intending migrants aged 16-25 among Malays.

Table 4.6 shows the age-standardized rates for mobility groups by ethnicity and by sex. Age is not the reason for the different mobility rates between Malays and Chinese, and between the sexes. Even when the rates are standardized, Chinese still have higher rates of stayers and Malays higher intending migrant rates. Malay youths have higher expectations than the Chinese and expect to leave the village for better opportunities. As expected, males dominate in all the mobility groups except as stayers.

Table 4.6
Simpang Empat : Age-Standardized Rates of Mobility Groups
by Ethnicity and Mobility Groups by Sex, 1976

Mobility Group	Rates per 1000	
	Unstandardized	Standardized
Ethnicity		
Stayer		
Malay	789.7	796.2
Chinese	846.9	840.6
Commuter		
Malay	128.1	127.7
Chinese	106.2	112.9
Intending Migrant		
Malay	108.8	107.7
Chinese	60.0	62.2
Sex		
Stayer		
Male	770.7	765.3
Female	892.1	891.2
Commuter		
Male	166.8	171.2
Female	63.2	63.4
Intending Migrant		
Male	103.3	111.6
Female	62.2	60.9

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

An examination of the sex age-specific mobility rates (Figure 4.5) show that at all ages the female stayer rates are higher. Among commuters, not surprisingly, males are an overwhelming majority over females. However, when the economically active are excluded, both the male and female rates are identical at the school-attending ages of 0-15 except at the school-attending ages of 0-15 where both rates are identical. Among intending migrants, both males and females peak at 16-20 years although male rates are higher right throughout.

4.5 THE STAGES OF THE LIFE-CYCLE AND SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MOBILITY GROUPS

This section investigates the socio-demographic characteristics of the different mobility groups as a complement to the next section which studies their economic features. An attempt is made to identify the main socio-demographic features of the mobility groups which are linked by the stages of the life-cycle.[22] The life-cycle affects all irrespective of community, representing what Nalson (1968: 173) calls demographic circumstances, "which place certain limitations upon some members of a family and give certain advantages to others". While such an approach may be criticized for being unitary, for the purposes of this section it is useful. The three major demographic variables used to illustrate the stages of the life-cycle of a village population at one point in time are age and marital status for males and females. As will be shown in the latter part of this chapter on critical moves, and especially Chapter 6, the simplistic life-cycle model has been expanded into the life-course approach.

Most of the work on life-cycle and mobility have been tested in industrialized western developed countries.[23] Owing to the universality of this concept, except for the actual age, the stages are the same. In the Malaysian rural context, the major stages appear to be school attendance, leaving school, getting the first job, subsequent job changes, marriage and marital dissolution, family formation and dispersal, and old age. Comparing Malays and Chinese, variations in these patterns as they relate to non-migration, mobility and migration are caused by community norms. For example, based on the survey data, the following observations can be made: age at marriage (Malays tend to marry younger), selection of spouses (particularly the role of matchmakers and parents),[24] residence at marriage (Malays tend to be bilocal while Chinese are strictly patrilocal),[25] and attitudes towards nuclear families (dependent Malay parents prefer to

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[22] From this section onwards, outmigrants will be included in the same tables as the mobility groups of the present village population even though they may not be strictly comparable.

[23] These studies treat migration and mobility as one of the effects of the life-cycle. Little attempt has been made to integrate non-migrants, migrants and other mobility groups within the framework of the stages of the life-cycle.

[24] This is changing with the increasing outmigration of single men and now, women to work outside the *kampungs*.

[25] Although the lineage system in Kedah is *adat temenggong* (generally patrilineal in contrast to *adat perpatih* practised by the Minangkabaus), decisions on residence after marriage are flexible. There are cases, particularly when the wife is very young, for a "adaptation period" when the newly-weds live for periods both in the wife's and husband's original homes. The major factors which influence the decision to live with the wife appeared to be proximity to husband's work place from wife's home, higher status of wife's family, no sons in the wife's family (very important if it is a farming household) and the availability of land from her family.

live alone, close to their children unlike the old Chinese who expect to live with their children).[26] Therefore, the examination and identification of the salient characteristics of the different mobility groups provide a typology of the different stages of the life-cycle experienced by both Malays and Chinese.

4.5.1 Age-Sex Structure of Mobility Groups

An examination of the age-sex pyramids of the different mobility groups demonstrates their age and sex selectivity characteristics of that particular stage of the life-cycle. One would expect sex and ethnic differentials as evidence of the norms and opportunities opened to females compared to males, among Malays and Chinese.

Stayers have more females than males (100 males : 110 females) due to there being more males among working commuters and intending migrants (refer Figure 4.6). There is a predominance of the very young and old, as depicted in the high dependency ratio of 110.5 per 1000.[27] Again, this may be attributed to the concentration of the economically-active population among commuters, and to a lesser extent, intending migrants. In this group are those too young to go to school (13.5 per cent), currently attending school in their *kampungs* and the old who constitute invalid parents, semi-retired folk and return migrants retired from government service.

Among the females, other than the very young and the old, stayers are housewives, unpaid Family workers including teenage girls helping in the household while awaiting marriage.[28] Among stayers the economically active are farmers (usually with land), family workers, hired labourers, people who work in the *kampungs* and who generally have nothing to gain should they leave. In contrast, among stayers there is another group which is at the bottom of the economic ladder, those who simply cannot afford the risk of migrating and are compelled to remain in the village.[29] There are also some adult children who cannot leave owing to family obligations. Most of the men

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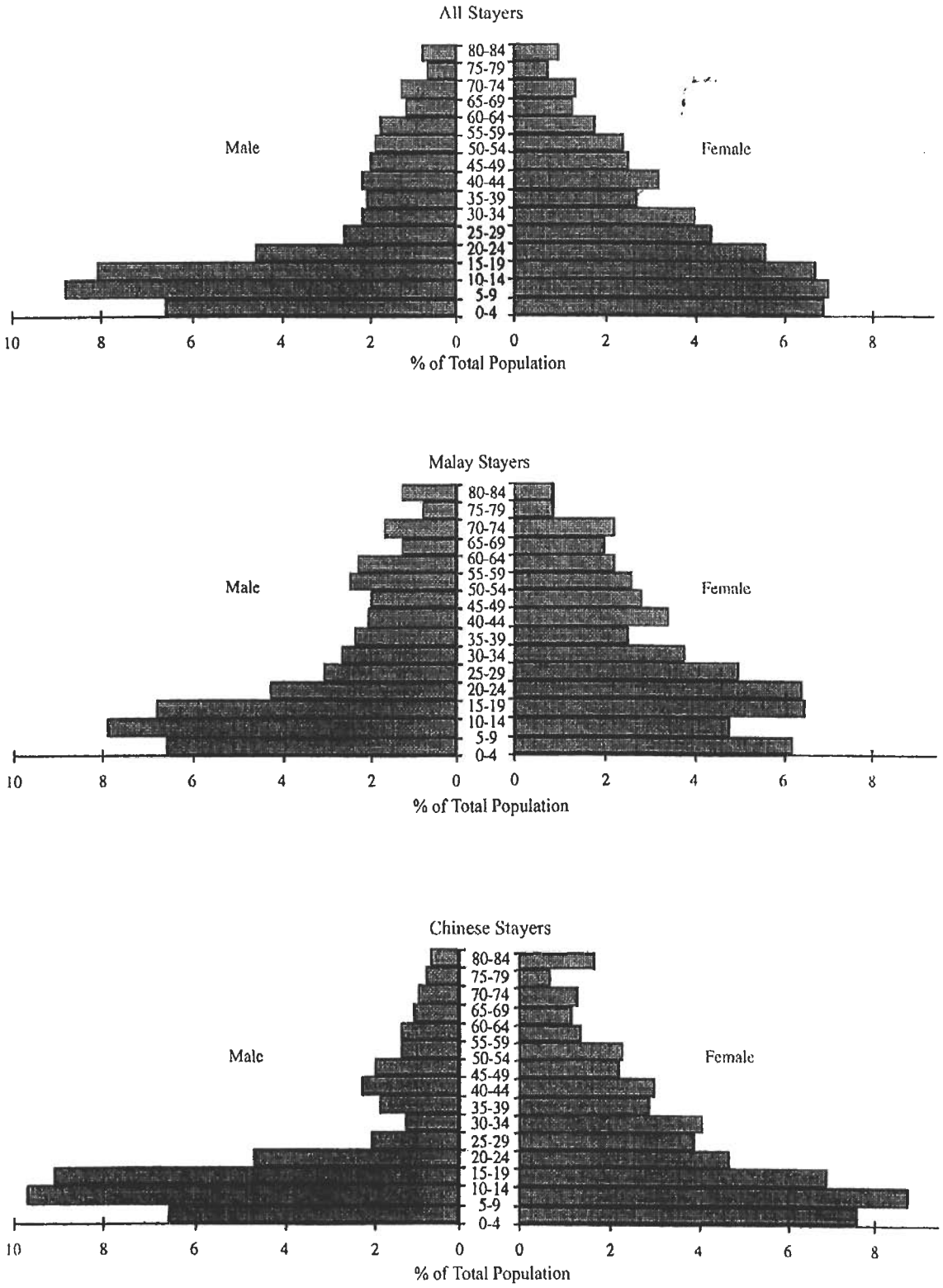
[26] Even among the Chinese there are differences due to dialectal norms. For example, Teochew favour large laterally extended families unlike the Hakkas and Cantonese and to a lesser extent, Hokkiens.

[27] Dependency ratio: $\frac{\text{number aged 0-14 + 60 and over}}{\text{number aged 15-59}}$

[28] The impact of the FTZs in Penang in drawing single Malay girls into electronics were not felt in this area yet.

[29] Studies in India (Connell *et al.*, 1976; Lipton, 1977), and Indonesia (Forbes, 1979; Hugo, 1975; Jellinek, 1978) support the finding that those who migrate from villages are not necessarily the poorest.

Figure 4.6
Simpang Empat: Age-Sex Structure of Stayers, 1976



Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

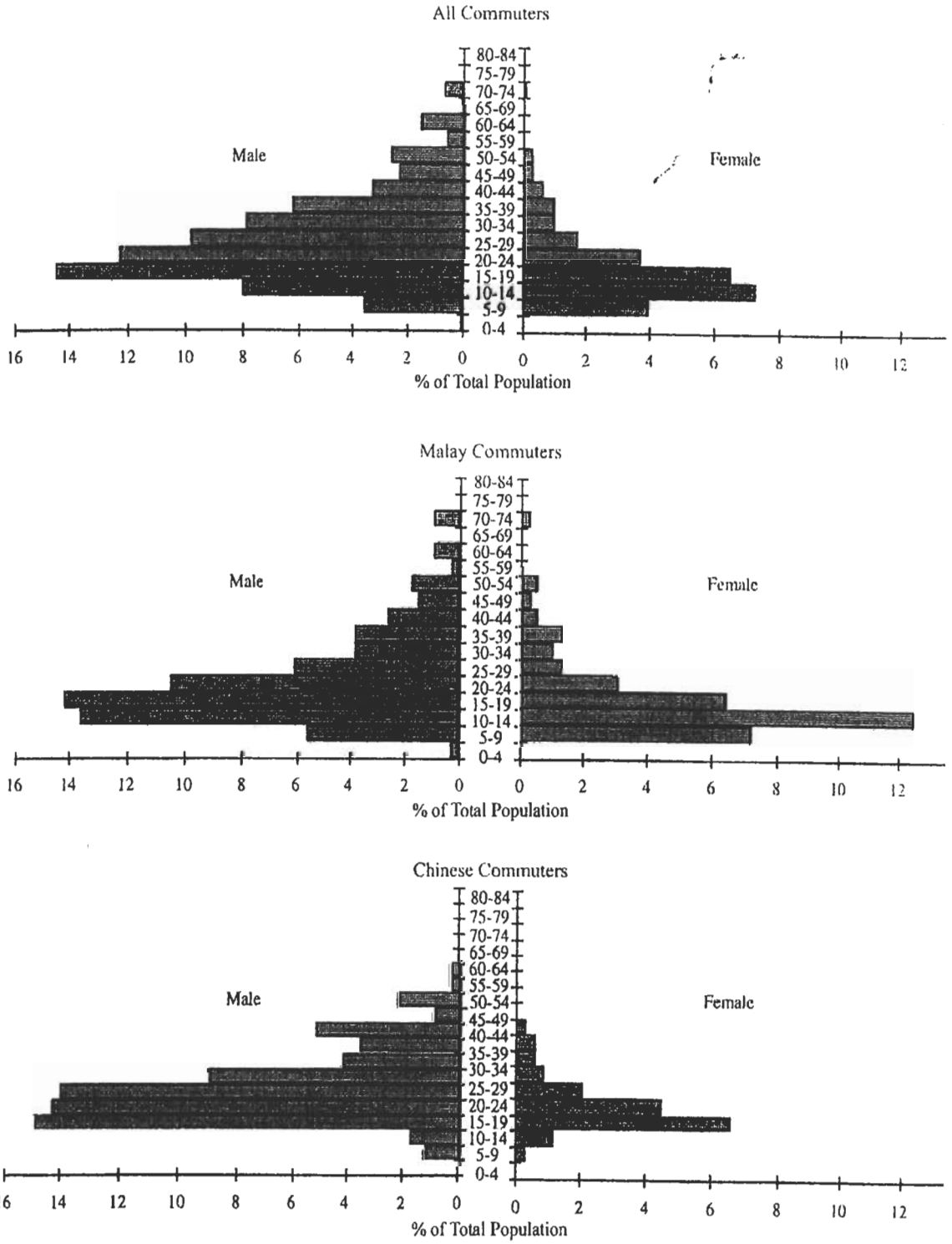
aged between 20-59 among stayers are commuters and economically-active.

The age-sex structures of Malay and Chinese stayers reflect that of the total stayer age-sex pyramid. However, there are Malay Chinese differences. Chinese males in the economically-active group are under-represented because more of them are working commuters. Similarly, there is a larger proportion of Chinese school children compared to Malays as fewer of them commute to school as they are not in as scattered households as Malays. Among females, the effect of patrilocality at marriage among Chinese (in contrast to the bilocality of Malays) and higher Chinese rates of female outmigration and commuting for work is evident from their smaller proportions in the Chinese stayer age-sex structure.

While there is a preponderance of females among stayers, they are conspicuously under-represented among commuters (100 males : 36 females) (Figure 4.7). Unlike stayers, commuters are comprised almost solely of the economically-active population aged 15-39. The other group are the school-going children who make up 22.9 per cent of the total. There are fewer female commuters as most have to, or prefer to work at home. When ethnicity is taken into account, both Malays and Chinese stayers tend to be male if economically-active. There are again some differences. The Chinese sex ratio is higher (100 males : 20 females) than the Malays, despite the higher commuter rate among Chinese females compared to Malay females. Fewer Chinese children commute to school, as they live in *kampungs* where school is available. There are more Chinese commuters than Malays in the older age-groups – a function of their economic roles, which will be elaborated upon in the section on Economic Characteristics.

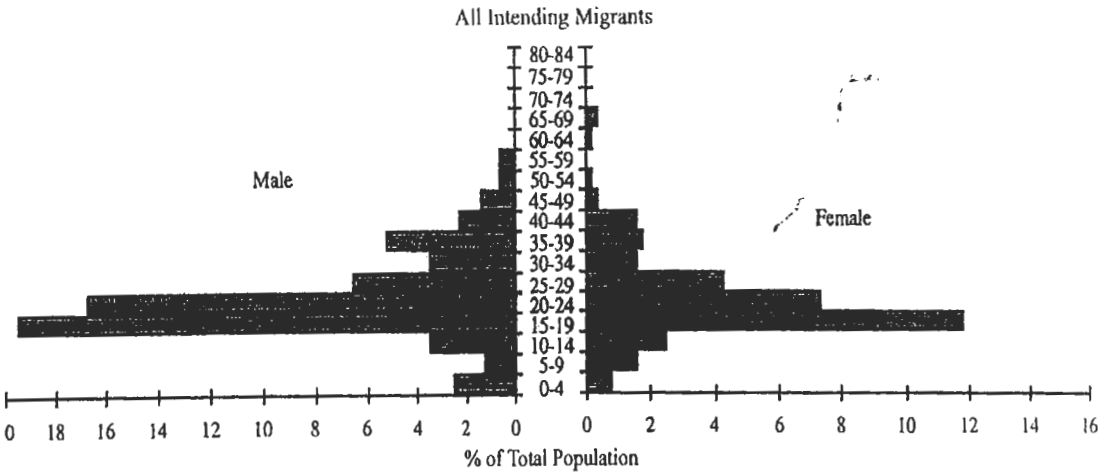
Intending migrants portray a similar age and sex structure to that of outmigrants (Figure 4.8). There is nearly twice the number of males compared to females (100 males : 57 females). Those under 10 years are passive, following their parents who are intending migrants. Those aged 15-24 comprised the bulk of intending migrants (57.3 per cent of all intending migrants). These are students planning to leave for further or better education, young school leavers searching for their first job, or better work outside the *kampung*. Intending migrants above 25 years old are wishing to leave in search of better opportunities, better jobs, land or intending to expand their businesses.

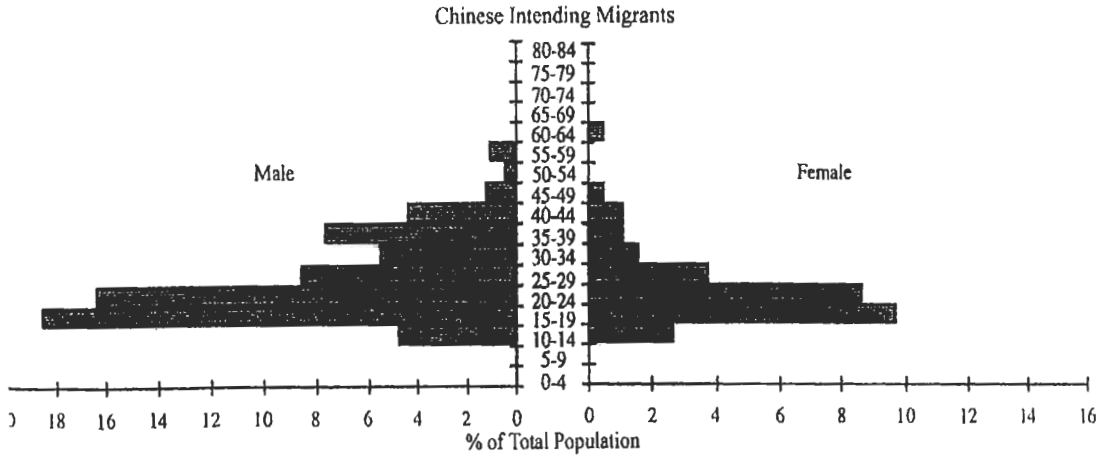
Figure 4.7
Simpang Empat: Age-Sex Structure of Commuters, 1976

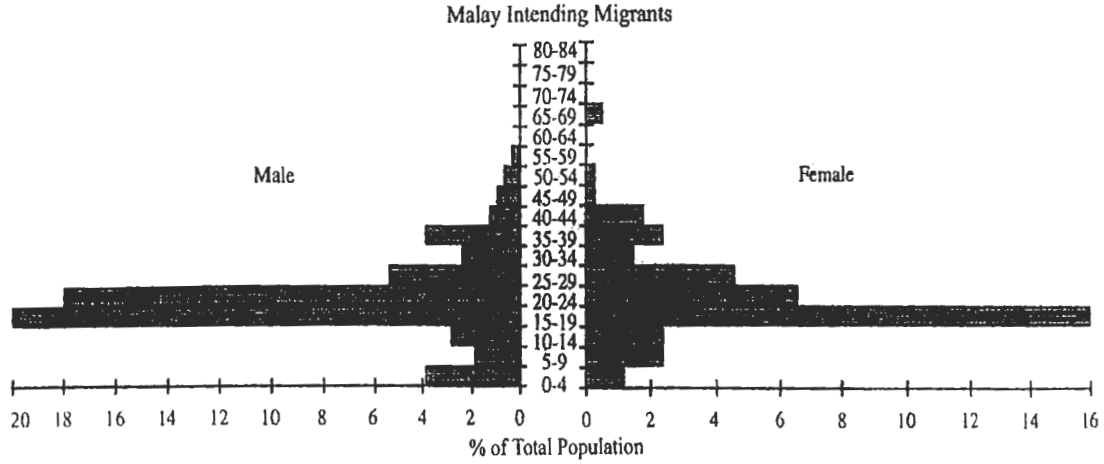


Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Figure 4.8
Simpang Empat: Age-Sex Structure of Intending Migrants, 1976







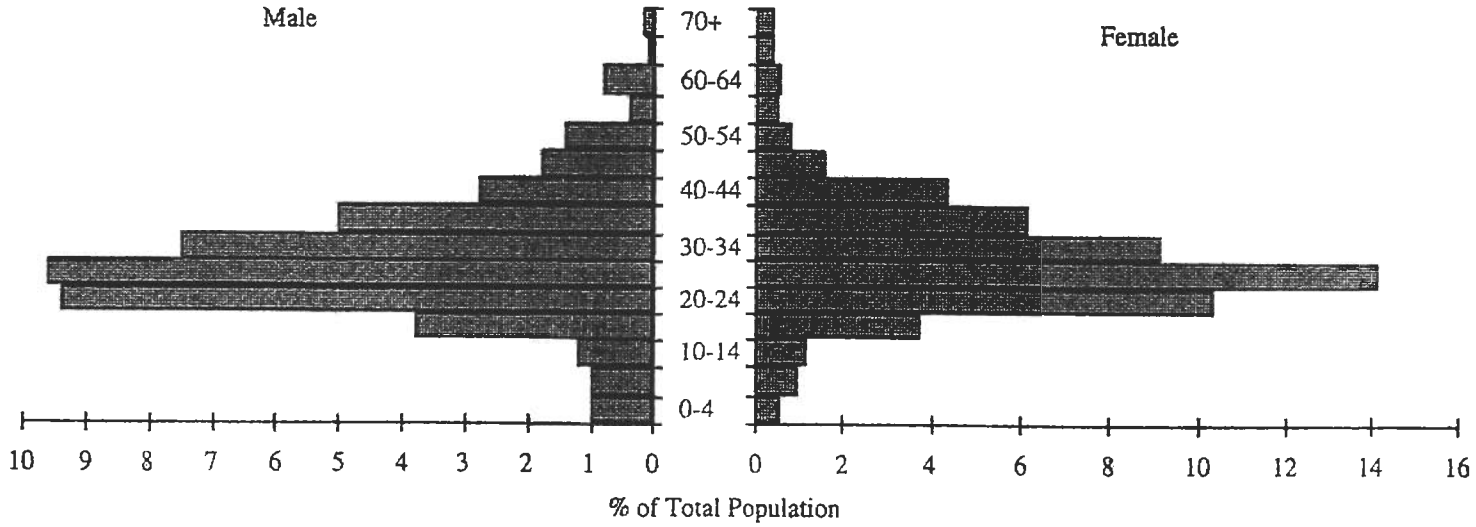
Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

As shown earlier in the age-specific mobility rates, the group aged 35-39 constitute a large proportion of those embarking on the second major phase of their economic life-cycle. Also in this group are government servants awaiting transfers. For both Malays and Chinese, most of the female intending migrants are passive, stating that they will have to leave when their husband or parents leave. The prevalence of intending migrants among Malay students compared to Chinese is evident in the exaggerated proportions aged 15-19 of both males and females. The second peak of intending migrants, of those aged 35-39 is clearer among Chinese than Malays, although it is prominent in both structures. Among girls aged 17-24 are those about to marry within the next few months. Because of patrilocality among the Chinese, this tends to be more common among Chinese girls than Malay girls. And as in the case of commuters, more Chinese than Malay girls intend to migrate for work.

Figure 4.9 shows the age-sex structure of outmigrants, one phase ahead of intending migrants. Their similarities are clear. However, there are more females than males among outmigrants (100 males : 120 females) explained by both passive and marriage migration. The dependency ratio is low among outmigrants, being only 8.2 per 100, a sharp contrast to that of stayers. Most of the young, under 15 years, are passive migrants. The economically-active, particularly those aged 20-34 constitute 62.1 per cent of the total outmigrant population. The majority of voluntary outmigrants have found a job elsewhere (whether it be their first or a better one), found own land or more land, have married or left for further education. A comparison of Malay and Chinese outmigrants show some differences. The sex ratio of Malays is more balanced than that of the Chinese (100 males : 146 females). Migration for Malays is still primarily male, in the economically-active ages. For Chinese, outmigrants are mainly female, due to marriage and female outmigration for work.

The sex of mobility groups by ethnicity is shown in Table 4.7. They show the same features as the age-sex structures of mobility groups. There are more females than males among stayers and outmigrants explained by the prevalence of housewives, unpaid family workers and marriage migrants, respectively. Among commuters there are nearly three men to one woman. Similarly, the sex ratio is in favour of males among intending migrants. A comparison of the Malay-Chinese sex proportions show certain community norms. While the Malay male age-standardized outmigration ratio is 231 per 1000, the Chinese male equivalent ratio is 214.1 per 1000 – a reflection of the bilocality of Malays on marriage and rural opportunities open to them. The

Figure 4.9
Simpang Empat: Age-Sex Structure of Outmigrants, 1976



Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Table 4.7
Simpang Empat: Mobility Groups by Ethnicity by Sex, 1976
(in percentage)

Mobility Group	Ethnicity								
	Malay			Chinese			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Stayer	47.7	52.3	2,413	47.2	52.8	2,657	47.5	52.5	5,070
Commuter	65.5	34.5	397	83.0	7.0	335	73.5	26.5	732
Intending Migrant	61.5	38.4	354	71.4	28.6	206	65.2	34.8	560
Outmigrant	51.0	49.0	859	39.2	60.8	855	45.1	54.9	1,714

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

contrast is sharper among females. While Malays have 49.0 per cent females among outmigrants, the Chinese proportion is 60.8 per cent, explained by both marriage migration and increasing search for work among single Chinese girls. This pattern is evident from a comparison of the Malay and Chinese age-standardized outmigration ratios of 230 and 316.3 per 1000, respectively. The opposite image is in the higher standardized Malay female rates of 970 per 1000 compared to the equivalent of 920.7 per 1000, among Chinese female stayers.[30] The higher proportion of females among Malay intending migrants compared to the Chinese is due to the presence of involuntary migrants, mainly wives. The larger share of female commuters among Malays is explained by their larger commuting student population, for the reasons mentioned earlier.

4.5.2 Marital Status of Mobility Groups

The marital status of mobility groups is directly related to age and sex patterns and their life-cycle stages (Table 4.8). Most intending migrants and commuters are single owing to the larger proportion still at school or about to enter the labour force. Because of the importance of marriage and family migration, a high proportion (71 per cent) of outmigrants were married. Stayers have a large proportion of single persons consisting mainly of young dependants. They also have a concentration of divorced and

[30] The standardized Malay and Chinese male stayer rates are 745.3 and 761.1 per 1000, respectively.

Table 4.8
Simpang Empat: Mobility Groups by Marital Status by Ethnicity, 1976
(in percentage)

	Ethnicity											
	Malay				Chinese				Total			
Mobility Group	Single	Married	Divor/ Widow	Total No.	Single	Married	Divor/ Widow	Total No.	Single	Married	Divor/ Widow	Total No.
Stayer	53.6	40.5	6.0	2,412	65.2	30.7	4.1	2,660	59.8	35.5	4.7	5,059
Commuter	71.5	27.5	1.0	397	51.3	47.2	1.5	335	62.3	36.5	1.2	732
Intending Migrant	68.6	29.9	1.4	354	68.9	28.6	2.5	206	68.7	29.5	1.8	560
Outmigrant	19.7	79.2	1.2	860	35.9	63.3	1.8	850	27.7	71.3	1.0	1,710

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

widowed persons explained by the older stayer population and their general immobility. The reason for the higher component of married people among stayers is that many of their single persons have become commuters (71.5 per cent and 51.3 per cent Malay and Chinese commuters, respectively). There is a larger proportion of married Chinese among commuters because most of them are older, already in the workforce, unlike the Malays. The higher per centage of single outmigrants among the Chinese is due to their greater rates of individual migration rather than family migration so characteristic of the Malays.

Against the background of the life-cycle, the following typology emerges. Stayers tend to be the dependants, the very young, the old, and the housewives. Intending migrants are those on the threshold of a new stage of their life-cycle, for example, about to continue further education or seeking their first job after leaving school.

Outmigrants are closely related to intending migrants, being one stage ahead. The majority have found a job elsewhere, whether it is their first, or have left to search for better opportunities, marriage, and for further education. Commuters represent the economically-active group, presently engaged in jobs or attending school outside their village.

4.5.3 Educational Level of Mobility Groups

While the life-cycle is mainly determined by demographic variables, as shown earlier, other factors, such as cultural norms, and ethnicity also impinge on it. This section will continue to delineate the typology by reviewing the educational and occupational characteristics of the mobility groups. Such socio-economic variables are highly affected by national policies, which are easier to unravel in comparison to less tangible ethnic and class-specific factors such as socialization, attitudes and perception.

The level of schooling is perhaps one of the most important factors influencing mobility rates, where the individual migrates to, and consequently, the impact on the two-circuits. An analysis of the level of schooling age-standardized rates of each mobility group showed that the stayer rate decreased with increasing education. Conversely, outmigration ratios increased with higher educational levels. Intending migrants and commuters displayed the same pattern as outmigrants. This finding is further reinforced in Table 4.9.

The group with the largest proportion with no schooling are the stayers (22.1 per cent). Those with the highest level of education are intending migrants. The reason for the smaller than expected proportion of outmigrants with education is the passive migrants (wives and pre-school children) and Malay farmers who left for more land among outmigrants. That the more educated will become outmigrants and intending migrants will be seen more clearly in the next analysis of mobility groups which selects only those in the labour force. be seen more clearly in the next analysis of mobility groups which selects only those in the labour force.

Table 4.9
Simpang Empat: Mobility Groups by Level of Schooling , 1976
(in percentage)

	No. of Years in School					Total	
Mobility Group	0	1-6	7-9	10-11	11+	No.	%
Stayer	22.1	56.2	17.1	4.4	0.2	3,953	100
Commuter	4.7	52.7	22.5	17.2	2.9	725	100
Intending Migrant	5.5	39.1	21.3	28.3	5.8	530	100
Outmigrant	14.0	55.4	14.2	11.8	4.6	1,625	100

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

It was shown in Chapter 3, on the national patterns of migration, that for Malays to break the two-circuit system of migration and thus attain a modern sector job, education was essential. It was also shown that compared to the Chinese, the Malays had higher levels of schooling in the rural-urban flow. Among the mobility groups, proportionally more Malays than Chinese have higher than 11 years (Form 5) of schooling[31] and this is particularly true of outmigrants and intending migrants (Table 4.10). This further supports the argument that owing to the employment structure in Peninsular Malaysia, for Malays to migrate to the urban areas they have to be better educated than the Chinese as they must seek jobs in the formal sector.

[31] Level of schooling is divided into the major catgegories of up to Standard 6 (1-6), up to Form 3 (7-9), up to Form 5 (10-11) and above Form 5 (11+) years.

Table 4.10
Simpang Empat: Mobility Groups by Level of Schooling by Ethnicity, 1976
(in percentage)

	Malay							Chinese						
	No. of Years in School					Total		No. of Years in School					Total	
Mobility Group	0	1-6	7-9	10-11	11+	No.	%	0	1-6	7-9	10-11	11+	No.	%
Stayer	24.7	53.7	16.3	5.0	0.3	1,942	100	19.6	58.6	17.9	3.7	0.1	2,011	100
Commuter	3.3	49.5	21.8	21.6	3.8	394	100	6.3	56.5	23.3	12.1	1.8	331	100
Intending Migrant	5.5	29.3	21.6	36.6	7.0	328	100	5.3	55.0	20.8	14.9	4.0	202	100
Outmigrant	15.9	48.3	16.2	14.4	5.3	835	100	11.9	62.9	12.4	9.0	3.8	790	100

Not only are outmigrants, intending migrants and commuters better educated than stayers, but they also have the largest proportion educated in English (Table 4.11). Compared to the Chinese, the Malays are almost exclusively educated in the Malay-medium and *ugama* (religious) schools.

Up to the 1970s, English is certainly the main language of the private sector.[32] There is evidence that those with English education finds it easier to get jobs outside rural areas. While only 9.4 per cent of Malay outmigrants are English educated, the share for the Chinese is 25.8 per cent. For Malays, an education in Malay is able to secure a government job, but it does not provide the flexibility for private sector work.

4.6 ECONOMIC CHARACTERISTICS OF MOBILITY GROUPS

This section continues to explore mobility differences by examining the important economic characteristics of the ever-lived village population of stayers, commuters, intending migrants and outmigrants. The main aim here is to analyze the economic features of the major issue in this thesis – that of the two-circuit system. The preservation or dissolution of the two-circuit system as argued earlier, is best assessed as occupational and industrial changes. At the same time, this discussion will throw further light on the mobility typology.

Owing to the integral relationship between occupational and industrial changes, on the one hand, and geographical mobility, on the other, this section evaluates the impact of the NEP on the case-study area in Kedah. Thus, it is also a study into the processes which result from attempts to break the two-circuit system. By comparing all types of mobility groups and the resulting economic structure of Malays and Chinese in a village context, some insights will be gained into the effect of the NEP, seven years after its introduction. Before surveying occupations, it is necessary to look into the labour force participation rate of the mobility groups.

[32] In fact up to the 1990s, English is still the preferred language in the private sector. Recent research on graduate unemployment which involved interviews with employers in the private sector found that they all preferred graduates who were fluent in English (Kamal and Young, 1990).

Table 4.11
Simpang Empat: Mobility Groups by Medium of Schooling by Ethnicity, 1976
(in percentage)

	Ethnicity											
	Malay				Chinese				Total			
Mobility Group	Malay[a]	English	Chinese	Total No.	Malay	English	Chinese	Total No.	Malay	English	Chinese	Total No.
Stayer	97.3	1.9	0.8	1,470	2.8	20.8	76.4	1,630	47.6	11.8	40.6	3,100
Commuter	91.3	8.2	0.5	378	0.6	29.4	70.0	310	50.5	17.7	31.8	668
Intending Migrant	90.1	9.9	-	292	-	32.0	68.9	172	56.7	18.1	25.2	464
Outmigrant	89.8	9.4	0.3	597	-	25.8	74.2	671	42.3	18.3	39.4	1,268

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976
Note: [a] Includes *ugama* (religious) schooling which constitutes part of Malay education.

4.6.1 Labour Force Participation Rate

The labour force participation rate of the different mobility groups show that outmigrants have a higher proportion in the labour force than non-migrants (Table 4.12). This is both an indication of the stage of the life-cycle and the selectivity of migrants. It is consistent with findings from other migration studies in the country (McGee, 1969; Suresh, 1975; and Pryor, 1975). Among the village population, commuters and intending migrants have the largest share in the labour force, explained by their higher per centages in the economically-active age-groups. Stayers have 72.7 per cent outside the labour force as evidenced in the proportion of children at school, pre-school children and the old and sick. Commuters have a far higher proportion currently attending school (36.7 per cent).

An analysis of the ethnicity of the labour force participation rates of the mobility groups reflects the macro-patterns discussed in Chapter 3 (Table 4.13). In all mobility groups, Chinese have a higher employment rate than Malays, the greatest difference being among intending migrants. Among intending migrants, 63.0 per cent of the Chinese are already employed, in contrast to the Malays where students alone comprise 32.8 per cent. This shows the different perceived opportunities and attitudes between Malays and Chinese. While intending migrants among Malays are students who expect to leave the village for further education (usually supported by government) or a new job, the Chinese intending migrants are already employed and want to leave for a better job.

4.6.2 Employment Status

Outmigrants have nearly twice the proportion of employees than non-migrants and a much smaller element of unpaid family workers due to participation in non-familial type occupations (Table 4.14). Within the village population, stayers have over twice the the proportion of self-employed recorded by commuters and intending migrants who, like outmigrants, are primarily employees. The reason for the high proportion of unpaid family workers among intending migrants is the large number of youths looking for their first job and passive migrants awaiting the head of household's move, biding their time in the village by helping their families. Consistent with the macro- patterns of the country, there are more Chinese employers in all mobility groups, being most common among stayers, commuters and outmigrants. The proportion is most pronounced among Chinese stayers because almost all the shops

Table 4.12

Simpang Empat: Primary[a] Labour Force Participation of Non-Migrants and Migrants, 1976 (in percentage)

	Non-Migrants				Migrant
Labour Force	Stayer	Commuter	Intending Migrant	Total Village Population	Outmigrant
Employed	25.5	60.0	47.2	31.3	45.4
Unemployed	1.8	0.5[b]	10.4	2.3	0.5
Labour Force Participation	27.3	60.5	57.6	33.6	45.9
Housewife	19.6	2.5[c]	13.3	17.1	41.6
Schooling	28.1	36.7	24.8	28.8	9.1
Not Yet Schooling	21.0	0.3[d]	3.9	17.2	2.7
Others (Too Old, Sick, etc.)	4.0	-	0.4	3.3	0.7
Out of Labour Force	72.7	39.5	42.4	66.4	54.1
Total No.	5,071	732	517	6,320	1,547
%	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Note: [a] Primary denotes the major activity.

[b] Four individuals, classified unemployed were daily commuters as they worked in the family farm/business.

[c] Eighteen women stated their primary occupation as housewives but again commuted to work in the family farm/business.

[d] Two children, too young to be at school, followed their mother to work in the family farm/business.

Table 4.13
Simpang Empat: Labour Force Participation Rates of Mobility Groups by Ethnicity, 1976

	Stayer		Commuter		Intending Migrant		Outmigrant	
Labour Force	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Employment Rate	(92.7)	(95.6)	(99.3)	(99.6)	(79.9)	(85.3)	(98.4)	(99.4)
Unemployment Rate	(7.3)	(4.3)	(0.7)	(0.4)	(20.1)	(14.7)	(1.6)	(0.6)
In Labour Force	34.1	20.6	38.5	85.1	49.3	73.9	49.9	42.3
Housework	17.6	22.0	1.5	3.3	11.4	15.8	37.5	45.4
Schooling	25.6	30.2	59.5	11.6	32.7	10.3	10.5	7.8
Not Yet at School	18.7	23.2	0.5	-	6.6	-	0.9	4.3
Others, Sick, Too Old	4.0	4.0	-	-	-	-	1.2	0.2
Out of Labour Force	65.9	79.4	61.5	14.9	50.7	26.1	50.1	57.7
Total No.	2,414	2,659	392	333	333	184	736	811
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Table 4.14
Simpang Empat: Primary Employment Status of Non-Migrants and Migrants, 1976
(in percentage)

	Non-Migrant				Migrant
Employment Status	Stayer	Commuter	Intending Migrant	Total Non-Migrant	OutMigrant
Employer	8.9	6.0	2.4	7.4	4.1
Self-Employed	46.4	18.8	16.4	36.6	24.2
Employee	22.3	66.5	61.1	36.9	66.7
Unpaid Family Worker	22.4	8.7	20.1	19.1	5.0
Total[a] No.	1,293	436	244	1,973	702
%	100.0	100.0	100.0	100.0	

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Note: [a] Totals of related tables do not correspond owing to inadequate data.

in Simpang Empat *pekan* are Chinese-owned. Chinese dominance as employers is due to the nature of their occupations, being in trading and commercial activities. This has important implications for the breaking of the two-circuit system because of the apparent difficulty faced by Malays in trying to penetrate these traditionally Chinese-dominated businesses. Malays have a larger share of self-employed in all groups except commuters owing to their being *padi*-farmers. The self-employed among commuters are Chinese who are hawkers. Among outmigrants Malays have two large proportions, as employees as they migrate mainly into the government service (breaking the circuit) and as self-employed, migrating into agriculture (preservation of the circuit). Thus, 37.1 per cent Malays are self-employed compared to the Chinese equivalent of 10.6 per cent. The employment status of outmigrants show the entrenched nature of the economic structure of the country. Even when Malays migrate, a chance of getting out of the lower-circuit, they move primarily into wage labour or farming, with fewer options available to them than the Chinese. These patterns are further elaborated in the analysis of the occupations and industries of these mobility groups.

4.7 OCCUPATIONAL STRUCTURE OF NON-MIGRANTS AND OUTMIGRANTS

What is striking is the difference in occupations between the village population (non-migrants) and outmigrants. Over half the village population is in agriculture compared to one-fifth of outmigrants. There are large proportions of outmigrants in services, professional-technical and production and transport workers. Among non-migrants, these occupations are not well-developed enough in the villages, therefore, people must work outside (as outmigrants or commuters) if they want these types of jobs. Sales workers among commuters are mostly Chinese hawkers.

A closer examination of the occupational structure of mobility groups show sharp contrasts between Malays and Chinese, similar to the macro-patterns of Chapter 3 (Table 4.15). In all mobility groups, the Malays are mainly in agriculture; the Chinese are chiefly in sales, and production and transport work. The only deviation from his pattern is the large proportion of Malays in service work among outmigrants, a pattern very similar to the national level analysis of migrants between 1965-70. Even among intending migrants, over half the Malays are in agriculture while over half of the Chinese are in production work.

Table 4.15
Simpang Empat: Occupation of Mobility Groups by Ethnicity, 1976
(in percentage)

Occupation	Mobility Group							
	Stayer		Commuter		Intending Migrant		Outmigrant	
	Malay	Chinese	Malay	Chinese	Malay	Chinese	Malay	Chinese
Professional, Technical & Related Workers	1.3	1.1	24.5	4.3	14.5	6.0	13.6	7.0
Administrative, Managerial & Clerical Worker	2.4	0.6	14.3	3.9	10.7	3.5	6.3	5.5
Sales Worker	4.5	27.9	9.0	31.3	3.8	25.0	4.2	27.5
Service Worker	1.6	1.9	7.7	1.4	7.6	3.5	27.7	5.3
Agricultural, Animal Husbandry, Forestry, Fishing and Hunting	85.5	42.9	23.2	7.8	54.2	9.4	41.3	3.8
Production, Transport, Equipment Worker	4.7	25.6	21.3	51.3	9.2	52.6	6.9	51.1
Total No.	758	527	155	281	131	116	361	345
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

This bifucation is tempered somewhat by a larger proportion of Malays in service work among outmigrants. There are two reasons for Chinese outmigrants not moving into agriculture. The first is the inability to attain agricultural land, for much of that is locked up as Malay Reservation Land. The second is an apparently strong preference for urban jobs, particularly skilled work. These require apprenticeship and are the only means to a skill among the less-educated Chinese.

Among commuters, the Malay concentration in agriculture, professional-technical and administrative-managerial work is contrasted to the Chinese dominance in sales, and production and transport work. Even among stayers, this same pattern emerges. There is an important implication for the two-circuit system in these occupational differences. The largest difference between stayers and outmigrants are in agriculture, service, and production and transport. While Malay outmigrants have shifted into agriculture (41.3 versus 3.8 per cent among the Chinese) and service (27.7 versus 5.3 per cent of the Chinese), most of the Chinese outmigrants have shifted into production and transport (51.1 against 6.9 per cent of the Malays).

A breakdown of the occupational categories illustrate the important contrasts between Malays and Chinese revealing the more detailed aspects of the two-circuit system. Among outmigrants, the major groups are production and transport, agriculture, service and sales work. In production and transport, the Chinese tend to be in skilled work, such as tailors, electricians and carpenters. These occupations may be attained with limited education as their means is through apprenticeship. Based on the Simpang Empat Mobility and Migration Survey, Stage II (see Appendix B for an elaboration), it was found that many of the Chinese villagers realize that higher education is out of reach for their children. Instead they stress the need to acquire a skill to make a living, preferably a skill which allows the person to be self-employed, and therefore, more independent. Thus, there is a sharp difference between the values of the peasant and working class Chinese, on the one hand, and the Chinese middle class, on the other. While the middle class have always inculcated the need for further education as a passport to upward social mobility (and this is the case even among the moneyed and less-educated Chinese), the working class Chinese in the village emphasize a skill through apprenticeship. This does not mean that the Chinese villagers do not think that a government job is ideal. They do. They talk about the security and prestige offered by that position. But they know too well that they will have little chance in getting such jobs, especially when they will be competing with better-educated urban Chinese, for a very small quota. As a result of preferential

treatment of Malays for government jobs, more Chinese are forced into the skilled-type work and commerce, their traditional domain. What is of concern here is that the traditional system, that is the two-circuit, instead of being broken, may well be reinforced, inadvertently. The fact that Malays do not seem to be entering the commercial and small-scale services sector is not due to their being unable to penetrate the sectors "controlled" by the Chinese. It is also related to their reluctance to learn to become electricians, mechanics and other similar work. In their context it is understandable. If they have the chance of being a government servant with all the advantages of such a job, including the prestige, the security without the pressures of the private sector, and the other fringe benefits including pension at retirement, they obviously would find it so much more desirable than the other types of more informal skilled work. Then, there are the characteristics of the apprenticeship system which makes it difficult for a Malay to join, even if he wants to.

Malay and Chinese parents have very different job expectations for their children. The Malays would like their children to get a government job because it offers security (regularity of income and a pension) in contrast to the rural pursuits with all the insecurities. The government job also means prestige and social standing. On the other hand, Chinese did not mention work with the government (except as teachers), often feeling it is out of their reach. What was interesting in their response was the need for their children to acquire a skill. They felt a skill would give their children a more independent livelihood which allows them to be self-employed, if necessary.

As expected among Malays, and now evidenced in the amount of *tanah terbiar* (abandoned land) in the country, is the strong wish that their children do not remain in agriculture. And this is occurring even in a highly-invested double-cropping environment of the Muda where *padi*-growing is more lucrative than elsewhere. Parents felt that *padi*-growing is very back-breaking work for small returns. This same sentiment is reflected again in the 1980s among the electronics workers and their families (see Chapter 5).

Such differences between Malay and Chinese expectations came through clearly from discussions with parents and youths in the village. In that sense, the rural Chinese felt that education could not help them much as it was hard for them to do well compared to the urban Chinese. It was therefore better for them to gain a skill through the apprentice system.

The apprenticeship system is the informal traditional means to learning a skill. Youths, at an early age are sent to work with a '*see fu*' (expert) in the particular job. Here the boy lives with the employer, and learns the trade from the basics. For this he gets a minimal wage (more like pocket money). Often such systems tend to draw on people of the same ethnicity (usually Chinese as these trades tend to be Chinese-dominated) and even the same dialect group. These are for reasons of ease of communication, and of living together (the Muslim would find it very difficult to eat and live with the Chinese employer because of the ramifications of religion such as not eating pork, etc.). Thus the difficulty of entry for Malays (if he wants to be apprenticed in the first place) lies in the nature of the system. The major way for the Malay to learn such skills are through formal schooling – the vocational schools. As a result, the Chinese are found in more skilled jobs than the Malays, a pattern found in the characteristics of recent migrants at the national-level (refer Chapter 3). Another interesting observation of the narrowness of employment among Malays is that while the Malays and Chinese are categorized as equipment drivers and operators, in a variety of industry in the private sector, including lorry transport business, the Malays are solely government drivers of trucks, vans, etc.

Sales work also demonstrates the same manner of labour absorption described among production workers. Few Malays are sales workers or hawkers. This may be explained by the family nature and exclusiveness of most small-scale Chinese businesses. Malays have been able to make in-roads into banks and insurance because of the formal recruitment processes of these large firms. In services, Malays are almost exclusively protection workers, in the uniformed services such as army, police, etc. while the Chinese are domestics, cooks and hairdressers. Even in the professional-technical category, the Chinese tend to occupy the more qualified positions of architects, engineers and doctors while the Malays are teachers.

These patterns are very similar to the national one and suggest the entrenchment rather than the disintegration of the two-circuit system up to 1977. Where Malays become outmigrants, over half of them move into agriculture, the rest into protective services, and teachers, all within the umbrella of the government service. The Chinese, on the other hand, with limited posts available to them in the government sector, and finding it very difficult to get agricultural land, are forced to diversify into production and transport occupations and traditional niches such as sales work and domestic services.

An analysis of the occupations of stayers show that even among the non-migrant village population, the Chinese are far more diversified than the Malay (Table 4.16). Nearly 85 per cent of Malay stayers are in agriculture, twice the Chinese proportion. In other

categories, the Malays register less than 5 per cent. In contrast, there are over 28 per cent of Chinese in sales and another 25.6 per cent in production and transport. Thus, in the village context, the Chinese are already more diversified than the Malays. Outmigration for the Chinese is an extension and broadening of their occupations in the village. For the Malays it is an escape to government, a break in the two-circuit, or remain in agriculture. Commuters' and intending migrants' detailed occupations also reveal that Chinese are more diversified than Malays and that these two mobility groups reflect the occupations of outmigrants (Table 4.15). Among commuters, most Chinese are in production and transport (as transport and equipment workers, tailors and electricians) and sales while 18.8 per cent are hawkers.

Table 4.16
Simpang Empat: Occupation of Stayers and Outmigrants by Ethnicity, 1976
(in percentage)

	Stayer			Outmigrant		
Occupation	Malay	Chinese	Total	Malay	Chinese	Total
Professional, Technical & Related	1.3	1.1	1.3	13.6	7.0	10.3
Administrative, Managerial, Clerical	2.4	0.6	1.6	6.3	5.5	5.7
Sales Worker	4.5	27.9	14.1	4.2	27.5	15.6
Service Worker	1.6	1.9	1.7	27.7	5.3	16.7
Agri., Forest., Fish. & Hunt.	85.5	42.9	68.0	41.3	3.8	23.0
Production, Transport Equip.	4.7	25.6	13.3	6.9	51.1	28.7
Total No.	758	527	1284	361	345	706
%	100.0	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Hawkers are an interesting group for they comprise the informal sector characterized by ease of entry, reliance on indigenous resources, family ownership, small-scale operation, labour-intensive, adapted technology, skills acquired outside the formal school system and operate in the unregulated and competitive markets (Hart 1973; McGee, 1978: 13-28). Vendors in this study demonstrated these characteristics which is probably one reason for the lack of Malays. The concentration of Chinese as hawkers may be viewed as a necessary means of livelihood for an uneducated poor section of the population who are unable to obtain agricultural land. Of the 57 hawkers among commuters, 53 were Chinese. As high as 73.5 per cent of them operated in markets,

along roads selling cheap goods, with a wide market, such as vegetables (41.5 per cent) and fish (13.2 per cent). Of recent introduction are mobile hawkers (26.5 per cent) who ply on motorcycles, covering a radius of about 30 miles per day. Most of them sell household essentials, perishables, in small quantities, of vegetables, fish and sundry goods to the less accessible *kampungs*. Malay commuters are mainly farmers and teachers.

Intending migrants reflect the occupations of outmigrants. Thus, 52.6 per cent and 25.0 per cent of Chinese intending migrants are in production and transport, and sales, respectively. In contrast, 38.2 per cent and 16.0 per cent of Malay intending migrants are farmers and farm workers, respectively and another 12.2 per cent are teachers.

A breakdown of the industries of these mobility groups further reflect the patterns discussed earlier that the mobility groups concentrate in different industries. Differences between the village population and outmigrants are most marked in agriculture and services (Table 4.17). While outmigrants are over-represented in services (34.0 per cent against 13.4 per cent) and manufacturing (17.8 per cent against 9.3 per cent), the village population is mostly in agriculture (51.9 per cent against 20.2 per cent).

Table 4.17
Simpang Empat: Industry of Non-Migrants and Outmigrants, 1976
(in percentage)

	Non-Migrant				Migrants
Industry	Stayer	Commuter	Intending Migrant	Total Non-migrant	Outmigrant
Agric., Forest., Fish. & Hunt.	68.2	14.0	33.5	51.9	20.2
Agric. Production	0.23.7	1.2	1.1	3.7	
Mining & Quarrying	-	-	0.8	0.1	0.3
Manufacturing	7.4	12.9	13.3	9.3	17.8
Construction	3.3	12.6	6.9	5.8	4.4
Electricity, Gas & Water	0.1	-	-	-	0.1
Wholesale & Retail	11.9	21.4	12.9	14.2	12.5
Transport & Storage	2.1	10.3	5.2	4.3	6.0
Services	6.8	25.1	26.6	13.4	34.0
Total No.	1014	435	248	1967	702
%	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration, Survey I, Kedah, 1976.

Of all the mobility groups, stayers display the greatest differences from those of outmigrants, nearly three-quarters being in agriculture (Table 4.18). As in the case of the other variables, commuters and intending migrants resemble the industrial structure of outmigrants. Over one-quarter of commuters are in services and one-fifth in wholesale and retail. Among intending migrants, over one-third are in agriculture and another one-quarter in services. The latter are mostly government servants awaiting transfer. These patterns are markedly differentiated by ethnicity, again showing the lack of diversity among Malays.

Table 4.18
Simpang Empat: Industry of Stayers and Outmigrants by Ethnicity, 1976
(in percentage)

	Stayer			Outmigrant		
Industry	Malay	Chinese	Total	Malay	Chinese	Total
Agric., Forest. ,& Fish.	84.8	44.4	68.2	35.7	3.8	20.2
Agric. Production	0.1	0.2	0.2	5.8	1.5	3.7
Mining & Quarrying	1.2	16.3	-	0.3	0.3	0.3
Manufacturing	1.9	5.5	7.4	2.2	34.3	17.8
Construction	-	0.2	3.3	0.3	8.8	4.4
Electricity, Gas & Water	-	-	0.1	-	0.3	0.1
Wholesale & Retail	4.6	22.4	11.9	3.6	22.0	12.5
Transport & Storage	0.5	4.4	2.1	2.0	10.2	6.0
Services	6.9	6.6	6.850.1	18.8	34.0	
Total No.	757	257	1284	361	341	702
%	100.0	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Although among stayers, both Malays and Chinese are in agriculture, the Malay proportion is twice that of the Chinese which again emphasize their narrowness of diversification. The Chinese are distributed throughout the industrial structure, but mainly in wholesale and retail. What is outstanding is that over 50 per cent are of Malay outmigrants in services, with another 41.5 per cent in agriculture. In contrast, 34.3 per cent of Chinese outmigrants are in manufacturing, with about one-fifth each in wholesale and retail, and services, and another one-tenth each in transport and construction. Only 5.3 per cent of the Chinese are engaged in agriculture. This pattern

shows that Malay outmigrants basically retain their village industrial stratification, the expected agricultural component having shifted into services instead. Consistent with national patterns, outmigration for Malays into the modern sector (except for a few migrating to FELDA oil palm schemes) is almost exclusively into the government.

Malay and Chinese commuters and intending migrants are more similar to outmigrants than stayers. Malays are practically all in agriculture and services, while the Chinese are distributed into wholesale and retail, manufacturing, construction and services.

4.7.1 Occupation of Outmigrants

As outmigrants constitute the major group which breaks the two-circuit system of migration, they should be analyzed further. This section examines in greater detail the different types of occupation, and the major factors which influence Malay and Chinese choice of occupations.

To elaborate on the rigidities of the economic structure in this country and how Malays and Chinese tend to cluster in certain occupations, with Malays showing a lack of diversity, two groups of occupations, protective services, and farmers and farm workers, have been selected to illustrate the problem. Only three Chinese are in protective services compared to 91 Malays. And among Malays, nearly 51 per cent work as soldiers, and another 14 per cent as policemen (Table 4.19 and 4.20). Farming occupations are widespread among Malays. There are 149 Malays compared to only 13 Chinese. This is a clear example where the two-circuit system, especially for Malays remain entrenched. About 78 per cent of the Malays are *padi* farmers, with another 9 per cent working as rubber tappers.

Indications where the two-circuit system is breaking is in the category of production and related workers, and transport equipment operators. But Malays are poorly represented in this group with the maximum of three persons as electrician and motorcar mechanics. In contrast, the Chinese are in all types of jobs, with maximum numbers as tailors (46), mechanics (15), masonry workers (17), and lorry and van drivers (24). This rigidity of the occupational structure is evident even between the sexes. Over 51 per cent of Chinese females are in production and transport, with another 28 per cent in sales. For Malays, their females are in agriculture (41 per cent) and services (28 per cent).

Table 4.19
Simpang Empat: Ethnic Composition of Outmigrants in Protective Services, 1976

	Ethnicity					
	Malay		Chinese		Total	
Protective Services	No.	%	No.	%	No	%
Armed Forces						
Army	46	50.5	1	33.3	47	50.0
Air Force	8	8.8	0	-	8	8.5
Navy	1	1.1	0	-	1	1.1
Police	13	14.3	2	66.7	15	16.0
Custom Officer	5	5.5	0	-	5	5.3
Prison Warden	10	11.1	0	-	10	10.6
Game Warden	5	5.5	0	-	5	5.3
Security Guard	3	3.3	0	-	3	3.2
Total	91	100.0	3	100.0	94	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Table 4.20
Simpang Empat: Ethnic Composition of Outmigrants among Farmers and Farm Workers, 1976

	Ethnicity					
	Malay		Chinese		Total	
Farmers	No.	%	No.	%	No.	%
Farmers						
Padi Farmer	116	77.9	3	23.1	119	73.5
Veg. Farmer	-	-	2	15.4	2	1.2
Chicken	-	-	1	7.6	1	0.6
Farm Workers						
Rubber Tapper	14	9.4	3	23.1	17	10.5
Oil Palm Labourer	2	1.3	0	-	2	1.2
FELDA Labourer	4	2.7	0	-	4	2.5
Hired Labourer	8	5.4	0	-	8	4.9
Other Farm Worker	3	2.0	2	15.4	5	3.1
Fishermen	2	1.3	2	15.4	4	2.5
Total	149	100.0	13	100.0	162	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

4.7.2 Age of Outmigrants

Age affects the occupation a person is in as it reflects the opportunities available to different cohorts at different times. Thus, Malays over the age of 31 are mostly *padi* farmers, the Chinese are hawkers. The youngest cohort in the labour market among Malays go into the armed forces while the Chinese into production and transport, mostly in factories and as lorry drivers. It is also those aged between 21-30 which makes up most of those in professional, technical and administrative managerial categories. The educated Malays have always moved into the government, as teachers and clerks. Age affects the occupation a person is in as it reflects the opportunities available to different cohorts at different times. The younger Malays with less schooling are now absorbed into the army and police force, as a consequence of the expanding armed forces after Independence. In contrast, the younger less-educated Chinese are going into production work, away from their traditional domain of sales.

4.7.3 Level of Schooling of Outmigrants

The level of schooling influences the type of occupation. Thus over 86 per cent of Malays without schooling remain in agriculture. The outlet for the Chinese are in sales, usually as hawkers. Up to six years of schooling, Malays are in agriculture (63 per cent) and some, for the first time, in services (20 per cent). For the Chinese, 56 per cent are in production work, with sales work at (30 per cent) continuing to play an important role. However, by 9 to 11 years of schooling, the government sector takes over with 45 per cent of Malays entering that sector. For the Chinese in this cohort, production work comprises 69 per cent of the Chinese. Sales have diminished in importance with increasing education. For both Malays and Chinese, university-level education means mostly professional and administrative work, with Chinese having a larger proportion in the professional category (69 per cent versus 45 per cent).

The national-level data (Chapter 3) which showed that Malay outmigrants are more educated than the Chinese in the same occupational group is reinforced by data from the village study. The difference is most striking among service workers. Thirty-seven per cent had schooling from Form 5 to university among Malays compared to 11 per cent among Chinese. This is explained by the different types of service work between Malays and Chinese. While the Malays move into the armed forces, the Chinese work mainly as domestic maids and cooks. In the administrative and managerial group, the proportion of Malays with the same level of education is 74 per cent compared to 64

per cent among the Chinese, again displaying the higher educational levels of the Malays.

It is only to be expected that the higher-level occupations (i.e., those that require more formal education) are likely to be urban. This is true in this study. But comparing Malays and Chinese, and this highlights the two-circuit again, for most occupational groups, except administrative and service workers, the Chinese have greater proportions in urban areas. For example, in the professional and technical group, while 62 per cent of Malays are urban, the proportion for Chinese is 79 per cent. Even in agriculture, Chinese outmigrants have a proportion of 39 per cent compared to 8 per cent by Malays which means that the Chinese tend to migrate to urban areas, even when they are in agricultural type jobs. The reason for more Malays than Chinese being in urban areas in administrative and managerial, and service work is their moving to government jobs within the government sector.

4.7.4 Medium of Education of Outmigrants

Medium of education is linked to occupation. Those with English education (for both Malays and Chinese) move into professional and technical and managerial positions. Those with Malay-medium remain in agriculture or get lower-level government jobs. The Chinese with Chinese education tend to engage in production and transport, and sales work.

4.7.5 Strata of Destination of Outmigrants

Where villagers migrate to is influenced by their occupation. Over half the outmigrants left for rural areas (based on Census definition) (Table 4.21). The much higher rural-urban proportion (than that recorded for Peninsular Malaysia) can be largely attributed to the survey area's proximity to Alor Setar and being along the main north-south trunk road. The highest proportion of all workers (30 per cent) and of production workers (34.5 per cent) were in centres of 10,000-74,999 and most of these worked in Alor Setar. Service workers (almost exclusively protection workers) and professional and technical migrants (teachers and other professionals such as architects and engineers) on the other hand, tended to concentrate in the largest cities of Penang, Ipoh, Kuala Lumpur. As may be expected, farmers and farm workers moved to rural areas with less than 1,000 people. Just under 25 per cent of all outmigrants moved less than 10 miles from the village.

Table 4.21
Simpang Empat: Outmigrant by Occupational Group and Selected Occupations and Strata of Destination, 1976
(in percentage)

Occupational Group and Selected Occupations	Size of Rural Centre			Size of Urban Centre			Total
	<1,000	1,000 - 9,000	Total	10,000 - 74,999	75,000+	Total	
Production, Transport	19.2	30.7	24.4	34.5	31.8	33.3	29.1
Tailor	3.5	14.7	8.6	4.0	11.0	7.1	7.7
Equipment Driver	3.5	4.9	4.1	8.0	5.2	6.8	5.5
Electrician	2.3	0.7	1.6	4.0	6.5	5.1	3.4
Toolmaker	1.7	0.7	1.3	6.5	2.6	4.8	3.1
Agriculture, etc	54.7	25.9	41.5	6.0	2.0	4.2	21.8
Farmers	41.9	18.2	31.1	3.0	0.7	2.0	15.7
Farm Workers	12.8	7.0	10.1	3.0	1.3	2.2	6.0
Service Workers	9.3	8.4	8.9	23.0	29.2	25.7	17.8
Cooks/ Maids	1.2	1.4	1.3	5.5	1.3	3.7	2.5
Protection Services	5.8	5.6	5.7	16.5	27.3	21.2	13.9
Sales Workers	8.7	22.4	14.9	21.0	9.1	15.8	15.4
Working Proprietor	4.1	7.7	5.7	7.5	1.9	5.1	5.4
Sales Workers	1.7	9.8	5.4	6.0	1.3	4.0	4.6
Hawkers	2.3	4.9	3.5	6.5	3.2	5.1	4.3
Professional/ Technical	5.8	8.4	7.9	9.5	16.2	12.4	9.9
Teacher	5.8	4.9	5.4	6.5	9.1	7.6	6.6
Professional[a]	-	-	-	2.5	6.5	4.2	-
Admin/ Managerial and Clerical	2.3	4.2	3.2	6.0	11.7	8.5	6.0
Clerical & Related	1.2	0.7	1.0	5.0	7.8	6.2	3.7
Total No.	100	100	100	100	100	100	100
%	172	143	315	200	154	354	669

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.
Note: [a] Architect, engineer, doctor and dentist.

4.8 OUTMIGRANTS' REASONS FOR MIGRATION

The stated reasons for migration, while often seen as "soft" data and susceptible to rationalization and memory lapses, are still useful when interpreted within a context of other variables such as demographic and economic characteristics. As Table 4.22 shows, over 55 per cent of the reasons are family ones, marriage alone contributing to 35 per cent.

If the total village population is studied, the majority move for family reasons which involves the processes of family development such as marriage, shifting into one's own house, migrating as the family expands, leave the household and eventually retiring. It also involves over 15 per cent who are passive migrants, dependants who follow their spouse or parents who are migrating. Among the economic reasons (35 per cent), the search for better opportunities makes up nearly 18 per cent. Education constitute 6 per cent.

There are some ethnic differences between Malays and Chinese which reflect the different types of opportunities available to each of them. Although the proportion that migrate for family reasons are similar between Malays and Chinese, there are more passive migrants among Malays (over 21 per cent compared to 11.7 per cent noted by the Chinese) who tend o migrate as a family. This is easier for Malays owing to the government jobs which provide housing for the family. Because of patriliny among the Chinese, 44 per cent migrate at marriage (compared to 27 per cent among the Malays). Malays and Chinese have nearly equal proportions who migrate for economic reasons. The dissimilarity occurs in the search for better opportunities where Chinese recorded 27 per cent against 8 per cent of the Malays; and migrating owing to the nature of job, and live with employer system and domestic maids). Nearly two-thirds of the economic reasons of the Malays are for government transfer. Owing to the educational opportunities available to Malays, twice the proportion migrate for further education compared to the Chinese.

About 86 per cent of females migrate for family reasons such as marriage (59 per cent) and as passive migrants, mostly as wives. Males, however, mainly migrate for economic reasons (about 63 per cent), chiefly searching for better opportunities, or government transfer. In education, males prevail.

Table 4.22
Simpang Empat: Stated Reasons for Migration for Outmigrants, 1976

Stated Reason	Ethnicity		
	Malay	Chinese	Total
Family			
Marriage	27.0	43.9	
Dissolution	0.2	0.5	
Own house	5.7	0.8	
Stay with relatives	3.4	0.7	
Follow relatives	17.9	11.0	
Economic			
Unemployed	1.4	0.9	
Search for better opportunities	7.9	27.2	
Nature of job	0.4	4.0	
Open land	1.1	-	
Agricultural work	2.5	-	
Live with employer	0.7	5.2	
Government transfer	22.7	0.9	
Education			
Further education	7.5	3.1	
Go for course	1.6	1.3	
Religious	0.2	0.1	
Total No.	361	345	706
%	100.0	100.0	100.0

Source: Simpang Empat: Mobility and Migration Survey I, Kedah, 1976.

Earlier we had discussed how Malays and Chinese tend to cluster in different occupations. Such rigidities in the economic structure of the country is reflected in the reasons for migrating. Thus, nearly 45 per cent of Malays moved because of job transfer in contrast to 2.1 per cent among the Chinese. The reason for this is the large proportion of Malays who are in the government which regularly transfers its employees.

The frequencies of such transfers are higher among the armed forces where 86 per cent moved because of job transfer. For the Chinese, a typical feature of their occupation as discussed earlier, is their apprenticeship system, and the tendency to stay with ones' employers. Therefore, nearly 24 per cent migrated because of the nature of their work and the necessity to stay with their employer, unlike Malays which noted only 2 per cent. And among these Chinese migrants, those in the service sector alone (i.e. electricians, mechanics, tailors and servants) comprised half of those who gave the nature of their work as the main cause for migrating.

However, the most cited reason among the Chinese, of nearly 61 per cent (compared to 15 per cent among Malays) is in search for better opportunities. On closer examination, it was found that there were large numbers of Chinese in the sales workers category. Within this group, for both Chinese and Malays, over 83 per cent gave this as their main reason for migrating. This suggests that among sales workers, there is a compelling need to look for larger markets.

Among the Chinese, 61 per cent said their main reason for migrating was to search for better opportunities, compared to 15 per cent among Malays. The higher proportion among Chinese is they tend to migrate in search of work, or better work as single individuals. And being in the private sector, as against the paternal security of the government, the urge to seek a better job always exists for the Chinese.

Not surprisingly, a large proportion of those who move for family-type reasons tend to migrate short distances within Kedah. These are migrants who move to start their own households (96 per cent), marry (80 per cent) and follow relatives (69 per cent). There are three groups of economic reasons which have a two-stream pattern, one within Kedah and the other further away. Those who migrate owing to the nature of their job (70 per cent) and have to live with the employers (83 per cent) move short distances. The people who are seeking better job opportunities (52 per cent), and are unemployed and looking for work (41 per cent) also tend to migrate within Kedah. Similarly, those who migrate for further education tend to move within Kedah (46 per cent, mostly

to Alor Setar) and another stream further afield, mainly to the bigger cities in Penang and Selangor. As expected, migrants who leave to open new land gravitate towards Kedah, Pahang and Perak, to the FELDA schemes and agricultural projects. Those who migrate owing to government transfer, are sent all over the country and there is little choice involved.

4.9 ANALYSIS OF PAST OUTMIGRATION

It has been argued that the two-circuit system, while entrenched, is slowly breaking. This dissolution been mainly caused by government policy to increase rural Malays' level of education, thus preparing them for modern, better paying jobs. This policy had been given greater impetus by the NEP in 1970 which used migration as a tool to shift rural Malays from agriculture to the urban modern sector. Most of these modern sector jobs were with government, inroads into manufacturing not occurring until the late 1970s and 1980s, as ill be shown in Chapters 5 and 7.

Insights into past outmigration patterns from the village, especially occupational changes throw further light on the development of the two-circuit system. This section will examine the outmigrants of three periods, 0-10 years (left between 1974-65), 11-20 years (left between 1964-55), and more than 21 years (left before 1954), based at their time of departure from the village.

An implicit assumption here is that major economic characteristics of outmigrants have not altered substantially since migrating from the *kampung*. Based on the life- history analysis, this assumption would be acceptable, particularly in the earlier periods when there was limited mobility in the major occupation of an individual's life. It must be reiterated that outmigrants are conceptually different from the village mobility groups (non-migrants) analyzed earlier, because a more meaningful study of them should refer to their characteristics at the time of migration. Instead, their characteristics refer to their current status, at the time of the Simpang Empat Mobility and Migration Survey I. To make outmigrants comparable with the other mobility groups, the present total village population is used as the standard population. Thus, the migration calculation are ratios and not rates. Technically, the number of outmigrants per year should be based on the number of villagers (population at risk) for that particular year. The small numbers would have made such calculations and prone to fluctuations and meaningless. Outmigrants were derived from family reconstitution (asking the head of household their

characteristics at the time of the survey) in the village. They are defined as people who have lived in the village but at the time of the survey had left the households on a permanent basis.

There were 1587 outmigrants, 25.2 per cent of the total village population. Chinese comprise 53.1 per cent and Malays the other 46.9 per cent. Table 4.23 shows the time these migrants left the *kampungs*. Over half left within the last ten years. The outmigration rate in 1976 was 17.3 per 1000 for the total population. The Malay rate was 15.0 per 1000 while the Chinese rate was 20.8 per 1000.[33] The higher rate among the Chinese is consistent with results in the earlier discussion. Table 4.24 shows the ethnic and sex composition of outmigrants during the three periods of departure. In line with the 1976 rate of outmigration there are more Chinese outmigrants in the recent period – a result of their inability and reluctance to remain in agriculture due to the lack of land. In the earlier cohorts, there are more females owing to the former importance of marriage migration and the lower mortality of older females compared to male outmigrants. The predominance of females for the earlier periods is clear from the age-sex structures of the different period migrants (Figure 4.10). The proportion in the labour force increases with the more recent migrants. This may be explained by the withdrawal from the labour force by the old.

Table 4.23
Simpang Empat: Time Outmigrant Left Village, 1976

Time Left Village (year)	No.	%		
0	109	9.0	}	52.8
1-5	341	28.2		
6-10	189	15.6		
11-15	148	12.2	}	27.9
16-20	190	15.7		
21-25	104	8.6	}	19.3
26-30	69	5.7		
31-35	60	5.0		
Total	1210[a]	100.0		

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

[33] The figures are too small for age-standardization rates of outmigration.

Note: [a] Total is inconsistent with the total number of outmigrants (1587) due to inadequate data on time of departure from the *kampungs* for some outmigrants.

Table 4.24
Simpang Empat: Ethnicity and Sex of Outmigrants by Time Left Village, 1976
(in percentage)

	Ethnicity		Sex	
Time Left Village (year)	Malay	Chinese	Male	Female
0-10	46.7	54.5	56.5	45.9
11-20	28.2	28.4	27.6	29.2
21+	25.1	17.1	15.9	24.9
Total No.	627	684	602	716
%	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

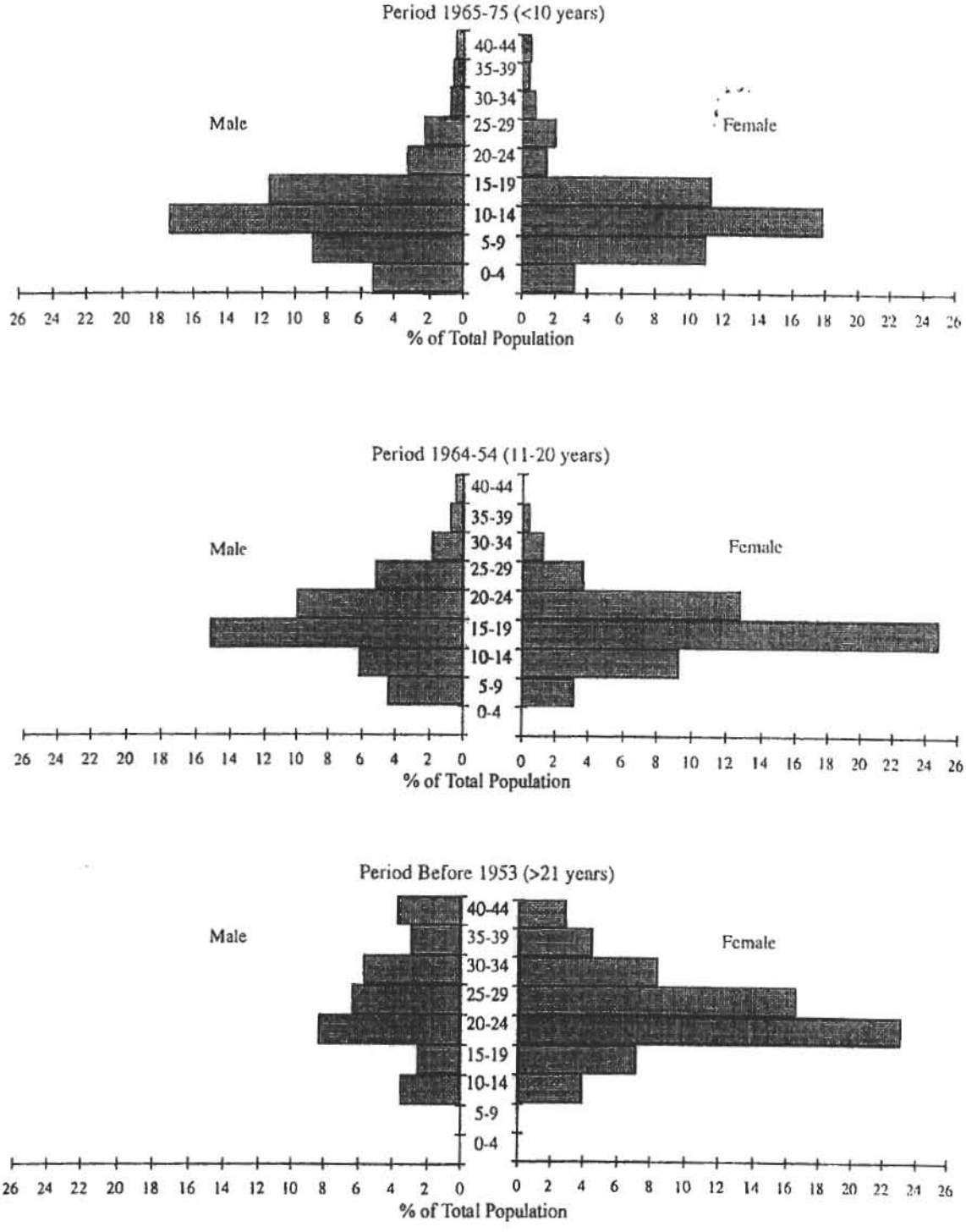
In the most recent period, students have increased, particularly for Malays. The decline in housework among Chinese in the most recent period may be attributed to the rising participation of young girls in the labour force.

An examination of the employment status of outmigrants show a shift of self-employed and employer categories towards employee status (38.5 to 81.2 per cent). This is related to the changing occupational structure, which shows a decline in agriculture at the expense of services, production and transport, and professional and technical which are employee status-type work (Table 4.25). The traditional areas of the Chinese (sales) and Malays (agriculture) have declined in importance for the more recent migrants (from 40.7 to 22.6 per cent and 66.7 to 22.8 per cent, respectively). This is important evidence to show the disintegration of the two-circuits. Malays are moving out of agriculture into services, professional and technical, and administrative and managerial while the Chinese into production and transport.

The sex composition of occupations also noted some interesting changes. Females have been making inroads into production and transport, and services sectors, with huge decreases in agriculture (64.3 to 5.2 per cent). Recent male shifts in occupations are chiefly into production and transport. All these changes are evidence of a changing

Figure 4.10

Simpang Empat: Present Age-Sex Structure of Outmigrant by Time Left Village, 1976



Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.

Table 4.25
Simpang Empat: Present Occupation of Outmigrant by Ethnicity by Time Left Village, 1976
(in percentage)

Occupation	Malay[a]			Chinese[b]			Total		
	Years Left Village			Years Left Village			Years Left Village		
	0-10	11-20	21+	0-10	11-20	21+	0-10	11-20	21+
Professional, Technical & Related Workers	17.4	14.1	10.1	7.4	5.8	-	11.5	10.7	7.3
Administrative, Managerial & Clerical Worker	8.1	5.1	5.8	3.7	13.0	-	5.5	8.3	4.2
Sales Worker	4.0	5.1	2.9	22.6	37.7	40.7	15.0	18.5	13.5
Service Worker	36.2	36.4	8.7	6.9	1.4	3.7	18.9	22.0	7.3
Agricultural, Animal Husbandry, Forestry, Fishing and Hunting	22.8	35.4	66.7	0.9	4.3	25.9	9.8	22.6	55.2
Production, Transport, Equipment Worker	11.4	4.0	5.8	58.8	37.7	29.6	39.3	17.9	12.5
Total No.	149	99	69	217	69	27	366	168	96
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Simpang Empat Mobility and Migration Survey I, Kedah, 1976.
Note: [a+b] X^2 significant at 0.0001 level.

economic structure and the breaking down of the two-circuit system which will be developed in the next few chapters.

The next part complements the first by analyzing retrospective life-history data of different mobility groups from Simpang Empat. Stage II of the Mobility and Migration Survey were life-histories which are year by year accounts of each individual's life (see Appendix B). The aim here is to use this rich source of data to analyze structural change in a migrants' life thus, seeking the integration of the macro- with the micro-level.

4.10 CRITICAL MOVES: AN ANALYSIS OF MIGRATION LIFE- HISTORIES[34]

A meaningful approach to the study of population movements as broad historical processes should seek to locate the micro-processes within the broader structural changes – what might be called the macro-micro approach. This is the approach we now adopt in this part.

The question, from both a theoretical and methodological view point, is how does one generalize from micro-level movements and decisions to the macro-level, since in a structural analysis of migration, population movements are more than the sum of individual locational changes. A generalization of individual moves requires a classification of moves in relation to structural changes, which must go beyond cross-sectional analysis of origin and destination, characteristics of migrants, reasons for people moving, income differentials, and migration elasticities. Such a taxonomic-structural approach, however, must not lose out on the richness and diversity of individual experience.

This part explores the life-history approach as a means of analyzing change within the framework of local-regional structural migration and labour mobility. While studies of locational changes are interesting they merely add to the already voluminous literature on migration. Studies examining migration *per se* without relating it to occupational history and the broader structural framework tend to be theoretically unsatisfactory. Often they fail to explain meaningfully, why, when, how and what happens when people

[34] Parts of this section is derived from my paper "Critical moves: a life-history approach to the structural analysis of migraton", Proceedings of the Conference on Urbanization and National Development, East-West Population Institute, East-West Centre, Honolu, 17-19 December 1981.

move. The life-history approach attempts not only to study changes through time but to relate these changes to other variables, incrementally.

We propose to introduce a method of capturing these micro-aspects of migration and labour mobility within an individual's life-course and to relate this to different levels of structural analysis by using the concept of "critical moves". The concept of critical moves is an attempt to summarize the value and degree of structural change associated with particular moves or a life profile of moves (migration). In this way, we would be able to reinstate the micro-aspects of migration into migration analysis on a structural level, in particular within the context of the two-circuit model of internal migration in Malaysia.

The next section discusses the concepts and methodology for the analysis of critical moves, followed by the first set of results based on a classificatory analysis of critical moves profiles. The analysis of critical moves is also carried out for the mobility groups as defined earlier. We then undertake a general statistical analysis of critical moves in order to bring out its various characteristics such as frequency of occurrence of different types of moves, different industrial characteristics of occupations and the differentials associated with them such as age, ethnicity and household characteristics. We conclude with a discussion of the findings of this analysis of critical moves as it relates to the two-circuit model of migration.

4.10.1 Methodology

The Concept of Critical Moves

Critical moves is an index of the extent and value of structural change incorporating the criteria of location and occupation associated simultaneously with a particular migration undertaken by an individual during his life. It represents a subject of all the moves undertaken by an individual which includes other types of, or reasons for migration in a lifetime. Such critical moves occur at the point of entry into the labour force, when a person obtained a job after leaving school and migrating to the urban area, or when a person changes jobs which entails a migration to another place.

The index of critical moves for each individual may then be compared with other individuals and analyzed in various ways in order to bring out the relationships with broader factors of structural change. This suggests a number of assumptions

which underlie the adoption of the numerical values used in calculating the index for each critical move. Six basic dimensions have been incorporated in the scoring of each move, namely strata, distance, state, occupation, employment status and industry. The actual values represent the structural importance of each change according to the development context of a developing country (see Table 4.26 for the scores).

It is important to note that the calculation of critical moves for changes of job and location or location alone (i.e. migration) only begins after the first job. The reason for this is that while the act of first entry into the labour force (obtaining the first job), whether involving a migration or merely obtaining a job, is important, it is difficult to incorporate into the scoring system and compare it with the other dimensions, particularly for occupation, employment status and industry. Besides, it is not as important for the analysis of structural change associated with a migration, since it is the first job change, regardless of age of entry into the job market, that is interesting.

The first assumption is that a move which is only a locational change is given less weight than one which has a locational change and job change. The reason for this decision is that a mere locational change without a concomitant change in occupation is less meaningful. Scores are assigned to each of the six dimensions of the two criteria. The extent of "criticalness" is valued by a series of factors which are considered important according to the theoretical framework of this research. Therefore, among the locational indicators, far more important structural change occurs in strata than interstate or intrastate migration (which is but an administrative classification or sometimes used as a proxy for distance). Among the occupational variables, industrial sectoral change is very pertinent as it reflects changes in the national structure. Therefore, the relative importance of each of these dimensions can be given a weight.

For each move a score of "criticalness" is calculated based on the values assigned to each dimension. This is an attempt to capture the multi-dimensional aspects of structural change. A total index, the summation of all scores, is calculated for each move for each individual. A set of criteria were followed consistently for assigning values. A greater positive structural change, for example, from primary to tertiary (differentiating from tertiary-government and tertiary-personal) is given the highest value. A change which is retrogressive, for example from tertiary-government to primary is given the lowest score. However, a retention of a position, such as rural to rural is given a medium score. But even within a preservation situation (that is, no structural change) the score for a higher-level type conservation, for example, urban to

Table 4.26
Value of Index of Critical Moves

	Criteria	Dimension	Scores
(A) Locational Changes			
	(1)	Strata	
		R-U	4
		U-U	3
		U-R	2
		R-R	1
	(2)	Distance (in miles)	
		50+	4
		10 – 49	3
		5 – 9	2
		0 – 4	1
	(3)	State	
		Interstate	2
		Intrastate	1
(B) Labour Mobility			
	(4)	Occupation	
		In-F	4
		F-F	3
		In-In	2
		F-In	1
	(5)	Employment Status	
		In-F	4
		F-F	3
		In-In	2
		F-In	1

Table 4.26 (continued)

	Criteria	Dimension	Scores
	(6)	Industry Sectors	
		P-Tf	10
		P-S	9
		Tin-Tf	9
		Tin-S	8
		Tin-Tg	8
		Tf-Tf	8
		S-S	7
		Tf-S	7
		Tg-S	7
		S-Tf	7
		P-Tg	6
		S-Tg	6
		Tg-Tf	6
		Tf-Tg	5
		Tg-Tg	5
		P-Tin	4
		Tin-P	3
		S-Tin	2
		Tf-Tin	2
		Tin-Tin	2
		Tg-Tin	2
		P-P	2
		S-P	1
		Tf-P	1
		Tg-P	1

Key

R	-	Rural	U	-	Urban
In	-	Informal	F	-	Formal
P	-	Primary	S	-	Secondary
Tin	-	Tertiary Informal	Tf	-	Tertiary Formal
Tg	-	Tertiary Government			

urban is assigned a higher value than a lower level of involutionary change (such as the rural to rural).

Based on the above considerations, a short-distance, intrastate move within the same strata, such as rural to rural is the least critical. On the other hand, a migration which is rural-urban, interstate, over 51 miles, with an occupational and employment status change from informal to formal and from primary to a tertiary sector constitutes the most critical move. While it has been quite easy to give scores to both the positive and negative extreme cases, for example, shifts from primary to tertiary industries or secondary to tertiary-informal industries, it has been harder to assign values to the "medium" type changes. However, it is hoped that possible discrepancies of these scores may cancel each other out in the summation of the total index.

A programme has been constructed to calculate the individual critical moves for 168 cases in the study villages.[35] The next section examines possible ways of analyzing critical moves using the above indices to answer questions specific to the aims of this study.

Methods of Analysis of Critical Moves

The definition of critical moves, and the creation of a critical move index using the criteria and dimensions outlined above, enables us to summarize the historical profile of moves of individual migrants in a sample or panel. Using this as the basic data, it is possible to conduct several analyses aimed at classifying the migration profiles and to relate these to the different levels of structural determination.

The most basic method of analysis is to undertake a frequency analysis of critical moves and relate them to other household or village data. The Rand Study based on the Malaysian Family Life Survey is an example of this type of approach. But this loses the structural linkages in the life-history data. Although a frequency analysis is also undertaken here, the more meaningful way of summarizing and classifying the individual critical move profiles would be to create a life-history matrix from the basic

[35] I would like to thank Datuk Dr Kamal Salih

data set, as shown in Figure 4.11.

Having constructed this life-history matrix of critical moves, it is a simple step to classifying these profiles by using a clustering method or a multivariate reduction technique such as Q-mode principal components analysis which provides a grouping of individuals according to similarity of their life-history profiles – that is, the similarity of their migration experiences. Profiles of migration history by groups may then be studied and related to structural shifts in the economy (Figure 4.12).

The next question is how are these profiles related to the broader structural analysis. This would depend on the level of structural analysis adopted. Taking the most micro-level of analysis within the argument of this thesis, that is, the family demographic level of analysis, first, several alternatives with decreasing levels of sophistication may be suggested. The first method (Figure 4.13) involves panel studies of every member of the family in which at every point of the individual migrant's critical move, the family life situation is examined in order to determine the influence of factors such as size of family, household income, average education of household members, the occupation of head of household and so on. These data, when analyzed across groups of individuals will enable the analyst to examine household labour strategies and their relationships with local and national economic structural changes.

A second alternative, less stringent on data requirements, considers such data only for particular points or conjunctures in the family demography history (Figure 4.13). A slightly better method is by comparing a particular conjuncture with a previous conjuncture. These conjunctures can then be related to particular structural shifts in the local-regional economy.

An even less stringent technique is to study only one individual migrant at a point in time where all data on his family background and situation, as well as the state of the extra-family's current structures, are brought to bear on the individual profile of critical moves. Most surveys are of this type, being similar to cross-sectional analyses where retrospective migration profiles can be constructed from their life-history data.

Numerous cross-sectional analyses may also be conducted which dissect the moves individually or in groups, from which cross-tabulations may be derived to determine functional linkages between cohorts in terms of occupation, level of education at first entry into job market, etc. Particular periods may be blocked off for comparative

Figure 4.11
Construction of a Life-History Matrix from Critical Moves Data

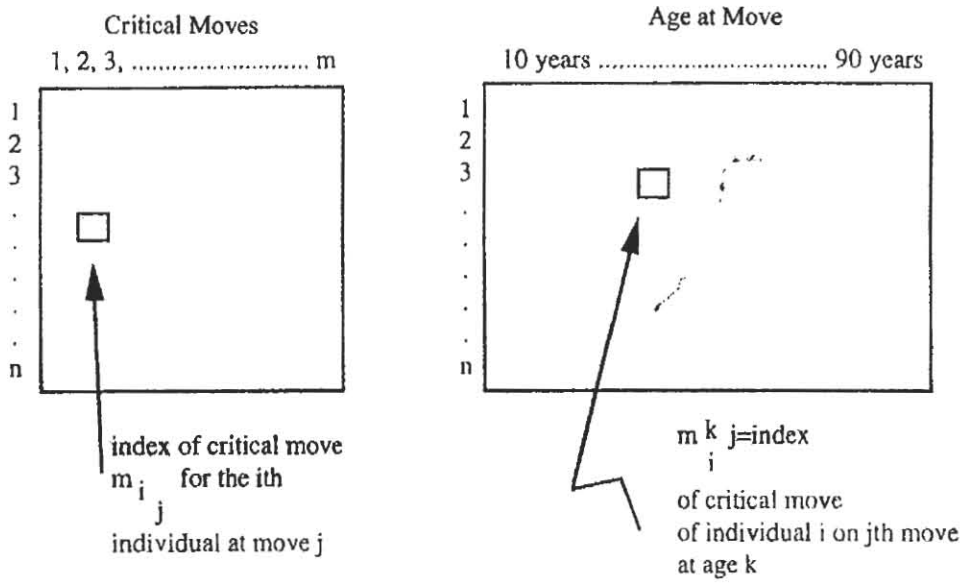


Figure 4.12
Group Profiles Using Factor Scores

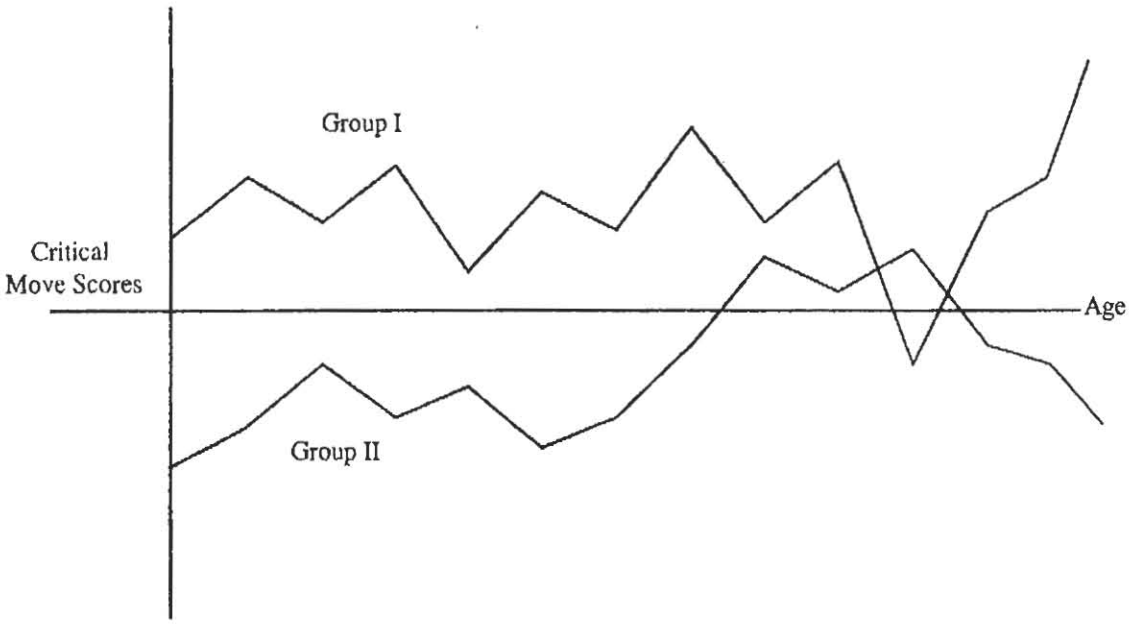
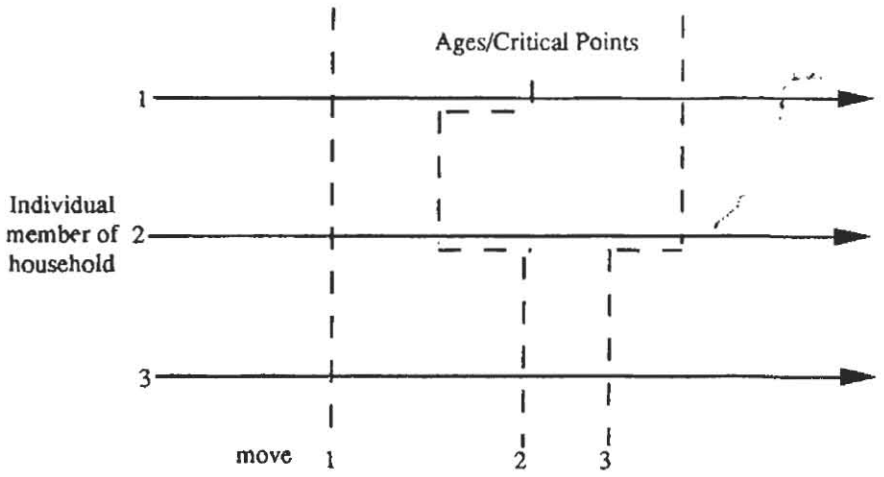
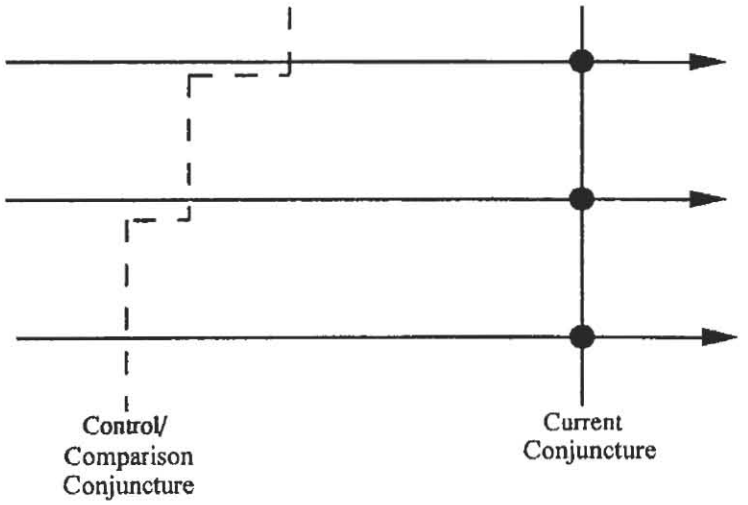


Figure 4.13
Alternative Techniques of Family-Demographic Analysis of Migration Profiles

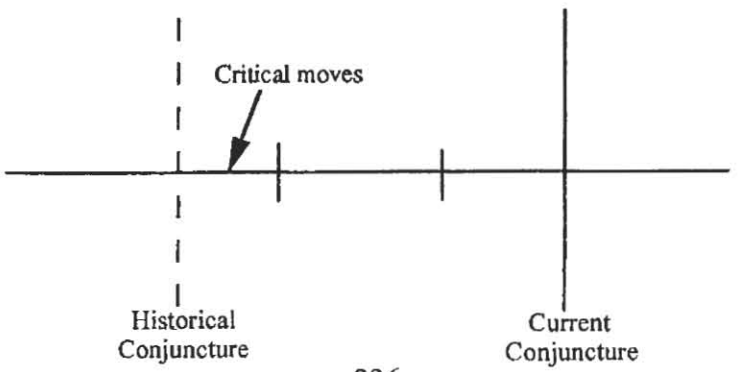
(a) Panel Studies of Family Members



(b) Cohort Analysis of Personal Conjuctures (All-Family Members)



(c) Individual Conjunctural Study



analyses of cohort experiences or of individual migration history. These period analyses may be related to particular stages of development of the local economy.

Pertinent questions here relate to the more specific objectives of this study. We can apply the above techniques to examine the following questions:

a) What is the distribution of critical moves within an individual's life-cycle? Do they vary, if so, how?
b) Do Malays and Chinese of the pre-1957 cohort (using time of entry into the labour force as the criteria for cohort) and post-1957 cohort display different patterns of critical moves? The year 1957 was used as it was the year of Independence and an important point where national policies changed. Were these individuals, in their migration and labour experiences more affected by the macro-structure of the political,
socio-economic processes than the more obvious Malay-Chinese socio-cultural differences. If so, this lends further evidence of the structured nature of migration in Peninsular Malaysia, discernible from national level migration and occupational characteristics (Young, 1979; 1981).
c) Do individuals achieve a similar extent of "criticalness" at similar stages of their life-cycle, pointing to the universality of the stage of the life-cycle impinging on migration and labour mobility behaviour? To relate this back to the previous question, what is the relative importance of the life-cycle and the macro-structural processes of critical moves?
d) Are there certain factors in the family of the individual (for example, average household education) which conditions and sets a threshold on critical moves?

Answers to these questions will give us some important relationships between macro-structures, government policy implementation (for example, the NEP), households and individual dimensions of population mobility.

The outline of techniques of analyzing critical moves is confined mainly to integrating the life-history study of migration to family-demographic structures and their articulation within the local economy. In order to go beyond the taxonomic-structural dimension of individual labour mobility, it is necessary to relate critical moves to higher-level structural analysis. This step requires a specification of the model of the national economy and the structural characteristics of migration streams within the particular economy. Using the Malaysian case, we can situate the analysis of critical moves within a two-circuit structure of migration and development, posed as a specific description of Malaysia's historical and contemporary migration phenomenon.

At this point, it is useful to recall that the construction of the index of critical moves had

already incorporated structural factors which are dimensions of the economic structure at a higher level of analysis. Labour mobility within the dimensions of occupation and employment status (divided into formal and informal), economic sector (divided into primary, secondary and tertiary sectors) and location (strata, i.e. rural-urban, intra- and interstate, and distance) are central to the analysis of structural change. The main point is that the level of criticalness of moves is directly related to structural changes or lack of it as experienced by an individual or groups of individuals during their life-course.

4.10.2 Profiles of Critical Moves

Frequency of Critical Moves

The critical moves of the individuals in the sample are subjected to a frequency analysis with results as shown in Table 4.27. It can be observed that two-thirds of the sample population made no move that is defined as a critical move during their lifetime, while the remaining third made at least one such move during their life so far. Of the "critical" third, the distribution is skewed towards one critical move (nearly one in every five). There are, however, nearly two in twenty persons in the sample who have made more than four critical moves in their lifetime.

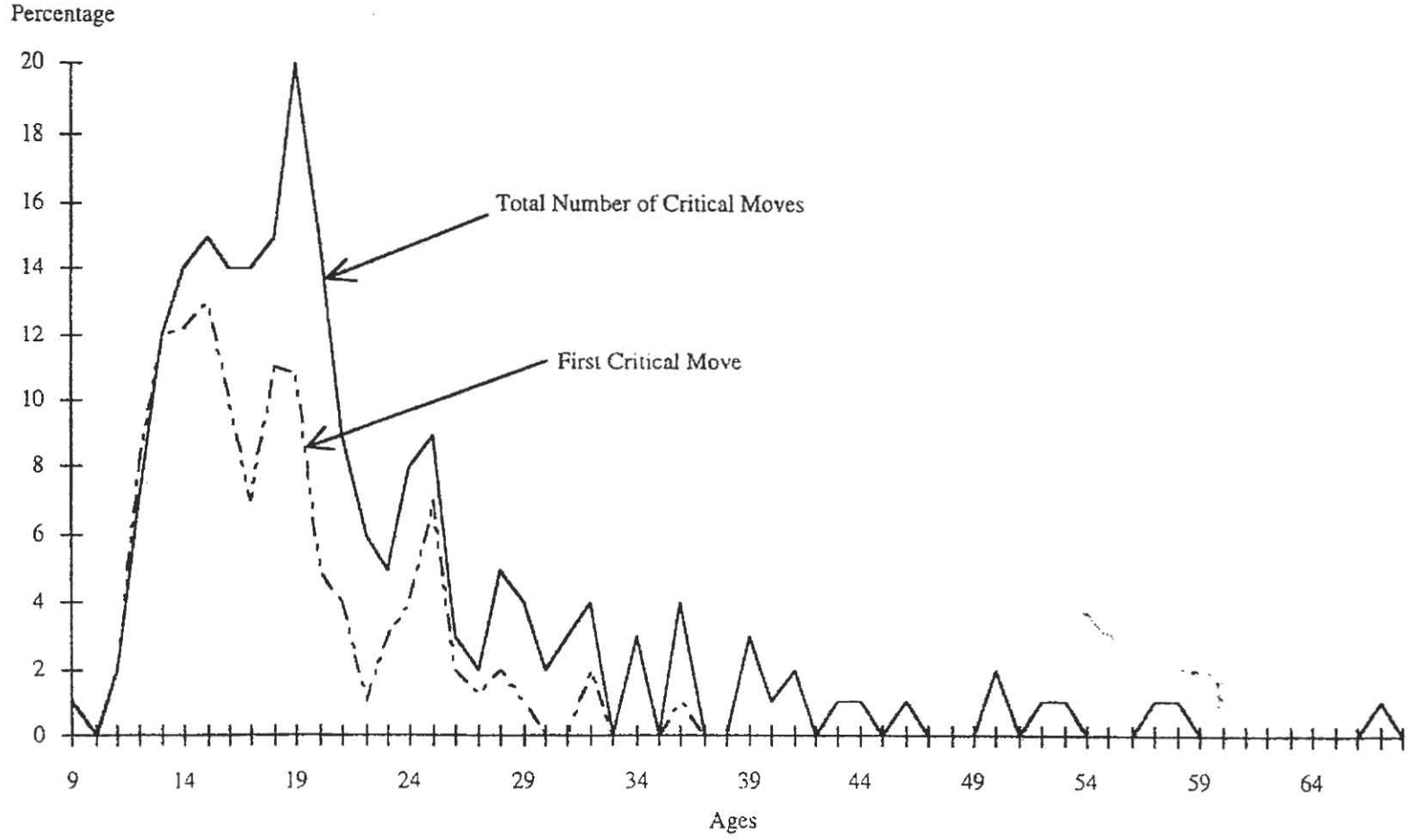
Table 4.27
Simpang Empat: Frequency of Critical Moves, 1977

	Absolute Freq.	Relative Freq. (%)	Adjusted Freq. (%)	Cum Code (%)
0.	420	66.7	66.7	66.7
1.	119	18.9	19.9	85.0
2.	52	8.3	8.3	93.8
3.	23	3.7	3.7	97.5
4.	10	1.6	1.6	99.0
5.	5	0.8	0.8	99.8
6.	1	0.2	0.2	100.0
Total	680	100.0	100.0	

Source: Simpang Empat Mobility and Migration Survey II, Kedah, 1977.

If the critical moves were cross-classified by age (Figure 4.14), it is clear that the total

Figure 4.14
Simpang Empat: Number of Critical Moves and First Critical Move



Source: Simpang Empat Mobility and Migration Survey II, Kedah, 1977.

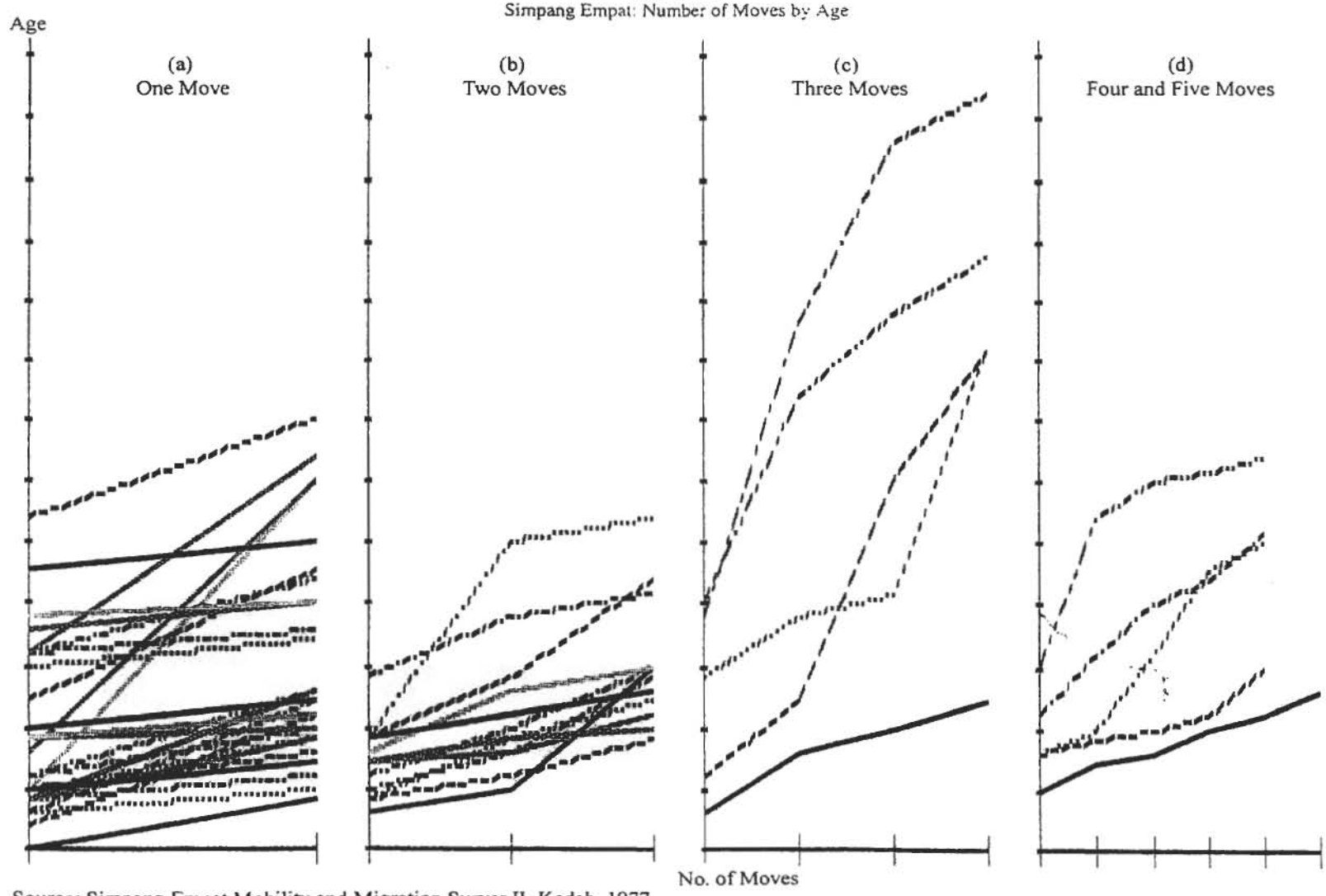
number of moves are concentrated at three critical ages, namely at age 15, 19 and 25. The first transition coincides with the school-leaving age for those who entered the labour force probably after entering secondary school (after six years of primary education). The second transition occurs at age 19 coinciding with those leaving secondary education or pre-university. It must be remembered that the entry into the labour force is not counted as a critical move; all critical moves are defined as the first job-location move after entering the labour force. The third transition at age 25 is most likely a major career move or one made involving a university or tertiary-level graduate.

This pattern is confirmed by the distribution of value of the critical move index by age. The highest values for the index tend to be bunched around the 15-17 age-group, spread in a narrow band from age 10 to 26. In other words, the most significant job-location move was most likely made after the first job.

The period lapse between critical moves can be better observed if we group the individuals in the sample according to the number of critical moves made over the duration of their lives to the date of the survey. Figure 4.15 (a-d) shows these profiles of critical moves according to age for those who move once, two times, three times and, four and five times, respectively. The slopes of the lines between moves indicate the length of the transition between moves, the steeper lines indicating longer "stays" in the job than the flatter ones which indicate a more rapid transition between moves. From Figure 4.15 (b), it is evident those who made two moves tend to make the second move sooner than later. Only three or four (Cases 59, 123, 156 and 172) appear to be the more exceptional. Likewise in the three-move group, the third move tended to be soon after the second, especially for the younger set. A variation of a similar pattern is discernible for the five-move group, albeit involving fewer cases (Figure 4.15 (d)). The most interesting profile of moves is for the four-move group (Figure 4.15 (d)). Except for Case 173 who is more similar to the other cases except for the number of moves, the four cases in this group showed long stays between critical moves throughout their respective careers.

This classificatory procedure is not really satisfactory, although it has brought out some salient aspects of the profile of critical moves. A multivariate grouping technique is used in the next section to achieve greater generality to the profiles, and to undertake some further analysis of critical moves along the lines discussed earlier.

Figure 4.15
Simpang Empat: Number of Moves by Age



Source: Simpang Empat Mobility and Migration Surver II, Kedah, 1977.

Cohort Analysis

These indices were then transformed into a life-history matrix according to the approach discussed above (see Figure 4.11). These life-history matrices were partitioned into sub-matrices according to different cohorts as part of the structural analysis of characteristics of profiles of critical moves. Two cohort categories were used: a pre-1957 versus a post-57 cohort; and a Malay versus non-Malay cohort. These cohorts were then subjected to a Q-mode principal components analysis as a classificatory device. This is a grouping technique which will enable us to classify the cases into groups of similar profiles of critical moves, to reflect similarity of job-migration experience. An arbitrary maximum number of eight factors will be extracted in each cohort analysis, thus limiting the number of groups in the classification exercise. This is to allow for sufficient comparability across cohorts for the purpose of the structural analysis of critical moves. In addition, a factor loading of more than 0.45 (which measures the degree of membership of the group) was used as the cut-off for all the cohort analysis. Factor scores, which in this Q-mode version gives a summary profile of critical moves for each group obtained in each cohort, are then used to give a visual impression of the differences between not only the different groups in each cohort, but also the differences between each cohort. The group (factor score) critical move files may then be used to study the underlying structural differences between the groups in order to explain the variability in job-migration experience between groups and cohorts.

Pre-57 Versus Post-57 Cohort Analysis

The choice of 1957, the date of entry into the labour force, as the cut-off year for the division of the cohorts in this analysis is based on the assumption that the year of Malaysia's Independence will distinguish between the work and mobility experience of those who entered the labour force before Independence from those who did after Independence. It should be pointed out here that confounding this will be the fact that the two cohorts will be at different stages in the family life-cycle and that the life-cycle profile of the post-57 cohort will be truncated when compared with that of the pre-57 cohort. This limitation is overcome by the fact that the factor analysis is done independently for each cohort. This point is however, to see whether the conditions prevailing before 1957 and those after 1957 have any bearing on the job-migration experience of the village population.

Of the 157 cases used in this analysis, 68 cases were classified as members of the pre-57 cohort and 91 in the post-57 cohort. The results of the principal components analysis are shown in Table 4.28. The eight groups obtained for the pre-57 cohort represented some 48.9 per cent of the total variance of critical move experience in this cohort, as compared to 73.4 per cent for the eight groups classified in the post-57 cohort. This may be interpreted as a gross measure of the greater variability of the critical job-migration experience of those who entered the labour market before 1957 when compared with those who entered the job market after 1957. This is further reinforced by the fact that the percentage of non- classifiable cases (that is, those whose factor loading is less than 0.45) for the pre-57 cohort (35.3 per cent) is higher than that for the post-57 cohort (28.6 per cent).

Table 4.28
Critical Move Profiles:
Results of Q-Mode Principal Components Analysis for Pre-1957 and Post-1957 Cohorts

Factors Extracted	Eigen Value	Percentage of Variance	Cumulative Percentage[a]
Pre-1957 Cohort			
1	5.336	7.8	7.8
2	4.874	7.2	15.0
3	4.589	6.7	21.8
4	4.188	6.2	27.9
5	4.034	5.9	33.9
6	3.582	5.3	39.1
7	3.452	5.1	44.2
8	3.228	4.7	48.9
Total No. of Cases = 68			
No. not Classifiable = 24 (35.3%)			
Post-1957 Cohort			
1	15.812	17.4	17.4
2	10.331	11.4	28.7
3	8.503	9.3	38.1
4	8.304	9.1	47.2
5	7.489	8.2	55.4
6	5.793	6.4	61.8
7	5.485	6.0	67.8
8	5.100	5.6	73.4
No. of Cases = 91			
No. not Classifiable = 26 (28.6%)			

Source: Simpang Empat Mobility and Migration Survey II, Kedah, 1977.
Note: [a] Errors are due to rounding-off.

Using the factor scores for each group, it is possible to see much more clearly this variability (or lack of) variability between the groups and cohorts. Since these factor scores are standardized aggregate measures of the group profile then peaks and troughs represent the variations in criticalness of job-migration changes mapped for the group as a whole. The peaks are the more relevant indicator of the structural value of a positive change at the different stages (ages) in the individual's life-cycle, while the troughs reflect reversals in terms of criticalness which suggest a negative change in the structural value of the move from the previous job-location.

Figure 4.16 (a–h) show the critical move profiles for the pre-57 cohort for the first eight groups obtained from the principal components analysis. Three general observations may be made about these group profiles. First, it appears that the most critical move for most individuals in the various groups occurs early in their life-cycle, the variation among groups manifesting mainly in the age when this occurs. This observation applies with equal force for the post-57 cohort (Figure 4.17 (a–h)) as a result of the stage of their life-cycle (shown in the truncated nature of their critical move profiles which remain flat after age 30).

The second observation is the increasing variability of the experience for the latter group's profiles (reflecting the order in which they were extracted). More importantly, the number of peaks in criticalness of job-location change increases, although at a declining rate, except for later groups where they increasingly reflect individual variability of critical move experience.

The third observation is that, from Figure 4.17 (c), (e), (f), (g) and (h), as well as Figure 4.16 (h) to a certain extent, there appears to be three critical points in the life-cycle of moves among the groups, namely around the age 16-20 years, a second at 30-32 years and a third at around 50 years. Exactly the same pattern was observed in the national-level migration streams between 1965-70 (Chapter 3). This might be a universal phenomenon, with the age at 50 years a critical point of optional retirement, especially for Malay civil servants.

Figure 4.16
Critical Move Profiles for Pre-1957 Cohort,
Using Factor Scores, for Eight Groups

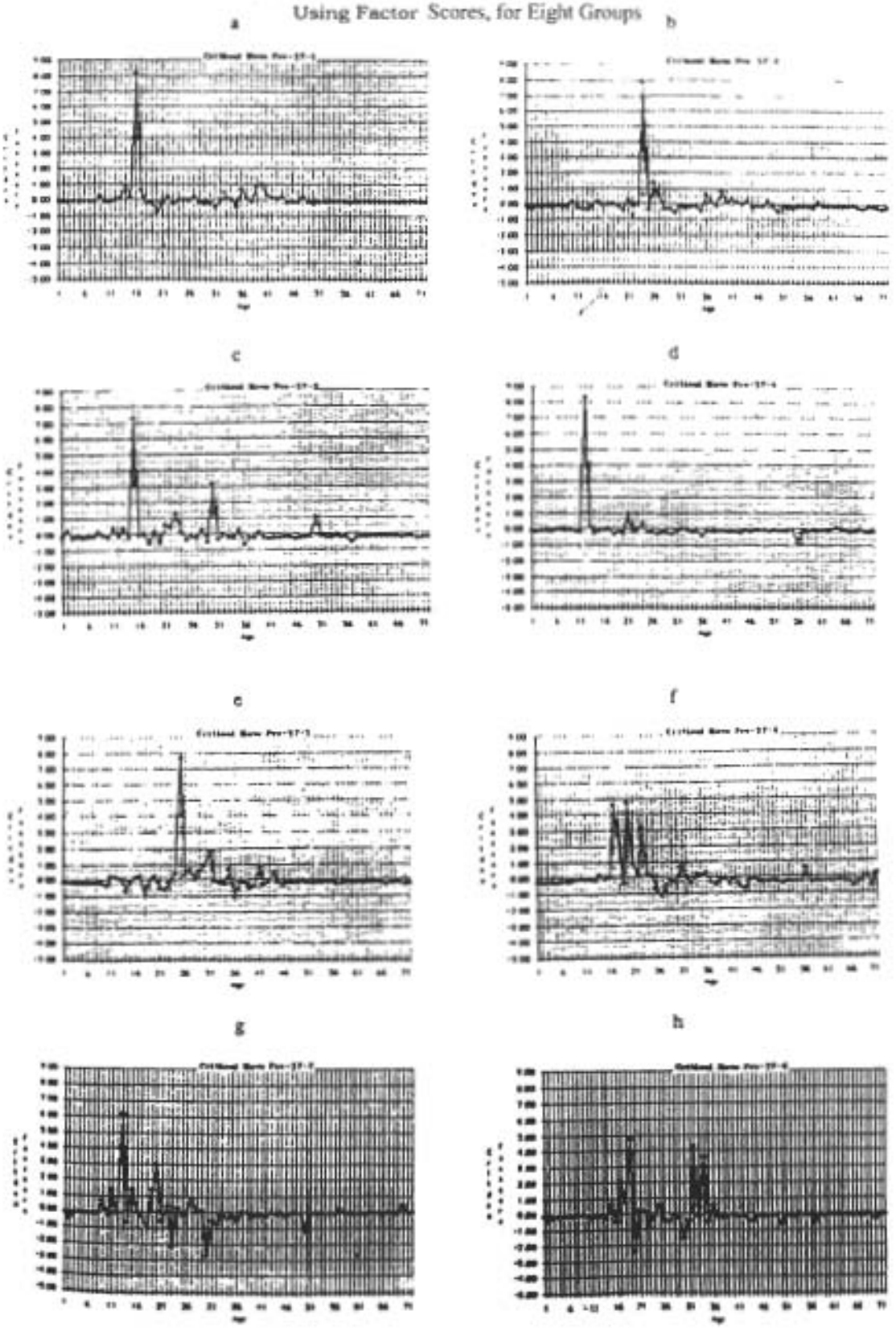
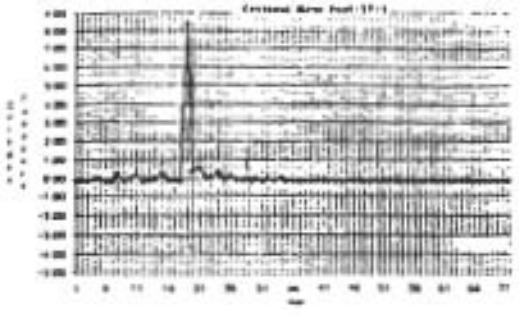
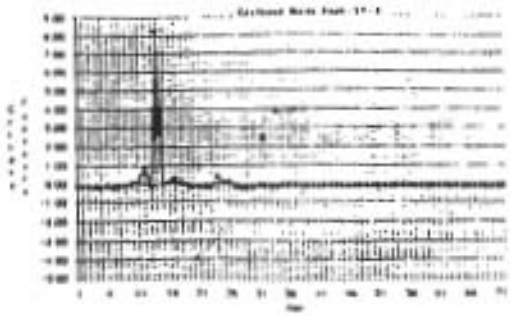


Figure 4.17
Critical Move Profiles for Post-1957 Cohort,
Using Factor Scores, for Eight Groups

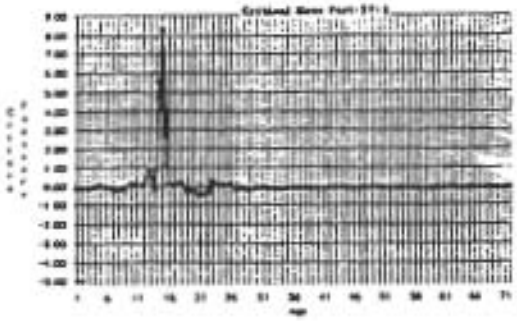
a



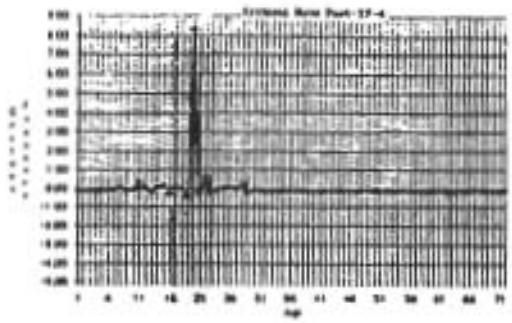
b



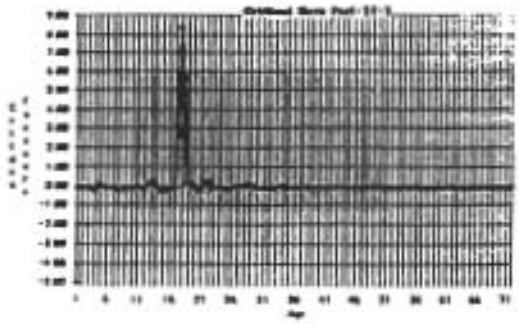
c



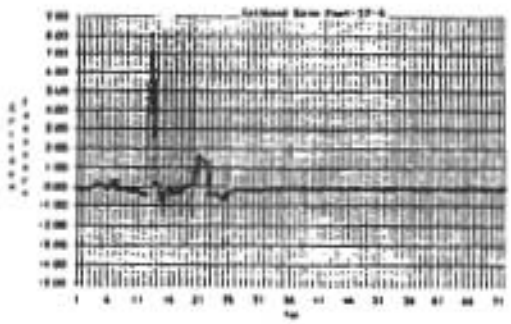
d



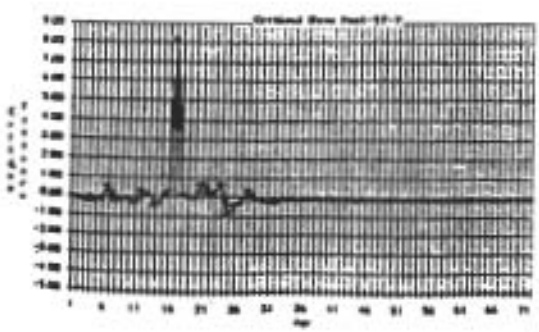
e



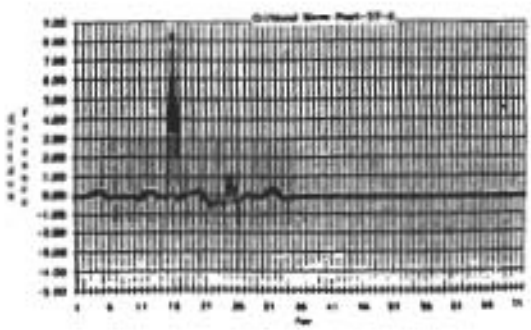
f



g



h



Malay Versus Chinese Cohorts

A similar analysis of the pre-57 and post-57 case was undertaken for the Malays and Chinese cohorts in the village case study.

The critical move profiles based on factor scores of the different cohorts is shown in Figure 4.18 and 4.19, respectively. Almost the same observations can be made between the Malay groups and Chinese groups as was made in the 1957 cohorts above. There may be a slight indication that the first significant critical move may be made somewhat earlier for the Chinese than the Malays, that is before age 16, but this dissimilarity cannot be pushed too far. A more significant difference between the two cohorts is the absence of evidence of a critical move for the Chinese groups at 50 years (Figure 4.20). The overall variability between the Chinese and the Malay cohorts may be illustrated by Figure 4.21. The differences in experience is more contrasting (judging by the peaks and troughs) in the earlier years (11 to 30) of their life-cycle and the coincidence of the critical move profiles after that, except for the difference mentioned above at age 50. On the whole there is little variability of significance between Chinese and Malay critical move profiles when moves are related to the broad structural changes in the economy.

One result of the comparison of critical move profiles between the two ethnic groups is in the incidence of negative scores. As mentioned earlier, critical moves measure the occupational and locational progress of the individual migrant through his life-course as the broad structural patterns, whether family-demographic or macro-events unfold. Negative scores, however, cannot be interpreted as reversals of fortune since it is merely a statistical effect of the extraction of orthogonal factors, namely, of independence between the groups of migrants showing similar profiles of moves.

But, the greater variability of the Chinese over the Malay migration experience judging from the incidence of negative and positive scores reflect the greater diversity of experience of critical moves among the Chinese compared to the Malays. This in itself suggests that a process of heterogenization takes place in the process of breaking the circuit, involving moves between rural and urban areas, and among occupations in the urbanized upper-circuit. These critical moves are job-related, thus the indices tend to reflect the heterogeneity of urban jobs more than homogeneity of rural occupations.

Figure 4.18
Critical Move Profiles for Malay Cohort,
Using Factor Scores, for Eight Groups

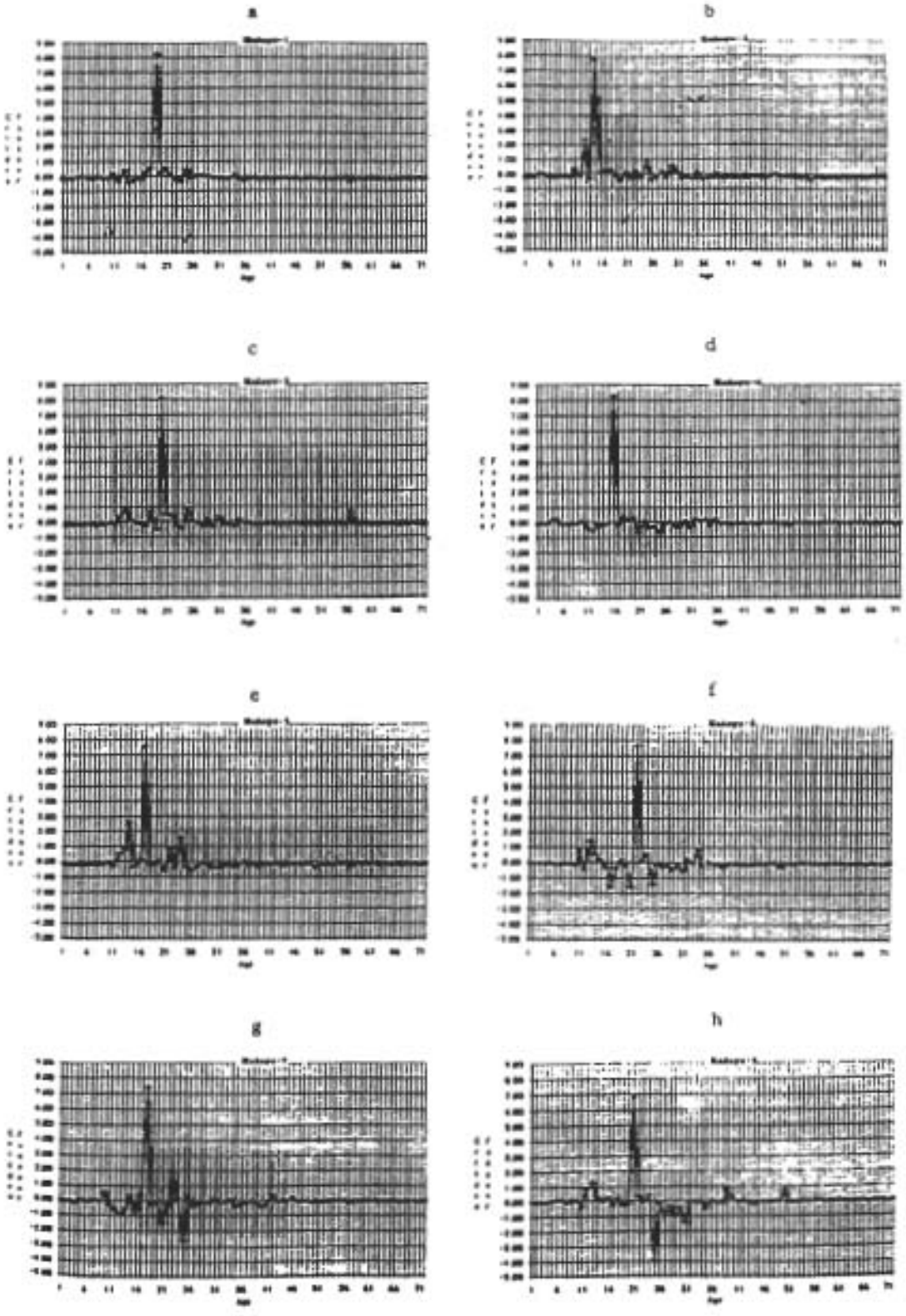


Figure 4.19
Critical Move Profiles for Chinese Cohort,
Using Factor Scores, for Eight Groups

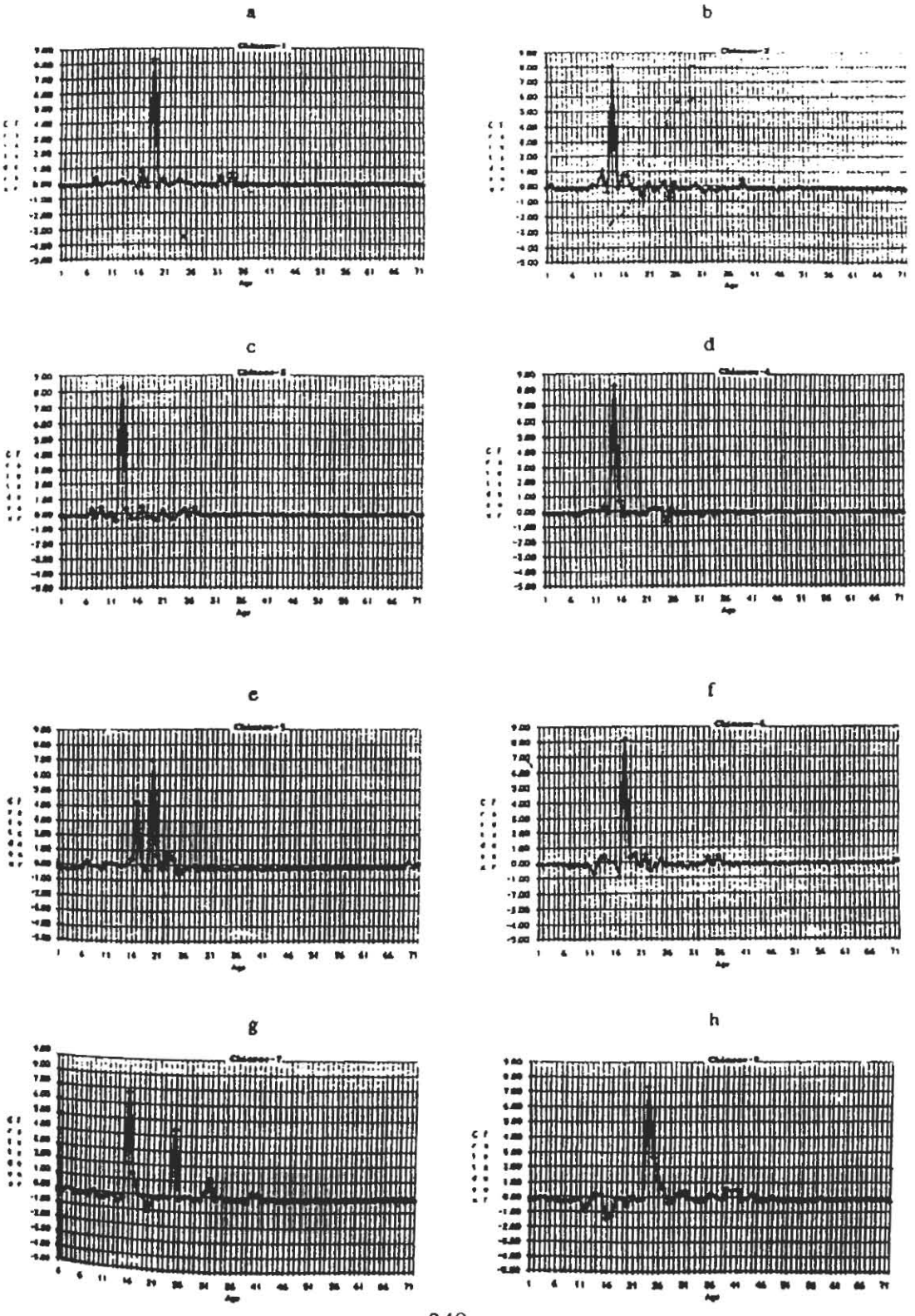
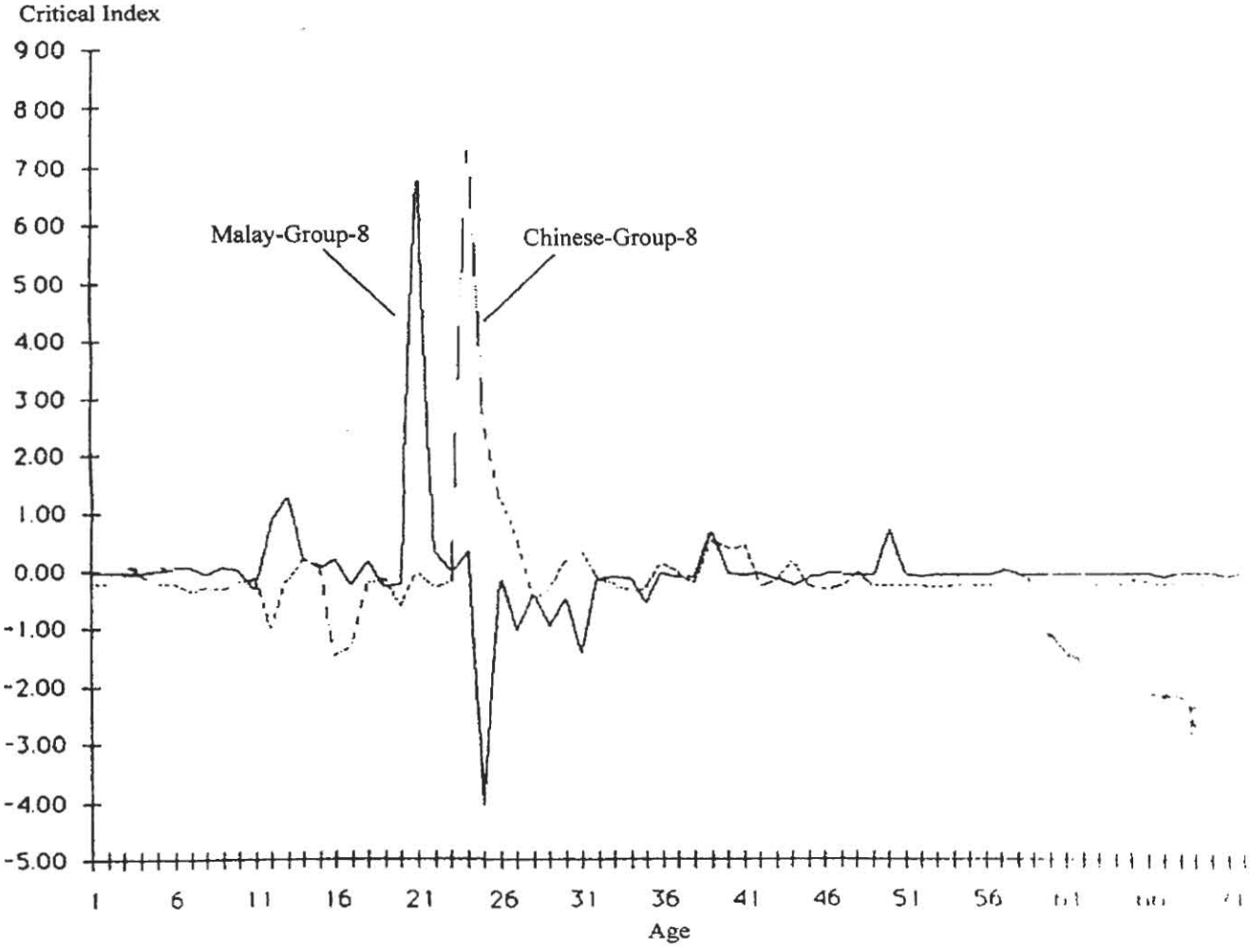
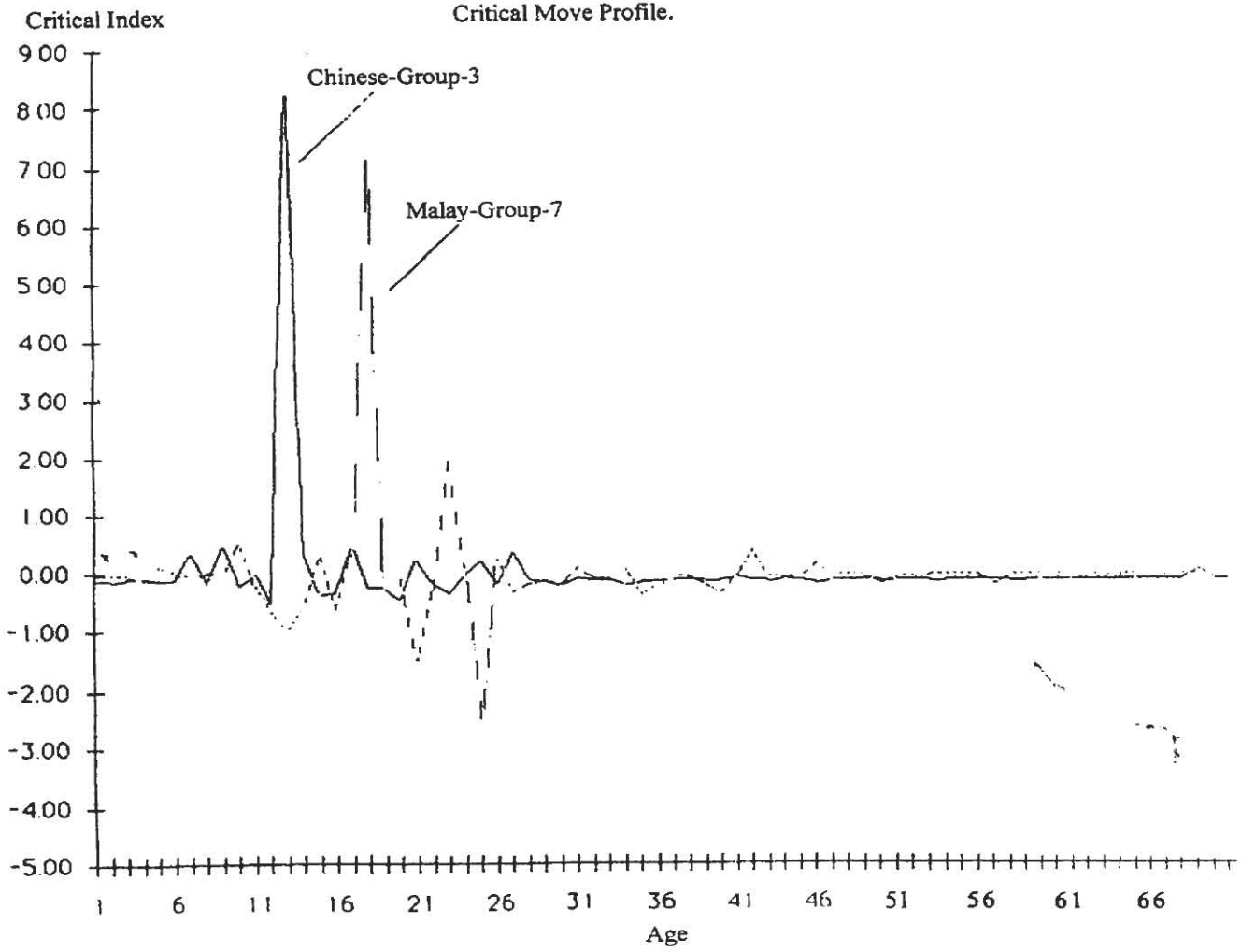


Figure 4.20
The Difference Between Malay and Chinese Critical Move Profile



Source: Simpang Empat Mobility and Migration Survey II, Kedah, 1977.

Figure 4.21
The Maximum Difference Between Malay and Chinese Critical Move Profile.



Source: Simpang Empat Mobility and Migration Survey II, Kedah, 1977.

4.11 CONCLUSION

From the analysis of mobility groups at the village-level, we conclude that a typology of mobility and migration groups certainly provides a fuller understanding of the processes of migration. Conclusions drawn from research on migration is highly dependent on the scale of the study and from which end it had been undertaken. For example, a total village population from the source-end will highlight the importance of family migration while an urban-end study will reiterate the importance of economic reasons. The typology is closely related to stages of the life-cycle and shows the links between different mobility groups, e.g., intending migrants with outmigrants.

The rural-end study has also pointed out the importance of commuters which will be missed in an urban-end study. Such a phenomenon has been extensively studied in the industrialized countries for its implications on transport, etc. but have been somewhat neglected in many Third World countries, and certainly the study of commuters from a rural area. The contribution of this typology is to put these commuters, an important mobility group, into a total mobility framework, in relation to other forms of mobility and migration. It is an important group as commuting may be an option available to potential outmigrants. It was shown that merely analyzing outmigrants may neglect a closely associated mobility group which, while contributing to the urban labour market does not add to the burden of congested urban areas. And as suggested in Chapter 3 commuters may well disguise the real extent of rural-urban migration and therefore, urbanization rates which are measured on the basis of residence. Also, they may reduce pressure on urban areas (for example, housing and basic services) caused by inmigration. At the same time, they affect village populations in both tangible (for example, income) and intangible ways (attitudes and perceptions).

This chapter has also shown that the rural and urban sectors in Peninsular Malaysia are more complex than that envisaged in the Harris-Todaro's (1970) migration model. The economic characteristics of mobility groups have demonstrated the fragmentation and segmentation of both the source and destination labour markets, which in the Malaysian context are highly influenced by institutional (for example, government policies in recruitment) and cultural and historical factors (for example, Malay and Chinese differences in attitudes and perceptions of occupations).

The two-circuit system of migration operated within the village setting and in fact, in terms of occupations and industry, reflected the national patterns. The Malays remained quite undiversified, their absorption into manufacturing which was to signify the

third wave of urbanization, still not being felt in the region. However, some historical data of the outmigration from the village indicated evidence of the circuit starting to disintegrate. It is now left to the last three chapters to examine in greater detail this phenomenon.

We have also analyzed the links between individual migration decisions and experience with the broad structural changes of the economy through the introduction of a concept of critical moves using life-history data. The methodology requires a descriptive measure of the historical profile of moves undertaken by the individual in his lifetime, and a grouping of the profiles in order to draw the salient aspects of the critical moves. Other methods of analysis may be applied to the matrix of critical move index, but these have not been attempted here.

What is important in this analysis so far is the reconfirmation of the ideas on the structured nature of migration in Peninsular Malaysia, drawn out in various ways using different techniques, whether derived from cross-sectional data or longitudinal data, and whether census-wide data or special surveys. It has shown that a more micro-level analysis, using ethnographic-type data on individual migration is necessary in order to understand further the decision to migrate and to link it to the broader structural processes. This will be attempted further in Chapters 5, but mainly Chapter 6 which delves into two migrant workers' family histories in great depth..

CHAPTER 5
THE NEW MIGRATION: FEMALE WORKERS IN ELECTRONICS FACTORIES IN FREE TRADE ZONES

5.1 INTRODUCTION

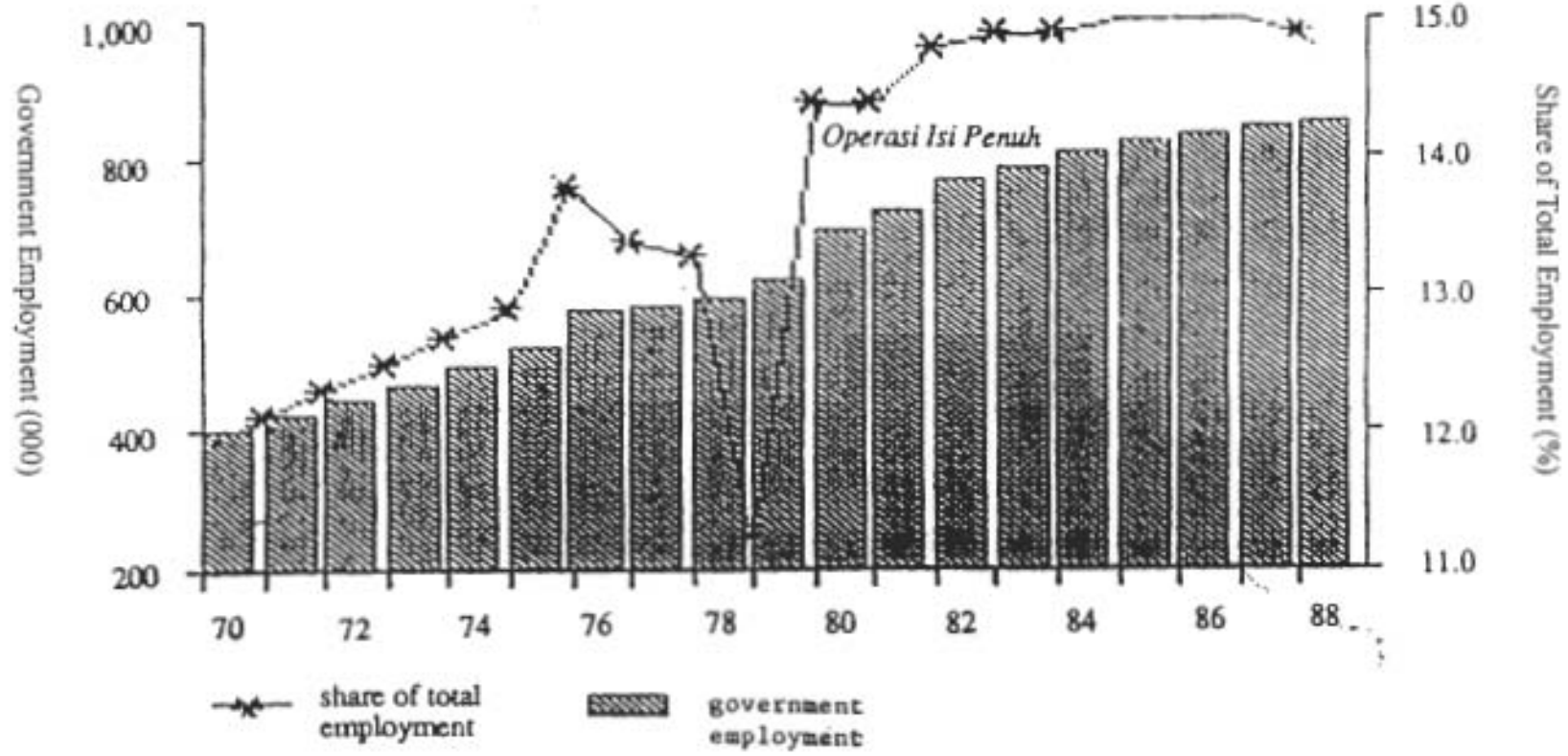
This chapter deals with a new era of migration in Peninsular Malaysia, the third wave of urbanization. Migration from the rural areas really started to increase in the late 1970s, in response to expanding job opportunities in both the public and private sectors in urban areas. This was driven by the policies of the NEP which had to succeed. Not only did the government pour massive amounts of money into rural areas to both *in situ* development and land resettlement schemes, thus producing a new cohort of youths bound for towns, but at the urban end, had to create jobs for these youths. This was done in two ways.

The first was the unprecedented expansion of the government sector, mostly in the mid-1970s and early 1980s, (especially during the *Isi Penuh* Exercise – fill all posts in 1980) to be stopped abruptly by the recession and a consequent job freeze in 1983 (Figure 5.1). The total number of employees in the public sector more than doubled between 1980 to 1986. In terms of total employment, its share had increased from 11.9 per cent in 1970 to 15 per cent in 1986. While total employment grew by 67 per cent, the public sector grew by 110 per cent (Kamal *et al.*, 1987). The second was the development of industrial estates, in particular FTZs for export-oriented, labour-intensive manufacturing industries such as electronics and textiles. The government wooed these companies with generous tax incentives.

This coincided with a redeployment of manufacturing industries from the core to the periphery of the world economy as part of the internationalization of productive activity and the new international division of labour (NIDL) which emerged during the mid-1960s to 1970s. The growth of these off-shore activities of transnational corporations (TNCs) is based on the exploitation of a cheap and docile labour – that of females. Here, we see the conjuncture of two forces, that of the national in the form of the NEP and that of the global, as exemplified in the NIDL for which the TNCs are the principal actors.

To return to our earlier argument, a meaningful study of migration must accept that the phenomenon is a product of the socio-economic and political structures, and to

Figure 5.1
Malaysia: Public Sector Employment, 1970-88



Source: Ministry of Finance, Economic Report, 1979/80 to 1985/86.

capture these processes, we have to analyze how the international forces are mediated by the national and regional policies which, in turn affect villages and individuals through the household. This chapter will also discuss why Penang state developed FTZs – thus making the marriage complete. What was left to make this arrangement complete was the necessary workers. Certain demographic conditions in the periphery led to the emergence of a vast number of rural workers entering the labour market. They were the product of the previous decade of high fertility and unprecedented decline in infant mortality caused by the health revolution in Third World countries.

This chapter examines this "new" migration of rural Malay females who make up the third "wave" of urbanization, spurred on by the NEP, as discussed in Chapter 2. The breaking of the two-circuits was hardly evident in the migration streams between 1965-70. In fact the low rural-urban migration and limited penetration by Malays into other industrial sectors, other than services, highlighted the potentially explosive situation which culminated in the racial riots of 1969. During the Simpang Empat Mobility and Migration Surveys of 1976-77, an inadequate dissolution of the circuit was occurring. But the rural case study showed that in the main, the two-circuit system was still entrenched. It was only towards the end of the 1970s and the beginning of the 1980s, that the new migration of female workers to FTZs gave hope to the breaking of the two-circuits. It was certainly an unusual stream. It did not consist of men but of women. It did not only absorb urban workers but mostly rural and, therefore, Malay. For once, the Malays were able to break out of their traditional escape route by leaving the rural areas for urban jobs in the government service. The crucial question then was: is this migration temporary, in view of the reputed footloose nature of the TNCs at that time (see for example, Frobel *et al.*, 1980). Besides, the international demand for electronic products like semiconductors had a boom-and-burst cycle which led to a series of retrenchments of these migrants. If, indeed, the migration is temporary, then the emergence of a Malay working class described by the proletarianization process may well be stifled.

In contrast to the previous chapter which studied migrants at the source-end, tracing a few to urban areas, this chapter is on the urban or destination-end. To understand the whole process, the next chapter will trace urban migrants at the destination back to their source. Another important point to stress here is that an analysis which locates the migration processes in a specific area, i.e. the FTZ, in an urban context, i.e. Penang, is meaningful only if all these processes are related to the whole region and how that in turn is affected by national and international forces. This

"embeddedness" of the FTZ in relation to its surrounding region, in their wider structural contexts, becomes an analysis of "territorial unit" (see Henderson, 1989).

The first section gives a background to Penang's industrial development, followed by the major employment characteristics of the FTZ. This sets the backdrop to the second part which comprise the bulk of this chapter. The advent of female labour migration with the industrialization process began in the 1970s and 1980s and can be divided into three phases. The first phase, in the early 1980s examines the characteristics of these female migrants, such as their family background in the rural villages, their household attributes and their own socio-economic features. They are compared to another group of workers of the same sex and age, those of the urban informal sector in order that we can understand the basic differences between the emerging new labour force, and the old established one (see Appendix C for a discussion of the rationale behind this choice, and the nature and location of the field work). The second phase which was in the first half of the 1980s involves the recession and its impact on these female migrant workers bringing into focus their vulnerability, the narrowness of the Malaysian economy and the importance of the continuing essential rural household links of the girls. The next section, the third phase is marked by the economic recovery after 1985, reflecting the changing conditions of work of the now more experienced and fairly integrated urban female workers.

This chapter traces the importance of this industrialization experience on female migrant labour in the three phases described. Implicit in this discussion are the issues of proletarianization (are these rural-urban migrants permanent and will they constitute the new Malay working class), migrants' links with, and contribution to their rural households, the permanency of such TNC activities, and the experience of this type of industrialization, with limited linkages to the local economy, as an option for economic development. Some of these issues will be introduced in this chapter to be developed further in Chapter 6.

5.2 PENANG'S INDUSTRIAL DEVELOPMENT

Penang had limited choices. From an essentially fishing and *padi* economy, it became a thriving free port under the aegis of the British. It flourished as a free port, until the transfer of the headquarters of the Straits Settlement from Penang to Singapore. This decline was further aggravated by Confrontation with Indonesia in 1963-66, and rising nationalism of neighbouring countries causing a drop in its

trade. The death knell sounded with the withdrawal of free port status by the Federal government and the concomitant development of Port Kelang to serve the conurbation of Kuala Lumpur. The economy was in the doldrums. With hardly any manufacturing industry, a struggling agricultural sector, unemployment was in the region of 15 per cent and outmigration became endemic. The only way out was an aggressive industrialization strategy (see Kamal and Young, 1986).

The impact of the industrialization strategy on Penang was tremendous. The most immediate was the large number of factories operating in the industrial estates and the FTZs (Figure 5.2). The first two of eight FTZs in Malaysia were gazetted in Penang in 1972. The number of factories grew from 36 in 1971 to 503 in 1990, and employment from 4,500 to 115,389 for the same period (Figure 5.3). The impact of the world economy, in the form of recessions is clear from the 1976-77 and 1984-86 low percentage change in number of factories and employment. As is normally the pattern of the sensitivity of the electronics sector, the slump hit this sector before the rest of the economy.

This industrial development resulted in rapid urbanization, centred around the main conurbation of George Town-Butterworth, spreading towards the new township among the eastern coast of the island. Industrialization transformed Penang into the second most important metropolitan centre after the Klang Valley (which incorporates the Federal capital, Kuala Lumpur). As a result, other major economic changes were also occurring in Penang. Agriculture (including forestry and fishing) declined dramatically from 14.6 per cent of GDP in 1971 to 5.5 per cent in 1981 and to 4.1 per cent in 1985. In contrast, manufacturing recorded an increase from 21 per cent in 1971 (reflecting a pre-existing industrial work force in the import-substitution and small-scale sector) to 38.2 per cent in 1981.

In demographic terms, these structural changes produced fairly dramatic changes in some of the usual indicators. For over 30 years, Penang had experienced outmigration of its population. By the 1980s, although it was still a net outmigration state it had a high migration turnover. This meant that while female migrants were flocking in, the more educated males were drawn to the more diversified economy of the Klang Valley (Malaysia, Government of, 1986: 176). The labour force participation rate increased from 35 per cent in 1970 to 49.6 per cent in 1980, and unemployment was reduced from 15 per cent to 5.5 per cent.

Figure 5.2
Penang: Number of Factories in PDC Industrial Areas, 1971-90

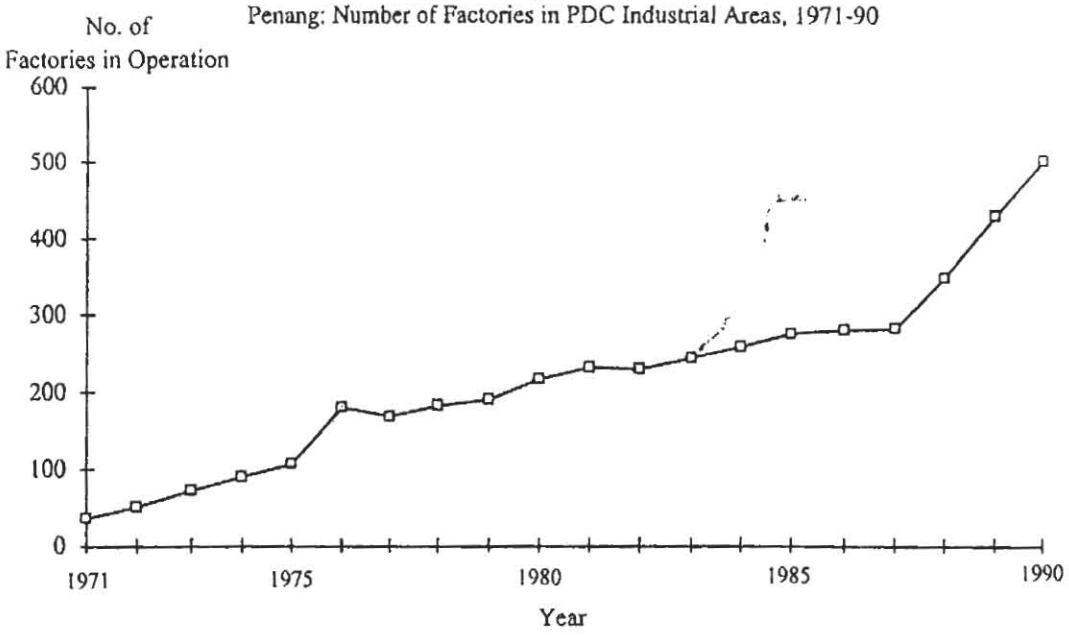


Figure 5.3
Penang: Number Employed in PDC Industrial Areas, 1971-90

Source: Penang Development Corporation, unpublished data, 1971-90.

Table 5.1 shows the employment characteristics in the FTZs from 1981-90. Several points may be highlighted here. In terms of ethnicity, the *Bumiputra* component has increased significantly. The unskilled workers category has risen substantially from 25 per cent in 1985 to 39 per cent in 1990.

Table 5.1
Penang: Employment Characteristics in the Penang Development Corporation Industrial Estates and FTZs, 1981-90

	1981	1985	1986	1987	1988	1989	1990
Total Employees	54,693	59,625	54,854	58,867	74,502	100,953	115,389
Ethnicity (%)							
Expatriate	-	0.4	0.3	0.3	0.3	0.4	0.4
Bumiputra	44.6	45.3	44.3	44.7	47.8	52.2	54.9
Non-*Bumiputra*	55.4	54.3	55.4	54.9	51.9	47.4	44.7
Sex (%)							
Male	n.a.	39.8	39.6	38.7	35.7	34.9	36.8
Female	n.a.	60.2	60.4	61.3	64.3	65.1	63.2
Category of Employment of Factory Workers (%)							
Skilled	n.a.	37.8	37.7	34.0	39.9	37.6	34.8
Semi-skilled	n.a.	5.9	6.3	7.0	-	-	-
Unskilled	n.a.	25.0	26.1	29.3	32.2	36.9	38.9

Source: Penang Development Corporation, unpublished data, 1991.
Note: n.a. - Not Available

Three important features concerning the structure of the labour force should be highlighted. The first is the sex bias towards female workers; the overall female-male ratio was almost 2:1. The predominance of females was due to the fact that electronics/electrical, and textiles/garments industries employed a disproportionately large number of females (78.1 per cent and 65.1 per cent, respectively) compared to males. This pattern is typical of such industries in other Third World countries as well. This is more obvious when only the electronics industry is studied. The growth in the electronics factories, and sex distribution in employment between 1980-87 is displayed in Table 5.2. In the 1970s employment grew steadily but was affected in the mid-1980s by automation, the practice of Just-in-Time (JIT) techniques and work recomposition. The decline in 1982 and 1985-86 was caused by the economic recessions. The high proportion of females is due to the importance of line operations where overwhelmingly females are employed. The percentage is declining owing to the greater displacement of line workers as a

consequence of automation (Kamal and Young, 1989) and labour-saving flexible production techniques (Rajah, 1989: 69).

The second important feature is the ethnicity of the workers in the FTZs where 46 per cent were *Bumiputra*. The significance of this is further emphasized when it is realized that urban Penang is overwhelmingly Chinese. The recruitment of *Bumiputras* is clearly in keeping with the aims of the NEP. In contrast to the Chinese-dominated small-scale establishments in the informal sector, the hiring policy in the TNCs were more easily enforced and monitored. As will be shown in the next section, the major source of the *Bumiputra* workforce in the FTZs was from rural-urban migration, consisting mainly of young female school-leavers from the neighbouring states of Kedah and Perak.

Table 5.2
Penang: Growth of Electronics Factories and Employment by Sex, 1980-86

Year	No. of Firms	Employment	Mean Firm Employment	% of Female
1980	25	24,919	997	80.4
1981	29	24,504	845	79.6
1982	27	24,446	905	78.1
1983	28	26,692	953	78.6
1984	38	30,474	802	80.2
1985	38	26,259	691	76.8
1986	36	25,046	696	75.9
1987	38	23,368	615	76.1

Source: Penang Development Corporation, unpublished data, 1980-87.

A third aspect of the new labour force was that nearly half of the factory workers were in the skilled or semi-skilled labour category. But this was unequally distributed between different industries. For example, the percentage of unskilled labour in the total workforce for rubber-based industries was 54.1 per cent, while for the electronics/electrical it was 20.1 per cent, and for textiles, 15.8 per cent.

5.3 FEMALE LABOUR MIGRATION IN THE 1970s: PENANG'S YOUNG URBAN WORKERS[1]

5.3.1 Survey of Young Workers

The emergence of the new labour force resulted from a massive rural-urban exodus of young female school-leavers or school drop-outs. The impact of this development has led to a contradictory phenomenon: while it has contributed to a radical transformation of the Penang economy over the past 20 years, it had at the same time created a significantly youthful workforce in the formal sector which contrasted with the effect on the labour segment in the traditional informal sector. The identification of these two segments of the youthful labour force reflected the pattern of uneven development in Malaysia, and the basic differentiations produced by the particular urban industrialization process taking place in Penang.

Who are these new migrants? What are the socio-demographic and economic characteristics of this new labour force compared to the more traditional one in this particular phase of industrial development in Malaysia? Already, we know these workers constitute the new era of labour force formation in Malaysia. They are different from the migrants of the earlier waves of urbanization discussed in Chapter 2. They were a small group, comprising the most educated in the villages by virtue of their being trained in specially set-up urban schools and remaining in urban areas in government jobs. Migrants in the other urban stream, the type that McGee (1969) studied in Kampung Bahru, Kuala Lumpur were the opposite, most were less educated, with one to two years of secondary schooling who came to the city with high expectations, only to find they were unable to get formal work, thus, turning to petty trading. This group of young female rural-urban migrants are, therefore, expected to be very different from the urban informal sector workers who, as descendants of the immigrant Chinese, now comprise the bulk of the Chinese urban poor.[2] This group, with minimal schooling, found it difficult to penetrate the formal sector.

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[1] Some of this section is drawn from the IDRC Participatory Urban Services Project, Final Report on Young Workers and Urban Services: A Case Study of Penang, Malaysia by Kamal *et al.*, 1985. The author was solely responsible for the design of the questionnaire, the analysis and write-up on the socio-demographic and economic characteristics of the female migrants and the history of Penang's economic development.

[2] It is always the "miracle" rags-to-riches success story that is publicized in so many immigrant societies. In fact, the majority of immigrants and their descendants remain in the lowest rung of the economic ladder.

5.3.2 Migration and Mobility Patterns of Young Workers

In this study, migration is defined as lifetime interstate migrants (persons who were born in a state other than Penang) and previous residence interstate migrants (persons whose last state of residence was outside Penang). There are many conceptual and technical problems associated with these two definitions (see Young, 1978: 57-9; Appendix A) but they are commonly used as they are fairly universal, especially from census-derived definitions.

The third wave of urbanization in Malaysia, an impact of the NEP consisted basically of a Malay rural-urban migration stream. Thus, among the young workers in the formal sector 53.6 per cent were Malays. In sharp contrast, the proportion was 0.5 per cent in the traditional sector. In 1970, only 4.8 per cent of Malays lived in urban areas. By 1980, this had increased to 21.3 per cent. The Malays also experienced the fastest rate of urbanization, at 6.7 per cent per annum compared to 3.7 per cent per annum recorded by the Chinese for the same period (Malaysia, Government of, 1981: 79).

Lifetime Interstate Migration

There were great differences between workers in the corporate and non-corporate sectors in migration experiences. In terms of lifetime interstate[3] migration, the formal sector had 45 per cent interstate inmigrants compared to only 7 per cent in the informal sector. Although the majority of workers were Penang-born and this includes those outside Penang Island in Province Wellesley, most of the migrants belonged to the modern sector (Table 5.3). This can be explained by the nature of the two sectors. The TNC manufacturing companies in the corporate sector are a recent phenomenon compared to the traditional informal sector. While the corporate sector draws on migrants, the traditional sector is supplied by workers whose families have always been in this area. Thus, 93 per cent of workers in the informal sector were born in Penang, most of them in George Town (87 per cent) or the immediate vicinity.

A breakdown of the birth state by ethnicity showed that Malay workers were drawn from a larger number of states than the Chinese. Malays, while coming mainly from Perak (45.6 per cent) and Kedah (44.4 per cent), also came from as far away

[3] A major criticism of the concept of a lifetime interstate migrant is that it merely compares birthplace and current residence without taking into account any movement that may have occurred n between.

as Johor and Selangor. Of the Chinese, only 13 per cent were from the adjacent states of Perak and Kedah.

Table 5.3
Young Workers: Lifetime Interstate Migration by Sector, 1982
(in percentage)

State	Formal Sector	Informal Sector
Penang	54.7	92.9
Perak	21.3	4.3
Kedah	18.7	1.4
Perlis	1.9	0.5
Negeri Sembilan	0.7	-
Selangor	0.7	-
Pahang	0.4	0.5
Johor	0.4	-
Kelantan	0.2	-
Others	0.7	-
Total No.	422	210
%	100.0	100.0

Source: Formal and Informal Sector Workers Survey, 1982.

Fifty-three per cent of the formal sector workers, being Malay inmigrants, were from rural areas compared to 5.4 per cent among the informal sector. As anticipated, 82 per cent of the Malays were from rural areas compared to seven per cent recorded by the Chinese. This shows that most of the new Malay urban workforce originate from the rural areas. These patterns illustrate the totally different workforces drawn by the formal and informal sectors.

Place of Previous Residence

An analysis of their state of previous residence showed a different picture from that of birth state. Among formal sector workers nearly 66 per cent named Penang as their state of previous residence (11 per cent more than birth state), followed by Perak and Kedah. This shows that where the girls are now staying is not their first location on arrival. In contrast, nearly 96 per cent of the informal sector workers moved to their present location from another place in Penang. A lower proportion of formal sector workers recorded their place of previous residence as rural (48.5 per cent) compared to their birthplace. Similarly, for the urban informal sector migrants, only four per cent lived in a rural area prior to their present residence. The findings show that the workers in the Bayan Baru area are very mobile, often

shifting between relatives and rented rooms. This is elucidated in the next section on living arrangements.

5.3.3 Socio-Demographic Characteristics

Some of the major characteristics of these young workers are summarized in Table 5.4.

Table 5.4
Young Workers : Socio-Demographic Characteristics by Sector, 1982
(in percentage)

Socio-Demographic Characteristics		Formal Sector		Informal Sector	
Ethnicity	Malay	53.6		0.5	
	Chinese	32.7		97.6	
	Others	13.7		1.9	
Sex	Female	90.5		55.7	
Age	13-15	1.7		9.5	
	16-19	23.9		33.8	
	20-23	38.1	83.4	20.0	66.7
	24-27	21.4		12.9	
	28-31	10.6		11.4	
	32-36	4.3		12.4	
Schooling	No Schooling	1.7		7.1	
	Std. 1-6 (6 yrs)	28.4		49.1	
	Form 1-3 (7-9 yrs)	40.3	69.9	37.1	43.8
	Form 4+ (10+ yrs)	29.6		6.7	

Source: Formal and Informal Sector Workers Surveys, 1982.

Sex

This Malay rural-urban migration was basically female. As high as 90.5 per cent of the workers in the formal sector were females compared to the more heterogeneous informal sector where 55.7 per cent were females. The increase in the female labour force participation was reflected in the country as a whole. In 1970, female employment in the manufacturing sector was 8.3 per cent. This figure doubled to 15.7 per cent in 1980, and subsequently to 20.8 per cent in 1983 (Kamal and Young, 1989: 14).

The fact that the workforce of these multinational electronics/electrical companies were overwhelmingly female was no surprise. It reflects the international pattern of females as semi-skilled operatives[4] working within a highly segmented and diversified assembly line on a global scale. This phenomenon may be viewed from both the demand and the supply sides. On the demand side, expanding capitalism took new forms such as the internationalization of capital resulting in the redeployment of certain types of activities from advanced countries to Third World countries producing a new international division of labour. To remain competitive in such a rapidly changing industry which is at the same time very sensitive to economic cycles, the industry had to exploit cheap and docile labour (Eisold, 1982). On the supply side, in many Third World countries, there was a cohort of young workers flooding an already labour-surplus economy.

But why is the workforce mainly women? The reason lies in the personnel policies of these companies. Women (and children) have historically made up the pool of reserve labour who are, at the same time, easy to exploit for numerous reasons including their economic weakness and social subordination. Often they lack the commitment and organization to form unions to fight for a better deal owing to their own precarious position and ethnic diversity (c.f. Herzog, 1980). The TNCs tend to isolate the workers so that they are unable to understand how the entire production system works, a death knell for possible unification of the various segments in a multinational labour movement to confront multinational capital (Grossman, 1979). Women are also preferred because they are tractable, submissive and used to following orders from males in the traditional setting. They are more accustomed to tedious and painstaking work, socialized to be more passive – all these features are moulded into a factory culture which imitates the family *(kekeluargaan)*, relegates the role of the male family members to those of the supervisory and management staff, and propagates all the attributes associated with feminity and a female stereotype (cookery and make-up classes, beauty contests, etc. organized by the factory). In this way, the attention of the female workers are diverted from the more important issues of work conditions and better pay (Chan *et al.*, 1983).

Age

Workers were young, the average age being 22.6 years in the formal sector and 22.3 years in the informal sector. However, the age distribution was dissimilar in the

[4] This term is usually given to workers who perform specific tasks in the semiconductor production process that are highly repetitive and quickly learned (Eisold, 1982: 2).

two sectors. (The formal sector had no worker below the age of 16 (the minimum legal working age) and the majority were 16-27 years (83 per cent) compared to 67 per cent in the informal sector. The informal sector had a wide range, from child labour (9.5 per cent) to older workers where 12.4 per cent were aged 32-36 years compared to 4.3 per cent in the formal sector.

Why does the formal sector draw from the age-group of 16-24? First, they are plentiful in a broad-based age-sex structure typical of Third World Countries. Young school-leavers taking their first job are preferred by these companies because they are inexperienced and malleable. Second, girls in this age-group are single and on the threshold of marriage which provides an excellent excuse for labour-shedding (Lim, 1978). Married women represent a lack of productivity – they are liable to get pregnant and therefore, entitled to maternity benefits. Labour-shedding provides a way of dealing with cyclical recession experienced by the companies. These companies do not want to keep these workers after a few years because their wages would have risen relative to productivity. A new and cheaper worker can easily replace the older worker because the tasks can be easily learnt. Older workers having more experience and maturity are potential troublemakers. Finally, a more disturbing reason which is emerging is that the productivity of these girls decline with increasing years, usually due to declining stamina, eyesight and other health complaints (Lim, 1978; Herzog, 1980; UNIDO, 1982; Eisold, 1982: 12). This was the status of thinking in the early 1980s.

Most of the younger workers in the formal sector were Chinese. Whereas 36 per cent of the Chinese were aged 15-19, the proportion for Malays was 21 per cent; over half the Malays were aged 20-24 years. Interestingly, this pattern was similar to the age distribution of the female labour force on a national level (Malaysia, Government of, 1984: 118-20). In contrast to Malay girls, more Chinese girls entered the labour market before they were 20 years old.

Marital Status

As expected, over 80 per cent of the workers in the formal and informal sectors were single due to the youthfulness of the sample population.

5.3.4 Educational Level and Schooling of Young Workers

Education is perhaps the single most important socio-demographic factor influencing occupations. It is certainly a pre-requisite for most corporate sector

jobs unlike the situation in the traditional sector. Thus, the educational level was higher in the formal sector. Workers there had higher mean years at school (8 years) compared to 6.2 years of the informal sector. While 70 per cent of the formal sector workers had been to secondary school, the comparative proportion for the informal sector was 44 per cent.

Education, especially at primary level, was still communally-based; the ethnic groups tending to be sent to schools where their own language was the medium of instruction. Most Malays in the formal sector went to Malay schools (91 per cent) and Chinese to Chinese schools (71 per cent) at primary level. This pattern shifted during secondary school to 60.8 per cent and 26.8 per cent, respectively. The major change occurred among the Chinese who transferred to English and Malay-medium secondary schools. For the young Malay workers from rural areas, Malay education was the only choice. Because most of the Chinese were urban-based, the range of schools was greater, especially the English-medium Christian schools. Also, the Chinese tended to feel that while Chinese primary education is desirable, English secondary schooling enabled the child to have a better chance of obtaining a modern sector job.

What was interesting in these findings was that with the conversion of government-aided vernacular schools to the Malay medium and the stimulation by the NEP in the 1970s, individuals with Malay-medium schooling could obtain jobs in foreign companies. This certainly would not have been so easy during the colonial and immediate post-Independence periods.

Among formal sector workers, there was no relationship between the number of years at school and father's occupation. Similarly, there was no relationship between the number of years at school and the state from which the worker came from. However, workers whose father were in government service were likely to have an English primary and secondary education.

5.3.5 Parent's Occupation and Household Characteristics

Earlier we had discussed the lack of occupational diversity among rural Malays in contrast to the Chinese (Chapter 3 and Chapter 4). The same patterns emerge in this study.

Parental Background

Most of the parents of the workers from the formal sector were in agriculture, mainly in rubber and *padi*. They had little to no land which partly explained their need to seek work outside the farm. They themselves did not want to remain in agriculture because they had at least two to three years of secondary schooling which they thought would give them a better livelihood in urban areas. The second major category was government service (16 per cent) mostly in the lower echelons, children of soldiers, policemen and other petty government officials. The workers from the traditional sector came from a typical Chinese working class background. Their fathers were hawkers, carpenters, trishaw riders, fishermen, sampan-rowers and a variety of other labouring work. Unlike the formal sector, there was great diversity. Even the mothers had a wide variety of jobs as servants, hawkers and as processing workers in the food industry.

From this we can conclude that the new labour force in urban areas is predominantly from an agricultural and services background, the former constituting a dissolution in the circuit. As migrants in the new urban context, they had severed their links with agriculture but not their households in the rural areas. In times of recession they will return to the villages. In the traditional sector, the young workers were mostly from the same type of background as their parents. They were almost exclusively Chinese. Those who had broken away from the occupations of their parents had more education and now had jobs in the factories.

Living Arrangements

Who the worker lives with is of interest as it indicates household support. As most formal sector workers were migrants, 62 per cent lived with their family or relatives (mostly with relatives) compared to 93 per cent for informal sector workers who tended to live with their family. Similarly, 28 per cent of the young workers in the modern sector lived in rented accommodation compared to merely three per cent among the informal sector workers. Sex and age bore no relationship with living with the family among the formal sector workers – explained by their being migrants. On the other hand, in a non-migrant environment such as those in the informal sector, more girls and workers aged 16-19 lived with their family. Again, as more Malays were migrants, only 38 per cent of them lived with their family compared to 90 per cent of the Chinese. As expected, the migrants had little family support compared to the Chinese of the urban Weld Quay area.

Current Household Size

Young workers lived in very large households, averaging 11.4 persons per household in the formal sector and 16.7 persons in the informal sector. The national average was only 5.2 persons (Malaysia, Department of Statistics, 1983: 138). This is explained by the particular context of the study, of basically inmigrants on the one hand, and urban Chinese within a densely populated area on the other. Although both sectors had high averages, the informal sector had the highest proportion in the largest household size – 38.6 per cent of above 16 persons per household compared to 19.2 per cent in the formal sector.

5.3.6 Economic Characteristics

Occupation

It was nearly impossible to compare the occupations of the formal and informal sectors. Although both were in manufacturing, their work were quite different, again a reiteration of the inherent dissimilarities between the two sectors. In the formal sector, 71 per cent were in electronics/electrical and 24.4 per cent in textiles/garments. Females constituted 96 per cent and 89 per cent, respectively, of the total number of workers in these two manufacturing industries. While the Malay girls were engaged mainly in electronics (70 per cent), the Chinese were in textiles (53 per cent).

The heterogeneity of jobs is typical of the informal sector as presented in Table 5.5. The major types of work were associated with the manufacturing of food, beverage and tobacco, tin and steel products, paper and cardboard box products, and charcoal and wood products. These major headings disguise the variety of work involved.

The work was basically unskilled and easily transferable. Women were found in the lighter jobs such as grading prawns, cleaning fish, making paper bags, sticking plastic flowers to branches, etc., while the men were in heavier work related to metal industries (89 per cent), and wood and charcoal (71 per cent) – the latter being a traditional industry of Weld Quay. Child labour was found in least demanding work, such as paper products (a quarter were folding paper bags), textiles (20 per cent sewing labels onto shirts), and the rest were in food processing (grading onions, prawns, etc.).

Table 5.5
Informal Sector: Occupational Groups, 1982

Occupational Group	No.	Percentage
Food, Beverage, Tobacco	38	18.1
Tin, Steel	38	18.1
Manufacturing, Paper, Others	35	16.7
Charcoal Wood	31	14.8
Agriculture, Animal Husbandry	22	10.5
Textile, Garment	20	9.5
Footwear, Plastics	13	6.2
Sales, Advertising	5	2.4
Storage, Transport, Construction	4	1.9
Vehicle Parts	2	1.0
Electronics, Electrical	2	1.0
Total No.	210	100

Source: Formal and Informal Sector Workers Surveys, 1982.

Job Placement

Another distinguishing factor between the formal and informal sectors is the way the person is placed in a job. The formal sector sets barriers in the form of certain qualifications, such as minimum schooling, minimum age, formal application, etc. in contrast to the informal sector characterized by the "ease of entry". While 77 per cent of those in the formal sector got their jobs through written personal application, the comparative proportion for the informal sector was 22 per cent. Instead, 33.3 per cent of the workers in the informal sector obtained their job through family and relatives compared to seven per cent in the formal sector.

Within this sector, the way Malays and Chinese got their jobs varied. While 78 per cent of the Malays obtained their jobs through personal application (especially in the electronics companies), only 31 per cent of the Chinese got their jobs in this way. Family and relatives as contacts played an important role in getting jobs for the Chinese.

Monthly Income

Income and expenditure figures must be interpreted with caution in any survey. The data presented here only suggest a pattern. One would expect the formal sector workers to be far better paid. Surprisingly, there was only a small difference in

mean monthly incomes between them (RM225.20 and RM254.40, respectively). However, the distribution varied, especially for the lower income group. Nearly 30 per cent of those in the informal sector earned between RM50-RM150 per month compared to 14 per cent in the formal sector. Those workers in the informal sector with the lowest earnings were mainly the younger female and child workers. The proportion in the higher income groups of the informal sector was comparable to the formal, which tended to cluster around RM151-RM250 per month.

Expenditure Patterns

The average expenditure pattern between the formal and informal sectors was similar. This was probably due to their being workers of the same income level, at a similar stage of the life cycle, etc. One noticeable difference in spending pattern was that workers in the formal sector tended to spend much more on clothes (14.7 per cent against 4.6 per cent) and hire purchase (2.4 per cent against 1.5 per cent). This may be explained by the need to dress better in the electronics factories compared to the informal sector backyard type industries and to rising consumerism among the young inmigrants. Transport expenditures were also lower for informal sector workers owing to their proximity to their workplace.

What this section has shown is the patterns and characteristics of the new migrants in their urban milieu of Penang in the early 1980s, during the height of the electronics industry. As a migrant stream these workers signify the breaking of the two-circuit, moving from a rural background to urban wage labour as contrasted to the circuit-preserving urban informal sector. If these workers had migrated to manufacturing industries in urban areas and remained there, a definite break would have occurred. But, being absorbed mostly into the electronics sector has meant a certain amount of insecurity, due to the cycles which the electronics industry experience and the TNC nature of their employment. To show this effect better, the next section examines the impact of the 1985 recession on these new industrial workers.

5.4 IMPACT OF THE 1985 RECESSION ON WOMEN WORKERS

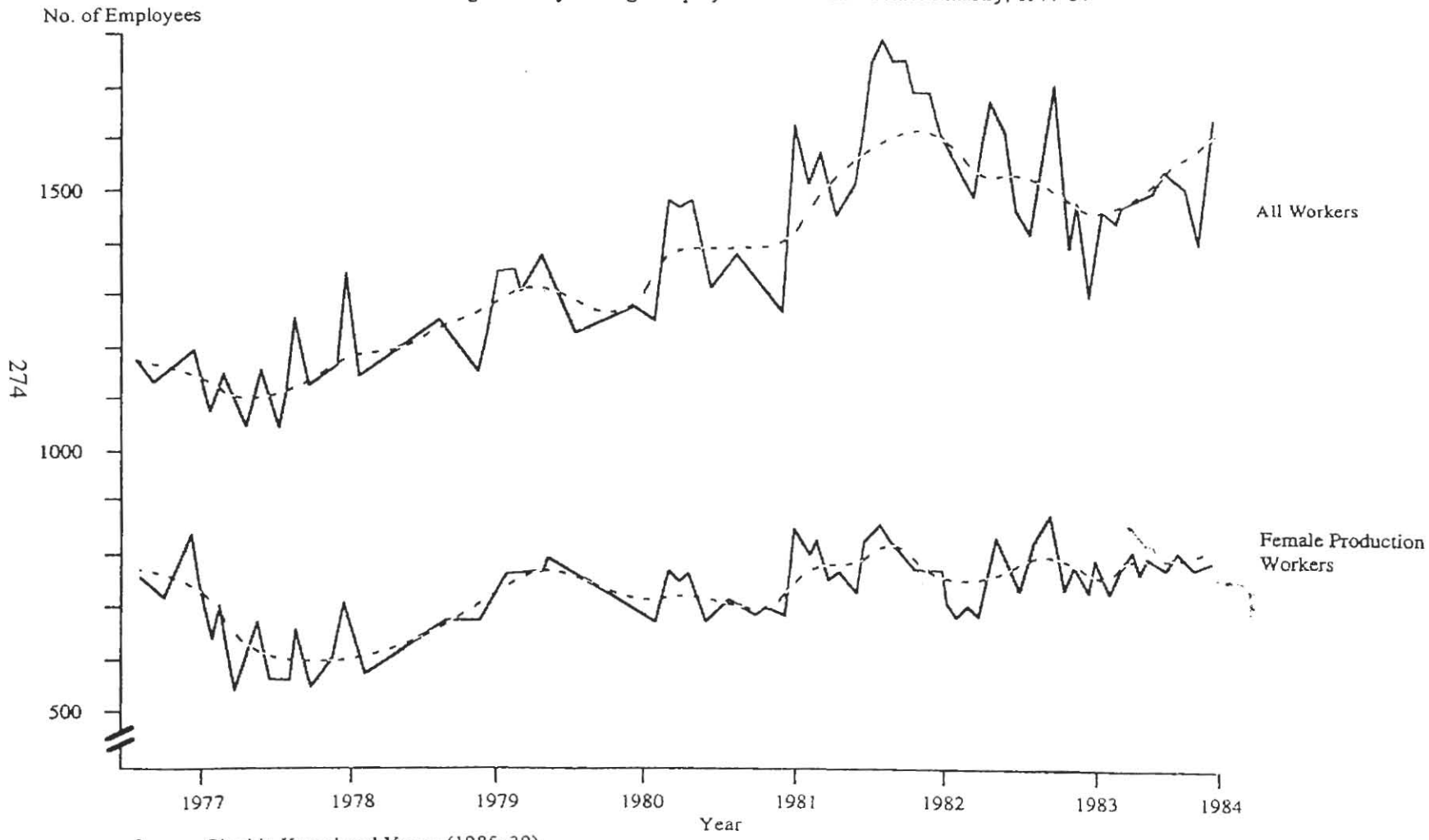
One of the most important features of Malaysia's industrial development in the 1970s and 1980s is the growth of the electronics and textiles sector. These factories are located mainly in the FTZs. In 1973, over half of the jobs created in

manufacturing were in electronics (Malaysia, Ministry of Finance, 1973: 49). Such a development led to two problems in the economy. It made Malaysian manufacturing susceptible to the trade cycle, and therefore, led to the recessions followed by retrenchments of workers in the mid-1970s and mid-1980s. Rapid growth of employment in electronics also made the Malaysian economy, already vulnerable owing to its dependence on commodities, even more vulnerable to internationally-transmitted recessions. For example, while the export-oriented electronics industry became sluggish in 1975 and 1977, local industries such as cement, rubber products and agricultural processing increased employment (refer to Kamal and Young, 1986a).

The kind of fluctuations in the unemployment situation we are discussing about may be seen in Figure 5.4 which shows the monthly employment figures (for production workers and for all workers) in the electronics industry in Penang for the years 1977-83. These fluctuations reflect the assembly-nature of the production process and the immediate employment requirements in response to changing market demands (Kamal and Young, 1985a). Those electronic workers who were retrenched during the downslide of the market situation were either absorbed into other industries in the area, or returned to their villages. But when the slump is very bad then it affects all industries as was the experience of the 1980s. Under such circumstances, the retrenched worker has little recourse but to return to the village. Over the long cycle, some restructuring of the workforce at the factory level had taken place, as in the case of the electronics factories between 1974-75, and in 1984-85. Penang is a major world producer of semiconductor which is subject to a roughly ten-year cycle of economic activity. However, the electronics industry continued to expand in the late 1970s and early 1980s. By 1981, it accounted for 12.2 per cent of manufacturing employment (about 80,000 in 1983), 12.68 per cent of manufacturing value added and 35.5 per cent of manufactured exports (Malaysia, Government of, 1986: 1). In recent years, the share in employment, value added and exports of electronic goods have increased.

This section examines how recessions have affected workers, especially women migrants. The numbers retrenched, as in the case of the unemployed, are closely allied to the fluctuations of the world economy. Some manufacturing industries, such as electronics, textiles, rubber products, and plywood are more prone to the changes owing to both the nature of the industry (as in the case of electronics, which is particularly sensitive to changing technology and market conditions) and to the extent of its export-orientedness (for example, electronics and textiles). Thus, an examination of the pattern of reported retrenchments in the Economic

Figure 5.4
Penang: Monthly Average Employment in the Electronics Industry, 1977-84



Source: Cited in Kamal and Young (1985: 39).

Reports (Malaysia, Ministry of Finance) from 1973 to 1983 showed that the first significant batch of retrenchments was in the first half of 1975 when 2,230 persons (over half in electronics) were retrenched. This was the first major retrenchment felt by the then totally inexperienced and unexposed female migrants in the FTZs of Penang. The numbers laid-off continued into 1976, falling off until 1983 when the figure rose to 4,303 (again, mainly in electronics and textiles). This was leading into the economic recession of the mid-1980s.

Perhaps nowhere is the negative impact on women workers more obvious than that of the recession on women industrial workers. In the context of Malaysia, this is aggravated by several factors. First, the bulk of the female industrial workforce are in the export platform industries, notably textiles and electronics. Second, these are labour-intensive industries with an overwhelmingly large proportion of their workforce comprising females. Third, electronics (mostly semiconductors) are notoriously sensitive to technological change and market conditions, and are consequently subject to economic fluctuations. All these reasons have made these women workers particularly vulnerable to such phenomena and adjustments.

5.4.1 Nature of the Recession and Its Impact on Migrant Women Workers

The recession of the last four years, beginning in 1982-83, has reversed the pattern of labour absorption in the Malaysian economy. Together with the slump in commodity prices and the property market, and with the government austerity drive in order to reduce the budget deficit, industry also has entered a general economic downturn. There are three features of the present recession which affects employment and retrenchment, and therefore labour experience (see Kamal and Young, 1985b).

First, this recession proved to be very severe based on the large numbers reported retrenched[5] (Table 5.6). Between 1983 and mid-1987, a total of 98,882 workers were reported retrenched (unpublished statistics, Ministry of Labour and Manpower, 1987). By mid-1987, it became apparent that this downturn in the economy will remain for some time with very serious implications for employment. Within the primary sector, the Malaysian Trade Unions Congress (MTUC) estimated in 1986 that 16,000 workers had been retrenched from estates, particularly rubber in the last three years. Between December 1984 and May 1985, 6,000 were laid-off. In the mining industry, tin had been badly affected, retrenching

[5] These figures are likely to be underestimated owing to under-reporting to the government.

about 20,000 workers in the last five years, reducing the workforce from 40,080 in July 1980 to 22,761 in April 1985.

Textiles also retrenched in 1985 losing 8,000 workers in the last two-three years, reducing its workforce to 23,000 by December 1985. Although the textiles industry began retrenching before the electronics, both industries expect to further cut down their workforce. Rubber products, car, plywood, matches, tractors, games and other industries were also retrenching (Utusan Pengguna, 1985). In the services sector, the hotel business was severely affected owing to the economic downturn discouraging international and local tourists. By 1986, textiles took an upturn owing to bigger quotas allotted to Third World countries.

Table 5.6
Peninsular Malaysia: Retrenched Workers by Industry, 1983 to Mid-1987

Industry	Year					Total	
	1983	1984	1985	1986	Mid-1987[a]	No.	%
	(in percentage)						
Agriculture, Forestry & Fishing	41.6	12.3	4.1	6.2	6.4	11,699	11.8
Mining & Quarrying	12.1	13.9	20.0	13.3	1.7	14,900	15.1
Manufacturing	31.5	48.0	63.0	54.1	29.1	50,819	51.4
Electricity, Gas & Water	-	-	-	-	-	-	-
Construction	0.9	0.9	0.7	8.0	37.0	5,470	5.5
Wholesale, Retail Trade, Rest. & Hotel	10.9	19.7	11.1	10.3	12.7	11,699	11.8
Finance, Insurance & Real Estate	0.1	-	0.1	1.4	9.7	1,231	1.2
Community, Social & Personal Services	2.6	5.1	1.0	0.8	1.5	1,648	1.7
Transport & Storage	0.3	0.1	-	6.0	1.8	1,416	1.4
Others	-	-	-	-	-	-	-
Total No.	16,668	9,269	43,844	20,212	8,889	98,882	
%	100	100	100	100	100		100

Source: Ministry of Labour and Manpower, unpublished statistics, 1987.
Note: [a] Only from January to June 1987.

Second, not only were the numbers laid-off large, but they also affected the primary sector such as mining and agriculture. Unlike the retrenchments of the mid-seventies which were mainly confined to manufacturing, the present retrenchments affected the whole economy, further pointing to the structural problems of this slump. This is borne out more clearly in Table 5.7 which shows the extent of reported layoffs by industry between 1983 and mid-1987.

Manufacturing was the worst hit; its proportion of retrenched workers rising from 31.5 per cent at the beginning of the recession to 63 per cent in 1985 and 54.1 per cent in 1986. The primary sector too, noted large proportions of retrenchments. The agricultural sector alone registered 41.6 per cent in 1983 as commodity prices fell and workers in rubber and oil palm estates were made redundant. The mining and quarrying sector increased the proportion retrenched from 12 per cent in 1983 to 20.0 per cent in 1985, and 37 per cent by mid-1987. Many tin mines were forced to close down in the face of low prices for tin, while quarrying declined with the recessionary impact in the construction sector.

Among industries in the manufacturing sector, electronics had retrenched about 30,000 workers. The increased speed of retrenchment was demonstrated by the fact that between August 1984 and March 1985, in a matter of seven months, over 6,000 workers were laid-off. The pace increased, for between April and September 1985, 4,200 workers were retrenched. And retrenchments in electronics continued unabated[6] until the end of 1985, tailing off by March 1986.

Third, as this recession was more severe than previous ones, it was not surprising that retrenchment affected not only the lower-level occupations, but the technical and supervisory levels, clerical and related workers, and even management level (Table 5.8). However, as in all retrenchment exercises, the skilled and the lower occupational categories made up most of those laid-off. Factory workers, both skilled and unskilled, comprised half the retrenched workers. If general workers were included, the proportion rises to over 80 per cent.

Fourth, the sex distribution of retrenchment was determined by the type of industry. Among the three most affected manufacturing industries analysed between 1983 to 1985, the wood and wood products, and rubber products/chemical products mainly retrenched males (around 75 per cent and 90 per cent, respectively). In contrast, electrical/electronics and textiles factories, being female-dominated, mostly

[6] A survey of English-medium newspapers such as The Star and New Straits Times showed that there was a news item on retrenchment practically daily between September and October 1985.

retrenched women in the range of 76 per cent and 72 per cent, respectively (calculated from Malaysia, Ministry of Labour, 1986).

Table 5.7
Peninsular Malaysia : States Most Affected by Retrenchments in 1985

States	Numbers Retrenched	Industries Most Affected
Perak	10,120	Tin mining, textiles, wood and wood products
Selangor	6,158	Tin mining, motor vehicle assembly, wood and wood products
Penang	5,550	Electronics, textiles
Pahang	4,402	Wood and wood products
Johor	3,466	Textiles, wood and wood products
Negeri Sembilan	2,769	Electronics, wood and wood product

Source: Malaysia, Ministry of Labour (1986), Labour and Manpower Report 1984/85. Ministry of Labour, Kuala Lumpur: 118.

Table 5.8
Peninsular Malaysia : Workers Retrenched by Employment Category, 1983-84
(in percentage)

Employment Category	1983 1st Half % Change	1983 2nd Half % Change	1984 1st Half % Change	1983/84 1st Half % Change
Management	1.8	0.8	4.7	-47.9
Technical & Supervisory	8.8	5.8	23.3	-47.3
Clerical & Related Workers	5.6	3.8	12.3	-56.6
Service Workers	2.8	2.9	3.2	-76.8
Skilled Factory Workers	39.1	15.0	24.4	-87.5
Unskilled Factory Workers	17.2	26.2	18.9	-46.1
General Workers	24.2	45.4	13.0	-31.8
Total No. ('000)	4,036	1,465	805	
%	100	100	100	-80.1

Source: Malaysia, Ministry of Labour (1981 & 1983), Labour & Manpower Report 1981/82-1983/84. Ministry of Labour, Kuala Lumpur. Malaysia, Ministry of Finance (1984), Economic Report 1984/85. Ministry of Finance, Kuala Lumpur.

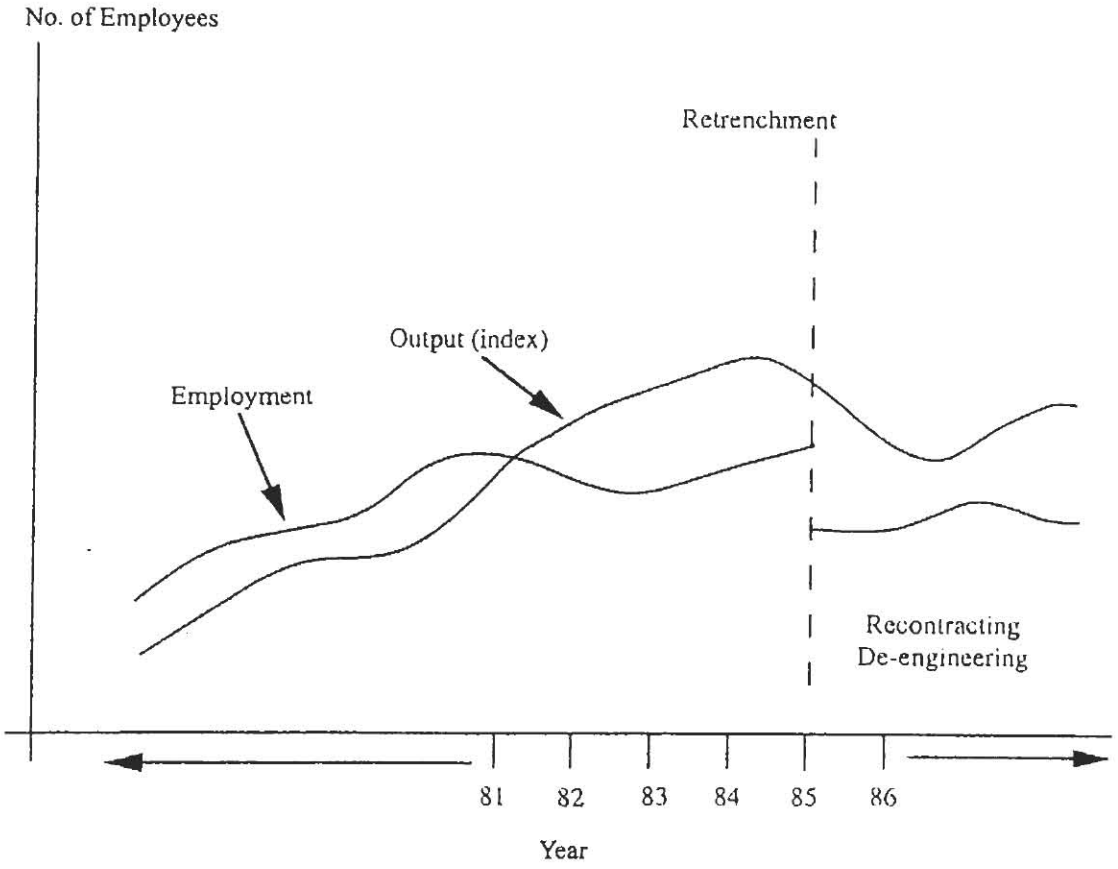
Fifth, it is important to examine how the different ethnic groups were affected by the recession. Again, using the same manufacturing industries as above, the Malays were the most affected in all four, but particularly badly in electronics where on the average, over 64 per cent were affected (in comparison to 21 per cent for the Chinese) and wood and wood products where 63 per cent (versus 34 per cent for the Chinese) were involved.

Employment growth in the electronics industry, while uneven as indicated in Figure 5.4, reflects both the short-term market situation for its products overseas as well as the structural and technological changes that affect the industry in the longer-term. The semiconductor industry in Malaysia is affected by the rapid changes in semiconductor technology which have left some firms with surplus capacity, for example, for those producing 64K chips at a time when the industry standard is shifting to 256K. In 1985-86 most firms were simultaneously also at the end of their first pioneer-status cycle, and, while extensions were possible with applications for new plant investments, they had to rationalize their production. A double pincer effect, one technological and the other economic, contributed to the retrenchment pressures of the period. However, as a result of technology conversion, most firms were already replacing labour with new machines to accommodate the new products and the rising cost of labour, and by the early 1980s the switch to capital-intensive technology was already evident (Figure 5.5). The retrenchment that came was part of the rationalization exercise, and labour has since been recontracted at a much lower level of compensation. A process of de-engineering also took place for the more innovative firms that decided against labour-shedding.

5.4.2 Retrenched Production Workers in Electronics: The Micro-Picture

Unfortunately, there is very little research on retrenched workers. Two studies will be quoted here. The first is a preliminary research on retrenched electronics and textile workers conducted just at the beginning of the recession, thus studying only the first batch of the retrenched (Rohana, 1985). The second is part of a longer study analysing how households with daughters in electronics are changing as a result of industrialization (USM-UBC Study : Household Response to Industrial Change, see Appendix D for a discussion of the methodology and data collection of the study). This research has just been completed and captured girls who have been retrenched later as the slump deepened, including workers in two electronics factories which closed.

Figure 5.5
Diagram of the Relationship between the Structural and Technological Change in Electronics and Labour



Rohana's (1985) study found that those who were retrenched were mainly female and Malay, a fact borne out in earlier studies of characteristics of production workers (see Kamal *et al.*, 1985, for example). Many of the girls were in the older age-groups, above 25 years which implies that the dictum, "first in, last out" had not been adhered to by the multinational companies who have, in order to cut down production costs, laid-off the older workers whose wages were higher than the more recently recruited workers (see Kamal *et al.*, 1985). As these workers were older many were married, which has important implications for family income and future job placement. They have been substantial family income earners, and the loss of their job had meant serious cut-backs in expenditure on their family, particularly in food and education. As the unemployment rates for women are higher than men, especially in urban areas, many have had to wait up to a year to secure another job. Most could not find work with the same pay as their last one. Their being married, and older made them less geographically mobile.

This section examines the impact of retrenchment on the Malay girls from the semiconductor factories in the recent retrenchment, as the slump deepens. The data were drawn from household histories of 50 Malay families with working daughters living in rural areas around the FTZs in Penang, Kedah and Perak (see Appendix D for the methodology and data collection of this study).

Most of the girls were above 25 years, single with 3-11 years of working experience in electronics. Most have had secondary education, even up to pre-university and whose parents were mainly in rubber and *padi*-farming.

To gauge the potential impact of retrenchment on the production workers' families, an assessment was made of the roles of these women in relation to their family. First, it is clear that the girls in the sample contributed their labour in terms of sibling-minding and housework before they joined the factories.[7] In fact, many of them, owing to their poor economic backgrounds were withdrawn from school early so that their mother could be released to work for money, and their male sibling (sometimes older), could remain at school. After they became factory workers, some as early as 16 years old – the minimum legal age for formal employment – their monetary contributions bought consumer durables for the house

[7] Parts of this section has been extracted from a joint paper with Kamal Salih "Industrialisation and household response: a case study of Penang", in Drakakis-Smith, David W. (ed.) (1990) Economic Growth and Urbanization in Developing Areas, Routledge, London: 125-70. The author designed the questionnaires (structured and unstructured) for the study and was responsible for the data collection, analysis and writing up of this part.

(ranging from elaborate furniture sets to rice cookers and blenders), paid for the education of their siblings (especially for tuition fees and repeat classes), house repair and renovations, and presents (such as clothes and other extras) for family members. Most important, their contribution provided a security through regularity of income.

An interesting aspect of how families have become dependent on such incomes is closely related to the regularity of their income, unlike income from agriculture and other village work. What started as a response by the girls to opportunities in the factories to assist with their economically depressed family situation became a position of increased sense of responsibility for the girls as their families became more dependent on their incomes. Thus, it was not unusual for them to say that they wanted to ensure that their younger siblings were given the chance to continue school so that they could get better and more secure jobs than factory work. There were even cases where younger siblings married before the working daughter who had to sacrifice by delaying marriage, similar to the working daughters of Hong Kong (Salaff, 1981).

Second, their important role as income contributors to their families gave them an important part in family decision-making. However, this depended on the length of time the girl had worked, and the extent of dependence of the family on her contribution.

The extent of dependence on their working daughters was related to the stage of the life-cycle the family was in. Obviously, in a family where both the parents were still able to work and the eldest child was in the factory, even with a string of young siblings, the family was not as poor as one where the parents were too old to work. Similarly, a family where the older children were contributing to the household income, with a few younger siblings at school, was still better-off than another family where all of the children were still in school. A household was at its most vulnerable where the couple was too old or too weak to hold down a permanent job and was totally dependent on a working daughter. It is such households which demonstrates the importance of children as investments for old age. In an environment where state support for the welfare of the aged is very limited, children become practically the only hope.

The size of the family as well as the number of children working and contributing were also important in determining the extent of dependence on the electronics

worker. Thus, in some case studies where older children had married and did not support their parents, the burden fell squarely on the working daughter.

Often the dependence of a family on a working daughter was affected quite dramatically by personal tragedies, such as death or serious illness, of the major breadwinner. Usually when this happened, the responsibility fell very heavily on the mother who was forced to explore all ways to make ends meet. Such strategies were revealed in some households where as the husband's health failed, the mother was forced to take on more work before the daughter reached 16 years old and became a factory worker. In cases where fathers had died, or were sickly, or had deserted the family, the economic dependence on the working daughter increased. The electronics worker who was a single-head of household (because the husband had died, or had divorced her or deserted) with children, was economically very vulnerable.

From this discussion it is clear that the worker, if retrenched will not be able to assist their families who have become accustomed to her help which has become very important. The electronics worker is not so important in households where the father still has a steady income and where other children are contributing to the household expenses. Based on the case studies of about 12 retrenched workers, from single to married, deserted and divorced, ranging in age from 24 to 36 years, with two to 10 years of work experience in electronics, we can get an idea of what the economic impact has been like. In practically all these cases, the effect is quite severe as these women's income can no longer be lightly dismissed as secondary.
This is particularly true for Shivas, an Indian girl who has no links with her family, deserted by her husband, and is left with her nine-year old daughter. They rent a room. They are completely dependent on this income. The retrenchment compensation was just over RM200 for three years of work. This is enough to tide her over for one month. She did not know what she was going to do. Rusni, who has worked for five years, while complaining of being fed-up of staying at home and doing housework as a result of being retrenched has a family who is less dependent on her income. There are other members who are contributing. Her money had come in useful for household consumer durables, household renovation and sibling's education. She is actively searching for work, to the extent of leaving her village about 60 miles away to live with a relative in Butterworth in her attempts to get work immediately after retrenchment. She finally found some manual work which she gave up after two days because it was too strenuous. As the eldest daughter she feels strongly obligated to help contribute to the family income as two of her younger siblings are still in secondary school.

The Malay girls have expressed *malu* (embarrassment or shame) for being retrenched even though they know it is not their fault for being laid-off. Villagers in their *kampung* have not looked down on them as most are aware of the recession. Many of the girls from the villages were forced to return to their families when it became clear that jobs were becoming increasingly difficult to get. Unlike previous recessions, this time the slump is affecting all sectors of the economy. A few have used their retrenchment compensation to learn tailoring and hairdressing in an attempt to seek other types of work. The majority have returned home and are helping with the housework, some even helping their parents tap rubber. Most are unaware of attempts by the government to train and to place them in temporary work. Few have contacts with their fellow retrenched workers. And for those who managed to get another job their salary starts from the bottom rung again. All past experience is ignored and considered irrelevant, even if they are re-employed in the electronics sector.

5.5 ECONOMIC RECOVERY AND THE CHANGING CONDITIONS OF LABOUR IN THE LATE 1980s

This section discusses the labour conditions in the electronics industry in the 1980s and its impact on the migrant industrial workers. It will be shown that these semiconductor TNCs are restructuring and new employment techniques are being applied, including redeployment, sub-contracting and re-contracting. It also appears that these companies, owing to increasing capitalization are cutting down the unskilled and semi-skilled labour component which characterized their earlier phase which involved large numbers of rural-urban migrants. They need fewer girls but of higher education and greater skills as the quality of production increases in Penang where a pool of technical know-how has developed in the last 20 years. However, the electronics component industry will continue to draw on girls as these are still labour-intensive and of the assembly-line type.

5.5.1 Recovery and Response in the Semiconductor Industry[8]

However, with the upturn in the electronics industry which preceded that of the Malaysian economy, accompanied by other adjustments, the labour condition in the

[8] Parts of this section is extracted from the joint paper with Kamal Salih, "Changing conditions of labour in the semiconductor industry in Malaysia", Labour and Society, 14, Special Issue on High-tech and Labour.

electronics factories where some in-depth research had been carried out (see Kamal and Young 1988a; 1989) started to take on a new complexion. This deserves some discussion here owing to its important and far-reaching impact on female industrial labour. Seen as the second phase (from 1983/84 onwards), there is a definite trend towards declining direct labour as a result of increasing automation and investment, particularly in the establishment of wafer fabrication plants. These changes, being attempts to consolidate the effects of cyclical and structural adjustments, are caused mainly by changing products and product technology, and by shifting configurations of the market. These, in turn, led to changes in labour condition and the labour market (see Salih *et al.*, 1988; Kamal and Young, 1989). Technology deepening is reflected in increasing automation, backward integration (with the setting up of wafer fabrication plants), subcontracting, the incorporation of Just-in-Time (JIT) systems and customization has important impacts on the labour process, particularly the twin questions of labour shedding and skill upgrading.

The changes which result from the growth and pace of technological advance in production are clearly evident in the labour situation. This is significant in this context as over 80 per cent of the labour force are females. While the industry experienced both slumps and peaks in response to structural and conjunctural adjustments in the world economy (Figure 5.4), there has been a definite trend towards decreasing direct labour use in the industry. The figure shows overall employment rising only slowly up to the early 1980s despite rapid increases in production, and falling thereafter; the numbers of female production operators showed little increase during this period. The adjustments to capital deepening involve several simultaneous processes of skill upgrading or reskilling, labour shedding and recontracting.

5.5.2 Labour Reskilling and Deskilling

Since the early 1980s, there has been a definite trend towards increasing capitalization and investment in the semiconductor factories. A UNCTC study (1986: 102-3) showed how the share of wages in total production costs continued to fall in the 1980s, illustrating the increasing capital intensity of the production process. Much of the former manual work of dicing, die-attaching, bonding, checking and testing is now automated and computerized. What had been a row of girls on one assembly line, bonding through microscopes is now reduced to perhaps two girls manning several machines, each viewing the chips through television screens. The bonding process now is far more complicated, with more wires to

attach as the chips become more sophisticated. In fact, such chips cannot be made by hand, owing to miniaturisation and increasing complexity, as part of the VLSI process.

A significant consideration is whether there is skill upgrading among the production workers. According to management sources, the production worker today requires a maximum of one month's training. But unlike the past, when she merely did repetitive tasks, today she may tend from eight to 30 machines. Often these machines work independently of her, except when realignment is necessary. Nevertheless, the worker has to judge when a particular process is not done correctly (and this is in a context of "zero defects") and rectify it on the machines. In contrast to the worker of the first phase of the semiconductor industry, she controls her own quality and has some concept of the final use of the products she makes. She is also capable of some simple programming. The companies now need girls who have completed at least basic secondary schooling because manual dexterity is increasingly being replaced with judgement qualities and sophistication in dealing with the machines. As a result, an increasing proportion of the labour force in the semiconductor industry is becoming more skilled.

Thus, while there are cases of deskilling as a result of automation, the same process also contributes to worker reskilling and retraining precisely because of the introduction of new machines, in line with the changing needs of the factory. As part of this rationalization process, supervisors are made redundant as the automated lines come directly under the supervision of the engineers. As an example, National Semiconductor in Penang was expected to be fully automated by 1989, with mainframe control of wafer-cutting, bonding, moulding, and testing. The pilot automated production line is in Santa Clara (see The Star, 14 July 1987), but discussions with management make it clear that the local input for this production line is quite extensive. This type of response has been suggested by Ernst (1987) as a reason why increasing automation does not necessarily lead TNCs to repatriate (to industrialized countries). This form of automation allows greater centralization of control, with emphasis on efficiency and streamlining of operations.

Generally, there is a change in the overall structure of employment by occupational and skill categories. There is a trend towards declining direct labour, and more absorption of skilled labour, especially of technicians and engineers. One result is that on a nation-wide basis the Malaysian American Electronics Industry's (MAEI) total employment was expected to increase only marginally during 1987 (The Star,

20 May, 1987). For example, one of the American semiconductor companies interviewed quoted direct labour as comprising 81 per cent of the company's labour in 1976. By 1985, this had been reduced to 74 per cent. It is likely that the proportion of direct labour is lower for merchant producers because of their more competitive market and, consequently, higher automation.

The trend towards declining direct labour has important implications for female workers. First, fewer women will be involved. Thus, a major employer of female industrial workers in the last decade is gone. Second, the skilled and technically advanced positions, such as those of technicians, tool and die makers, engineers, and others are held by males. The critical question as to whether females are selected for technical training and promotion has been a sensitive one. The argument by some of the personnel managers in these factories are the usual ones, that these girls are not career-oriented, they may leave after marriage, or at least after the arrival of the first child, and on marriage are obliged to follow their husbands, all pointing to their lack of permanence. However, these traditional, simplistic arguments have not taken into account that these girls are no longer fresh from school and have been in the workforce for over 10 years, may have married and even started families and yet have continued working. Even the argument that the female worker is less educated than her male counterpart does not hold true when a comparison is made. In terms of hard data, hardly any females hold highly skilled technical positions.

5.5.3 Labour Shedding Practices

Temporary shutdowns, voluntary resignations and attrition

The short-term fluctuations in employment reflect various techniques used by firms to cut back labour. One method by which this is achieved is through compulsory shortening of working hours and working days. Initially, staff are encouraged to take annual leave. When this is spent, more drastic measures are employed, such as forced shutdown of plants for a few days per week. While some companies apply these measures to the lower-level staff such as supervisors and operators, other firms do it across the board. It had been observed that when shutdowns are too frequent, some of the production workers are forced to resign and search for full-time jobs elsewhere because their take-home pay falls too low for survival in urban areas.

There have been cases where TNCs have used rather unscrupulous methods of labour shedding. For example, in one particular case in Penang, the company gave a "special offer" whereby workers were encouraged to resign voluntarily. They were then offered compensation if they resigned within the stipulated period, which was much less than that required in the official retrenchment benefits (Young Workers Education Project, 1983). To make sure that the "special offer" would be effective, workers were told that it was only valid for a limited number of days, and that if they were to leave or retrenched later, no such benefits would be available. The "special offer" was withdrawn after the required number of workers had resigned.

Temporary shutdowns in the name of stocktaking have also been very common. While this helps the plant to tide over and adjust to short-term difficulties, it has severe repercussions on the income and subsistence of the women workers, who are paid only for the days they work. However, the more gradual process of labour shedding is in the form of labour attrition for example, as girls leave for various reasons, such as marriage, they are not replaced. Some companies in the Penang FTZs estimated a 10 per cent reduction in direct labour per annum as a result of natural attrition, a percentage also quoted by the Chairman of the MAEI (see The Star, 20 May, 1987).

In addition to the shedding of labour by means such as those mentioned above, managements periodically adopt job rationalization schemes, in order to "reduce fat" as well as to streamline staff and line operations thereby reducing labour costs. The tactic of job rationalization involves the reduction of indirect labour (clerical, supervisory and even lower management workers), reassignment of workers, regrouping of line functions, and respecification of job descriptions. While these schemes may be necessary from the point of view of personnel management, they are often used as an excuse to get rid of older workers, who are considered less cost-effective.

Labour re-deployment and sub-contracting

The other effect of the recession on labour relates to the way companies adjust their labour deployment. Retrenchment is only the final solution for most of these companies, who avoid it because of the bad publicity and image that it causes, especially after the Mostek retrenchment exercise in 1986 which saw production workers picketing for the first time in the semiconductor industry (Lockhead, 1988). One practice which has emerged is job enlargement. To become more cost-

effective, workers now have to do more work, or a greater variety of jobs with a concomitant expansion of responsibilities. The number of shifts per day is now increased from three to four to cutdown over-time, thus saving costs. There is job rationalization in terms of job conversion and downsizing, including redundancy strategies as workers are re-deployed from less productive or superfluous work.

Certain types of work in the factory, such as cleaning, gardening, security, that is, work not directly related to the production process, but formerly done by workers on the company's payroll, is increasingly sub-contracted out. As a result, the firm does not have to deal with associated labour problems of redundancy and efficiency. The issue of hiring and firing of workers is, thus, reduced to a contract between two companies.

Labour recontracting

A newly emerging phenomenon from these FTZ factories in Penang is that of recontracting of labour (New Straits Times, 30 December, 1986). This form of rationalization was evident in the Business Conditions Survey (Malaysian Institute of Economic Research, 1987) which showed hiring and firing of workers going on simultaneously among electronics companies. What this means is that after workers have been retrenched, they are then rehired (when the need arises) on contract, for example, for three months. The past experience of the factory worker is not taken into account when she is re-employed, which means that from a wage of RM450 per month she may slip back to one of RM280. After the end of the three-month contract, the firm has the flexibility of not signing another contract with these workers if production orders do not warrant it. This eliminates all responsibility for redundancy and retrenchment compensation. Also, the company does not need to provide the other allowances and benefits received by staff on its normal payroll. As a result of these activities, employment agencies, many illegal, specializing in recontracting labour have sprung up.

For the semiconductor companies, such practices can be linked to the use of JIT, where flexibility is of utmost importance, and the objective of saving costs for the company by decreasing inventories and, in this case, by easy elimination of surplus workers. And as mentioned earlier, inside the factory, JIT is part of the new production strategy of flexible manufacturing (especially customization) designed to cut down turnaround time, and therefore, costs.

This form of exploitation is of some concern. Although the economy has picked up, many manufacturing companies which employ large numbers of women (textiles, electrical goods, timber and plastics) continue to exploit this form of labour (The Star, 12 June, 1989). The Employer's Association said that such re-employment practices were within the law and that companies have to do this owing to the difficulties in longer-term performance forecast.

5.5.4 Impact on the Female Labour Market

As is evidently clear, these changes in labour condition and work processes are consistent with the changes occurring in product and production technology, and in marketing developments. The role of the state at the macro-level and of factory floor adaptations at the micro-level are well articulated to meet the requirements of industrial restructuring in this fast changing sector. This collaboration of needs will have some influence on the future of the semiconductor industry in off-shore locations like Malaysia.

One of the impacts of the changing production technology on the labour market is in labour turnover. In the early phase of the semiconductor industry in Penang, there was much mobility between firms, especially at the technical level. However, this has ceased somewhat with consolidation of the industry and companies sending skilled workers for study tours and courses in US and Japan. MAEI expects to spend RM200 million per year for the next few years in training. As an incentive to local workers, a number of the American companies such Hewlett Packard offer stock options to all its staff.

The second impact is on wage levels. As Table 5.9 indicates, wage levels have been rising during the first phase in comparison with the rest of the ASEAN countries. Average wage levels are expected to increase with rising skill requirements and productivity. However, there were no complaints from the managing directors interviewed about this rising wage rate. Most of the companies felt that the rate of increase is marginal in Malaysia. One company quoted an increase of 3 to 10 per cent in the last five years compared to 8 to 15 per cent in the 1970s. When this is analysed against the fall in direct labour with increasing automation, there is no doubt that the cost of skilled labour in Malaysia is much lower than that of the NICs and the US. And this very fact, that of cheaper skilled labour according to UNCTC (1986) will be the main reason for these TNCs to remain off-shore. What was reiterated continuously throughout all the interviews

was the high quality of the Malaysian skilled workers: they were more motivated, keen to learn, had the right attitude and were very conscientious. They contributed to the higher yields and therefore, higher productivity achieved by these factories. Most important, they were cheap (see Bertelson, 1987; Rusch, 1987; Katayama, 1987).

A final effect on the labour market of the changes in production technology and consolidation of the TNCs during this second phase concerns the pattern of labour force participation in the local economy. This is reflected in three ways. First, the semiconductor industry will no longer create the vast number of jobs as it did in the early phase. Therefore, it cannot be assumed to continue to play that role owing to the structural changes within the industry. In order to generate jobs, downstream activities such as consumer electronics must be actively encouraged, especially in the face of unemployment rates around 11 per cent (Kamal *et al.*, 1987).

Table 5.9
Comparison of Compensation (Hourly Wages & Other Fringe Benefits) Between the US and the East Asian Countries 1969, 1974, 1980 and 1985 (in US$)

Countries	1969	1974	1980	1985[a]
United States	-	-	8.00	8.37
Singapore	0.29	0.57	2.00	1.58
Hong Kong	0.28	0.60	1.20	1.33
South Korea	0.30	0.40	-	1.19
Malaysia	-	0.37	0.60	0.84
Philippines	-	0.20	0.50	0.63
Thailand	-	-	0.35	0.43
Indonesia	-	-	0.35	0.35

Source: Rajah (1986: 9) adapted from Lim (1978: 25) and Maxwell *et al.* (1985).
Note: [a] Derived from Scott (1985: Table 1).

Second, the high proportion of female workers in the industry is likely to decline with increasing automation. In the early phase of the seventies, women made up over 90 per cent of the total workforce (see Kamal *et al.*, 1985). By 1986, they had fallen to 71.9 per cent in Penang (Table 5.10). Already in the first phase of the electronics industry, the technical and skilled workers were skilled workforce, the proportion in production work, dominated by females, will decline. However,

ancillary industries such as consumer products are still labour-intensive, requiring manual dexterity (Rajah, 1988: 62).

Third, the question of economic restructuring as enunciated in the NEP, where more *Bumiputras* should be incorporated into the modern wage sector now takes on a different dimension. As mentioned earlier, the main aim for establishing these labour-intensive TNC firms in FTZs was to absorb a young cohort of youths just entering the labour market. Most were women, because females were preferred as production workers, the overwhelming majority of the labour force in such companies. Now with labour shedding and attrition, the *Bumiputra* proportion is likely to decline further (even if there is increased intake in the higher levels of management) because the proportion of production workers (large proportions are *Bumiputra*) will continue to fall. In 1982, *Bumiputra* made up 44.6 per cent, but by 1986, this had fallen to 44.1 per cent (Table 5.10).

Table 5.10
Penang: Employment Characteristics of Electronics Industry in Penang Development Corporation FTZs
1982-86
(percentage of total employment)

Year	No. of Factories	Ethnicity			Sex	Total
		Expatriates	Non-*Bumi-putras*	*Bumi-putras*	Female	
1982	27	0.1	44.6	55.3	78.1	100.0 (24,446)
1983	28	0.2	46.1	53.7	77.3	110.0 (26,692)
1984	38	0.3	46.0	53.7	76.6	100.0 (30,474)
1985	38	0.2	43.8	56.0	71.7	100.0 (26,259)
1986[a]	34	0.2	44.1	55.7	71.9	100.0 (24,746)

Source: Penang Development Corporation, unpublished data, 1982-86.
Note: [a] As at 30 June, while data for the preceding years are as at 31 December.

5.6 CONCLUSION

What this chapter examined were the new migrants, constituting the third wave of urbanization. The two-circuit of migration is being broken as these migrants tend to remain in manufacturing in urban areas, many marrying fellow workers or petty government officials and settling in the urban areas. Their children, born of workers are becoming the first generation of urban-born Malays. Whether there will be social mobility among this generation is left to be seen, but if indications in the economy are anything to go by – their future looks bright. The New Development Plan (the successor of the NEP) is retaining the restructuring element, but with emphasis on growth. Within the world economy, ASEAN and in particular, Malaysia looks well placed to attract the relocation of capital from the NICs. And as industrialization will certainly be stimulated, this new generation of urban Malays are likely to remain in manufacturing and the fast expanding services sector, beyond government jobs.

True, there have been ups and downs in the economic cycles that have retrenched migrant workers. But these migrants have always expressed their interest to remain as workers in urban areas. While the semiconductor industry continues to shrink its labour force through capital intensification and attrition, other opportunities in consumer electronics assembly and ancillary industries associated with those already in the FTZs will be opened.

The next chapter will deal in greater depth with some of these issues, in particular, the impact of the industrialization cycles on the migrant within the context of a household approach.

CHAPTER 6
HOUSEHOLD HISTORY AND MIGRATION

6.1 INTRODUCTION

The impact of industrialization cycles on the household economy has been the subject of much writing in recent years. The focus of historical demographers, social historians and historically-oriented sociologists and economists concerns the theoretical and empirical issues involved in the household economy. These issues include the role of the household as a production and consumption unit, the sexual division of labour, the relationships between patriarchy and the capitalist mode of production, the domestic labour debate, and household adaptive strategies.

In the 1970s, a number of peripheral economies achieved high growth rates through rapid industrialization under an emerging NIDL. This was based on the redeployment of capital to specially-created export-processing zones in the periphery where cheap labour was used to produce goods for export. As we saw in the previous chapter, this cheap labour was usually drawn from the surrounding rural areas or urban surplus population. The incorporation of rural-urban migrants in the new labour force constituted a process of social transformation of major importance in recent times.

This chapter uses the household approach as a prism to separate structural processes which impinge on the migrant. It had been argued that an analysis of the migrant, isolated from his original household context provides only a limited understanding of a complicated process. Through the household approach, whether focused on the structural aspects of the household such as the family demographic structure and household economy, or focused on processes such as household adaptive strategies and practices, the various forces at the different levels of the international, national, regional and local, are brought together within the microcosm of the household.

Two major issues are dealt with in this chapter. The first concerns the decision to migrate in the context of the household economy. The second is central to this thesis. It is the preservation or dissolution of the two-circuits which can be examined through the migration of the factory worker, the links she maintains with her family and the effect of the retrenchment, seen as cycles of the electronics industry and the world economy.

Concerning the decision to migrate, which has been dealt with more superficially in the

previous chapters, this chapter examines why the person in the particular household became an outmigrant. In other words, what were the demographic features such as sibling order, sex order, and timing of different events of other members of the family that influenced that act of moving. What were the broader socio-economic forces affecting the household that led to outmigration?

When the single worker is completely absorbed into the urban economy, through processes of new family formation, the subsequent migration of the original household, or other factors, the incorporation process of this new labour force will be completed. If the process is incomplete, owing to instability as a result of the lack of labour commitment by both the multinationals and the workers, then several conservation processes will operate including circular mobility of labour, return migration, and the persistence of rural-urban links through household processes.

It must be remembered that a retention of rural links and support should not be seen as an inadequate dissolution of the two-circuits. As more evidence accumulates with the upsurge in historical demography associated with early industrialization in developed countries, it is becoming clear that circulation was a common transitional phenomenon and that in the early stages of industrialization, rural links were preserved by outmigrants. Such was the experience of early industrialization in America (see for example, Hareven, 1982). Therefore, the preservation of rural links among urban migrants should not be seen as an inadequate form of urbanization. It will only be a matter of time before those links disappear, if the urbanization process is complete and permanent. What is more relevant in the study of this new phase of rural-urban migration is whether there is dependent urbanization and rural subsidization of industrialization and TNC activities if the rural household becomes the major source of refuge for retrenched workers.

These questions may be most fruitfully studied through household processes since the impact would be determined by the nature and type of the household, its stage in the family life-cycle, the structural links of the household to the local economy, etc. Thus, the processes and structure of particular types of households through time will determine the nature of labour participation and reproduction within the context of overall household adaptive strategies to changing social and economic situations.

As shown in the previous chapter, the single worker may be displaced through a series of labour-shedding strategies adopted by TNCs under recessionary conditions. The

pertinent questions which are of interest are: how do these girls cope with the situation, were they reabsorbed, and if so, into what type of work (formal or informal, rural or urban), do they go back to their rural households and, what is the impact on the rural household during such crises, especially as they have become used to the economic contribution by this factory worker. Some of these questions were raised in Chapter 5 and were partially answered. The essential difference between this chapter and the previous one is that such questions, especially the reasons for migration, educational options, household labour strategies, etc. will be dealt with as household processes.

This chapter begins with a theoretical examination of the relations between industrialization and the household economy, followed in Section 3 by case studies of individual migrant workers within the family context. The next section reviews a methodology of analyzing household histories as applied to the life-history data using life-course analysis to study migration and other related household behaviour.

The Penang case study described here is a culturally-specific experience of the impact of macro-social processes on the household economy in the periphery. These case studies and family life-courses are used to highlight, and to empirically reflect some of the issues on household and individual responses to migration and industrialization. The variety of household practices suggests, not only the cultural and local specificity of the household economy in the production process of the whole economy, but also the different ways they articulate with the broader processes. The concluding section considers the usefulness of the household approach to the study of migration.

6.2 INDUSTRIALIZATION AND THE HOUSEHOLD ECONOMY: A REVIEW OF THE THEORETICAL ISSUES

The concern in this chapter is with the relationship between industrialization and the household economy in a transitional economy (see Young and Kamal, 1990).[1] The issues revolve conceptually around the changing forms of the family during the capitalist transition (see for example, Levine, 1977; Harris 1983: 185). This involved a transformation from an agrarian economy in which the household is a production unit to one in which the household is linked to the productive process only through the wage labour of the male (Beechy, 1978 cited in Harris 1983: 196). Around the same time, the domestic domain had become a major focus of theoretical attention. Redclift

[1] Parts of this chapter have been taken from Young and Kamal (1990) "Industrialization and household response: a case study of Penang", in Drakakis-Smith, David W. (ed.) Economic Growth and Urbanization in Developing Areas. Routledge, London: 125-70.

(1985: 93-5) identified three issues in this debate: the first traces the development of the argument concerning the persistence of pre-capitalist subsistence production based on the household in less industrialized countries; the second, the informal economy under advanced capitalism; and the third is centred on the domestic domain covering the question of the sexual division of labour and the role of patriarchy in explaining the subordination of women in the capitalist mode of production.

Based on the above arguments, the household is a significant unit for the study of societal change. Not only is it the most common and basic socio-economic unit but "... the interplay of its size and structure with economic and demographic development, make up an intricate adaptive mechanism ..." (Laslett, 1969).

According to Netting (cited in Netting *et al.*, 1984: xiii), in a peasant agrarian economy the household is perhaps the most flexible and responsive social grouping, sensitive to minor, short-term fluctuations and finds means by which individuals adapt to the subtle shifts in opportunities and constraints that confront them.

How do we define the household and the family? Without going into the complicated cultural contexts and debates (see for example, Netting *et al.*, 1984) it is sufficient to note that the major difference between these two closely related concepts is that the household is a task-oriented residential unit while the family is a kinship grouping which may not be localized. However, it is through the commitment to the concept of family that people form households to enter into relations of production, consumption, accumulation, transmission, and socialization. Thus, households are

> "a primary arena for the expression of age and sex roles, kinship, socialization, and economic cooperation where the very stuff of culture is mediated and transformed into action. Here, individual motives and activities must be coordinated and rendered mutually intelligible ... Decisions emerge from households through negotiation, disagreement, conflict, and bargaining. The decision to marry, to build a house, to take in a relative, to hire a maid, or to migrate are seldom made or acted on by isolated individuals, because such decisions necessarily affect household morphology and activities" (Netting *et al.*, 1984: xxii).

In this study, we extend the household concept to that of the household economy, incorporating family members who do not co-reside (in a household) if they remit money and/or services regularly to the household. These are usually outmigrant working children who may or may not be married. This concept is associated with "income-pooling" as a mode of household organization (Wallerstein, 1982). The

notion of income-pooling represents a distillation of household practices that have come to be known as household adaptive strategies, and which emphasizes the empirical dimensions of the study of the household.

Historical demographic studies on the family and household in Europe and the eastern states of North America, based on family reconstitutions derived from censuses and parish records have shown how family structures have changed owing to the interplay of the processes of mortality, nuptiality, timing of marriage, marital fertility and migration (see Laslett and Wall, 1972; Levine, 1977; Lee, 1977; Hareven, 1978b). These basically quantitative studies have been complemented by the research of social historians in France (Aries, 1962; Flandrin, 1979) and England (Stone, 1979) who have shown how the system of values and norms within families, as represented in the roles of parents, strength of kinship and family ties, and the prolonging of childhood leading to the importance of the role of the family in education, have changed as the authority of the patriarchy, church and state shifted. Stone (1979: 424) concluded that family change is the ebb and flow of the battle between competing interests and values represented by various levels of social organization, from the individual to the national.

Another group of research has shown how families, within the constraint of the family cycle and the life-course, adapted to a rapidly changing economic environment. Hareven and Langenbach (1978) in their compilation of oral histories in Amoskeag, New Hampshire, and Hareven (1982) in her study of the New England families responding to industrialization showed how these families functioned as crucial intermediaries in labour recruitment, and acted as an active agent in its interaction with the factory system. There was evidence of how families allocated labour, investment and resources to cope with the vicissitudes of changing industrial needs. Depending on the stage of the family life-cycle, decisions were made as to whether members of the family were to be sent out to work, remain in school, or forced to stop school so that they could look after younger siblings at home in order that their mother be released for factory work. As more children entered the labour force and could contribute to the pool of family income, older siblings were allowed to marry and form their own households.

The argument for a household approach is a clear indication of the disenchantment with the individual approach. The household approach asserts that decisions, and consequently actions, are not isolated events but are part of family decisions where different members are part of a collective unit. To take this concept one step further, to

argue for a life-course approach, defined as "the changing pattern of interdependence and synchronization among the life-histories of family members" (Elder, 1978: 17) is to accept the view that the family is not a static unit but a changing entity over the life-course of its members (Hareven, 1978c: 1). Rather than view the family life-cycle as cross-sectional stages in the development of the family, the life-course examines both the individual and collective family development as a meshing together of roles and decisions. Consequently, rather than identifying stages, the life-course approach examines transitions and individual's movements through different family configurations, and analyzes the determinants of the timing of such movements. Thus, the life-course examines the interactions between four types of time (see Hareven, 1977; 1978c for an elucidation of these concepts).

"Individual" time concerns the life-history of an individual, from birth to death, as he passes through the major biological and cultural events of his life, assuming different roles, responsibilities, etc. "Family" time is closely associated with the family development cycle. Family and individual decisions affect the timing of transitions such as leaving home, entering the labour force, marrying, setting up new household, child-bearing, launching children from home, and widowhood. Crucial to this concept is the processes of family adaptation and change over time, the timing, arrangements, and duration of events in the life-course. How the family responds and adapts to changing circumstances is constrained to some extent by the family-life cycle. For example, parents may be at their most solvent when their children have grown up and are contributing to the household income. Similarly, they may be at their poorest when their children are still too young to work or when they themselves are too old to work and have no children remitting money to them. "Industrial" time refers to the trade and demand cycles of an industry, for example, in this study, the swings of the electronics industry. Finally, "historical" time is synonymous with chronological time which concerns the forces of history and society on the household. An understanding of how these "times" interlock, that is how individual time within family time which, during industrialization is also affected by industrial time and encompassed by historical time representing the major economic, political and social processes, provides insights into the dynamics of social change.

Tilly and Scott (1978) approached the issue of family change in France and England through the analysis of women's work as part of the changing family functions which were identified in this progression: subsistence family economy (where members of the household produced solely to maintain themselves, such roles being defined by sex

and age), family wage economy (where members of the household were engaged in wage employment), and finally, the family consumer economy (where the role of the married women as mother and housewife is paramount, and husbands and unmarried children were the main family wage earners).

What these diverse studies show is that the evolution of the family faithfully reflects the broader economic, political and social conditions in a country. Thus, the household, as a unit of production, consumption, accumulation and socialization is a decision-making unit which mediates between the individuals collectively and the forces outside. As such, the household in its process of change becomes an adaptive unit, a microcosm of the broader structures at the village or community level, from the regional to the national and the international levels. But the relationship between the family and the outside world is a dialectic one. While the households change as a result of socio-economic transformations, so too do households themselves contribute to the macro-forces and themselves are evidence of the transformation.

Demographic processes operating within the context of the family may also be seen as household adaptive strategies. On a macro-level, population pressure sets in train a number of responses in agricultural households (see for example, Boserup, 1970). On a micro-level, declining mortality within the household has changed the practice of nuptiality, caused delayed marriages, increased celibacy and led to declining marital fertility in Japan during the eighteenth and nineteenth century (Smith, 1977). Also in Japan, parents used infanticide as a means to regulate child spacing and the sex of children in response to decreasing land sizes (Smith, 1977; Hanley, 1977). These processes were reversed when there was land availability resulting in high fertility rates (McInnis, 1977). Similarly, the practice of different inheritance systems, especially that of partible and impartible land in Germany in the seventeenth and eighteenth century, have caused peasant households to respond differently (Berkner, 1977). Thus, where the inheritance system is partible, the number of households increased, as does population. Where impartible inheritance systems exist, there is increased outmigration and celibacy practised by non-heirs. Families adapt inheritance systems to their own needs as evidenced in the divergence between inheritance customs and practice (see Berkner and Mendels, 1976, cited in Hermalin and van de Walle, 1977: 10).

We might conclude here with Pahl and Wallace's (1985: 224) restraint, that on the basis of their work on detailed empirical studies on the household and household work

strategies on the Isle of Sheppey,

> "sharply undermines the more optimistic scenarios of those ... who see people being able to liberate themselves from the tyrannies of markets, exchange values and the capitalist relations of production to something more productive and satisfying in the cocoon of the so-called "domestic economy" ... The whole burden of our argument rests on the reality that there is only one economy and that a household's position in that is fundamental in determining its positions in other economic spheres."

6.3 CASE STUDIES IN HOUSEHOLD PRACTICES

We have selected two typical electronics workers in the FTZ as case studies to illustrate household practices as discussed above. They have been chosen from about 40 girls working in semiconductor companies which were part of the Household Response to Industrial Change Study (see Appendix D). These case studies are based on individual life-history narration, or the story-telling technique which is more loosely structured and therefore, less quantitative in comparison with the life-history matrix. However, the technique does capture the atmosphere, nuances and subtleties of their experiences, often lost in the highly structured life-history matrix method as used in the previous chapter.

6.3.1 Narrative Study of Two Women: Mak Teh and Yati [2]

The two case studies of Mak Teh and Yati were chosen because they represent quite typical examples of inmigrant production workers in electronic factories in the FTZs of Penang. As discussed in the last chapter, we know these workers are female, mostly Malays aged 16-25 years with at least six years of formal education. They migrated from rural areas where their parents were involved mainly in the *padi* and rubber sectors. They sought jobs commensurate with their education which they could not get in the villages; were recruited in walk-in interviews and recruitment drives by the companies in the villages; they lived in high-density rented rooms with a sprinkling in hostels, and with very few urban services available to them (see Kamal *et al.*, 1985). Many maintained close links with their households by remitting income and visits.

A body of information on these factory girls has been accumulating since the late

[2] Derived from intensive interviews between 1984 and 1986 by Chin Siew Sim, research assistant for the Household Response to Industrial Change Project.

1970s, usually concentrating on the effects of the new factory environment and the urban milieux had on them (see Blake, 1975; Jamilah, 1978; Fatimah, 1985), worker consciousness (Heyzer, 1988) and their participation in trade unions (Rohana, 1985). However, no one has attempted to use the household approach by linking the following issues to the structures and processes of the households. The issues are the girls' reasons for migrating to work in a factory; their impact on their households in terms of their financial contribution and how that is used; what happens when they are retrenched; and finally, their future as permanent inmigrants to cities.

Mak Teh belonged to the earliest intake of workers in the FTZ. She had been working for 12 years and therefore, had experienced some of the previous recessions in electronics. We were able to gain insights into her relatively long experience as a worker, and a working daughter, with all its ramifications on the household she had physically left behind in the *kampung*, but of which she still felt so much a part. In contrast, Yati had had only four years work experience as she was incorporated into the Penang workforce in the early 1980s. From these two individual case studies narrated below, we will draw out the issues pertaining to their life-course, such as sex and sibling order; aspects of gender in the division of labour within the domestic domain; how and why these girls left their homes for wage work; the nature of their links to the household in terms of income, services, and obligations; their role and impact in the household economy; and finally, some of their hopes for the future and fears of retrenchment during the time of the study.

Individual Case Study 1: Mak Teh

Mak Teh, aged approximately 36, twelve years as a production worker in a semiconductor factory.

Aptly known as Mak Teh to everybody, she looked and behaved like a mother. She was a plump and quiet lady in her mid-thirties. Many people would think that being an unmarried women at this age, in a Malay context, would cause an identity crisis in her life. Perhaps there was one, but her crisis was more mundane – it was that of keeping her aged parents and dependent siblings well-fed and well-looked after. Consequently, her real fear was that of retrenchment.

Her Work

Mak Teh finished her primary schooling and left to *"jaga adik dan anak saudara"*

(look after brothers and sisters and their children) before coming out to work. She joined Monolithic Memories Inc. (MMI) in 1974, two years after it was set up in Penang. She remembered those days when MMI had a fleet of only two factory buses compared to the present fleet of over 40. She started with a daily wage of about RM2.70 and her take-home pay per month came up to about RM60-RM70. Rent only cost about RM3 in the beginning and through the years it had spiralled to RM30 a month. "It (wage) was enough then since prices of things were lower – food, bus fare, and even things like *sarungs* and clothes. I remember how I used to wear the new *sarungs* across the ferry so that I won't be taxed." She reminisced about those early years of working life when Penang was a free port. "I was scared of the city then but now it's ok", Mak Teh said on her adaptation from the *kampung* to the city.

She worked at the wire-bonding section which consisted of about 13 girls who had been in service for about seven years or more. They were the experienced hands and had been in this section ever since they started work in the factory. There had not been much automation in this section. Basically their work were still the same as before, old machines were replaced by new ones. She was not sure if these were upgraded machines. "The target level has not changed much, over 100 per day (can't remember the exact number) because we do the wire-bonding manually".[3]

Because of her long work experience, she remembered other bad times. There were brief spells, lasting only two to three months in 1974/5, 1977, and 1980. The year 1986 was the worst she had ever experienced. Her present daily pay was slightly above RM20 and so she could still cope with pay-cuts and forced holidays. "We just have to spend less and cook more often instead of eating out."

Mak Teh's Family

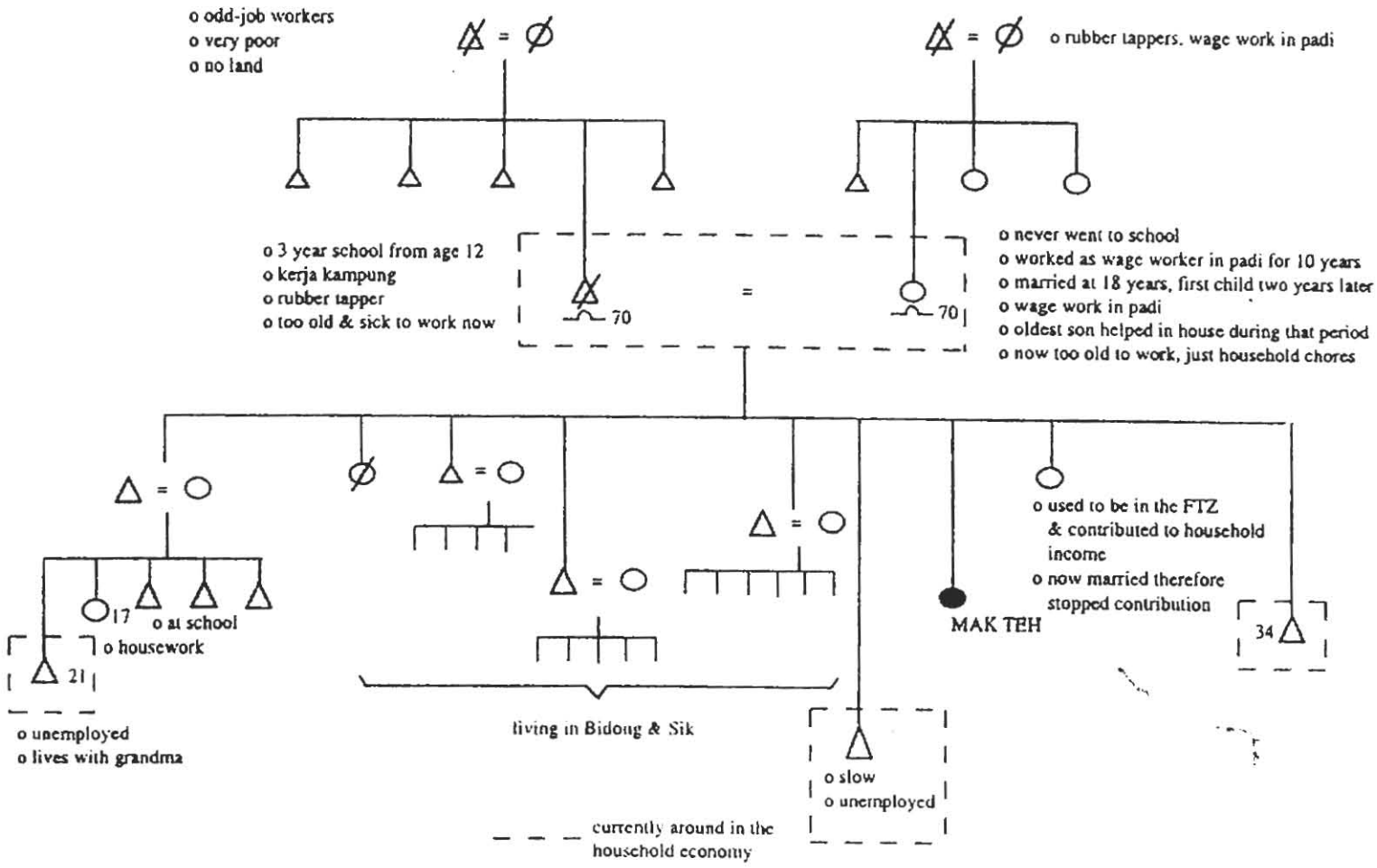
a) Ayah and Mak

Both Ayah and Mak were about 70 years old but Mak looked older than Ayah. They were married at the age of 18 or 19 and had lived in the same *kampung* ever since. A simple family map of Mak Teh's family is shown on Figure 6.1.

Ayah was very thin, almost just bones and wrinkled skin, clad only in a *sarung* during the day. When it rained, his bones hurt him so much that it made sleep impossible. He

[3] In fact, by 1987 automation in wire-bonding had become quite advanced. That Mak Teh was vague about the machines and the impact on production is quite typical of the factory girls.

Figure 6.1
Mak Teh's Family Map



Source: Household Response to Industrial Change Surveys, 1985-87

had just run out of his supply of medication which he purchased for a fee of RM5.00 (tablets and services) from a friend who bought it in Sungai Petani, the nearest town. Despite his age and poor health, Ayah was mentally alert and remembered past events vividly. He was the fourth in a family of five boys. His parents were poor, involved in *kerja kampung*.[4] Ayah entered school at the age of 12 and stopped after three years to do all sorts of work available in the *kampung*. Later his father passed away and he went to Bujung to live with a relative ("that was how we met"). Ayah worked as a rubber tapper on an *orang putih's* (white man's) estate. Then he married Mak and moved in to live in her mother's house.

His wage as a rubber tapper then was about 50 sen a week, amounting to about RM18 or RM20 a month. When the Japanese came, Ayah and Mak already had three children. Nobody could work privately for anybody then and like everyone else he had to work for the Japanese. Even his eldest son, who was about 10 years old, had to work. Two unfortunate events occurred during this time. His little daughter died. Later, he was rammed by a buffalo which caused his health to fail over the years. After the Japanese left, he again worked in a Chinese rubber estate as a *mandor* or overseer. He left the job because it was too much work and responsibility for the amount of money he was paid. He became a contract tapper in an *orang putih's* estate but had to stop work about 15 years ago because of his poor health and advancing age.

Mak was short and had all the looks of a *tok* (grandmother) except that this *tok* had very inquisitive looks and expressions behind a pair of smudgy glasses. A responsive and articulate woman, she spoke expressively and with openness. She had a catching laugh which probably helped her and the family through those difficult early years. As she put it, "*cerita senang makcik tak tau, cerita susah yang makcik tau*" ("stories of hardship Auntie knows, stories of prosperity Auntie doesn't know"). She was the second child in a family of three. Her parents worked as rubber tappers or *ambil upah* (wage workers) in *padi*. Mak said that she started to work at a very young age, pointing to her grandson who was about 11 years old. She was also *ambil upah* as a *padi* planter. Mak never went to school. She got married at the age of 18 and had her first child two years later. Marriage did not confine Mak to the house since it was just not possible to live on Ayah's wages alone. Mak continued working in the fields, usually leaving the house early in the morning, returning only in the evening. The children were left under the care of the eldest son who bathed and fed the rest. Out of

[4] Village work which encompasses a variety of rural activities from work in the *padi* fields to labouring. It is a very unreliable source of income.

sheer necessity, all her sons were good cooks and housekeepers. The youngest son could even sew.

Mak had stopped working in the fields now. She did household chores, cooking and washing for the rest who were still living with her – Ayah, two sons and a grandson. Mak Teh had bought a pack of Amway soap powder[5] for Mak so that she need not scrub the laundry, especially jeans which were the boys' favourites. "These boys will soak their clothes for days and I wash them because I can't stand the sight and smell. I don't have the strength to wring them so I just hang them on the line. I only sweep the floor when it is dirty, maybe once in two days. If there were girls around, it would be different. These boys are not bothered.", Mak said without a trace of complaint.

b) Mak Teh's Siblings

Mak Teh's oldest brother and his family lived in the same *kampung*. They were rubber tappers. His eldest son of 19 was unemployed and lived with his grandmother (to avoid his father's wrath after being involved in an accident). The next daughter was 17 years old and looked after the house when the parents were at work. She also saw to household chores and minded the younger ones. Grandmother thought that she was so thin because she is too tired to eat properly. This family did not contribute to Grandmother's household, and was in fact quite dependent on her; the grandchildren often ate there. Grandmother paid for her grandson's treatment after the accident and also paid for other extraneous expenses.

The second child was a little girl who died during the Japanese Occupation. The next three sons had their own families and were living in Bidong and Sik. The fifth son was not married. Although he ate and socialized at Mak's house, he lived in another house which was just opposite Mak's. He moved out because he was sick of washing dishes in the house. He appeared to be rather effeminate, was a bit slow but was said to be a good cook. He formerly sold *bee-hoon* (rice noodles) in the *kampung*. At present, he was unemployed. After Mak Teh came a younger sister who used to work in the FTZ and contributed to the family income. Since her marriage, she had stopped her contribution and lived in Seberang Perai with her husband.

The youngest was a male, 34 years old and still single. He, too, went to primary school

[5] The production workers are particularly susceptible to direct-selling. Amway products (like Corningware, Tupperware, and Avon cosmetics) are in the direct-selling line and are very popular among the factory girls.

and stopped, preferring to work rather than stay in school. He had held all kinds of jobs, the last was at the biggest rubber-processing factory in Semiling. He was there for a few years but left when he started falling sick due to the gases produced in the rubber factory. He did register for a short course in agriculture but went late and could not catch up. Now, he just *jaga kerbau* (look after the buffaloes). They had some buffaloes. Every evening he cycled to locate their whereabouts because there were no grazing land in the *kampung* for the buffaloes. So they were let loose to wander about. He appeared soft-spoken and shy. Mak Teh said that he was not demanding. She had thought about purchasing a motor bike for him but at the same time she was afraid that he might get into an accident. "This is something which I have to think hard about", Mak Teh said, "but he does not demand that he wants it. Well, if I don't buy him the bike, the money is enough to pay for his wedding expenses." She seemed so much more concerned about his future than her own.

Mak Teh's Contribution

Mak Teh's contribution to the family had been a joint one before the others got married. Of all the single children left, she was the only one with a regular wage. What choice had she but to be the major supporter of the family? They had an account with the *Pak Cik*[6] who came into the *kampung* to sell vegetables, fish, and meat. Mak Teh settled this major expenditure at the end of the month. During the harvesting season, they sometimes received rice from the neighbours.[7]

The House

The house was still in the process of renovation. The work was started about five years ago, being done bit by bit. Mak Teh said that so far it had cost them about RM5,000-RM6,000 and this was due to the fact that they could not afford to purchase all the necessary materials at once. The latest stage was cementing the floor. Mak Teh had been the major contributor towards this renovation. They were not sure when the whole house would be completed. But when Mak Teh talked about it, she spoke positively about building the bathroom in the house and putting all the crockery into the kitchen. Building a proper bathroom in the house was of much concern for the safety of her aging parents. It seems that Ayah had been affected by some spirits when he went out to the bathroom early one morning but luckily for his *kuat semangat*

[6] It means uncle, and is used when addressing an elderly man as a sign of respect. In this case the Pak Cik is the hawker who sells meat, fish, vegetables, etc.
[7] Such elements of reciprocity still exist among the poorer *kampung* folk.

(spiritual strength) he was able to withstand the spirit.

They did not hire a *tukang rumah* or house builder for this job. It was done entirely by a relative who was learning the skills of constructing a house. There was electricity and piped water in this *kampung*, all done just before the last general elections. This house had electricity but no piped water. Water came from a well outside the house. The house was sparsely furnished. There was a set of cushion chairs, all pushed against the wall. Years ago, one of the brothers had purchased a black-and-white TV or what they call TV *dua warna* (two colour). The floor was lined with linoleum and straw mats which Mak wove. The kitchen was still the old part of the house since the renovation has not reached this portion. There was a firewood stove and two kerosene stoves. There was a lot of crockery, all purchased for the weddings of the brothers and sister. "When the kitchen is ready, I can put all these into the cupboard," Mak Teh said.

There were some chicken running around the house. Mak used to rear about 50 of them but there was an outbreak of disease and all but a few died. They could get as many as 20 eggs per day and some of them would be sold or given away.

Individual Case Study 2: Yati

Yati, aged 20, four years as a production worker in the semiconductor industry.

Yati was tall and pretty. Initially, she appeared shy and reserved, but gradually she opened up. Although she was 20 years old, she had matured more quickly than others of her age through child-minding her siblings at a young age and four years of working life in Penang as a production operator. She was one of the daughters who was taken out of school to look after her younger brothers and sisters when her mother had to take on a full-time job in the estate.

She started working in the FTZ when she was 16 years old. She followed her cousins from the same *kampung* who were then working in the factories in Penang. She started with Intel as a temporary worker for three months, went to Litronix, and was now in Mostek. Intel was a "good" company in terms of the working environment but she could not stay on because she was hired as a temporary worker. *"Hari Sabtu I stop kerja di Intel, hari Isnin saya dapat kerja di Litronix. Senang saja nak cari kerja di kilang"* ("On Saturday, I stopped work at Intel, on Monday I had a job with Litronix. It is easy to find a job in the factories"). But she did not stay on for long in Litronix

because *"kilang itu kecil dan pada masa itu ada personal problem dengan operator lain. Masa itu budak lagi. Sikit-sikit saya naik marah"* ("the factory was small and I had some personal problems with other operators. At that time, I was still a kid and prone to get angry over minor things"). After a year she left for Mostek. Although she has worked for four years, her take-home pay was not the equivalent of what she would be receiving had she stayed on in one factory. Each time she started with a new factory, she started at the bottom rung. She had been with Mostek for two years and her pay was about RM240 per month. She may be starting with yet another new rate of pay when Mostek hands over its operation to Thomson.[8]

Yati had no steady boyfriend although she had many admirers. She said that so far she had not been on a single date. She wanted to work first, but if she did get married, she does not want to work any more. According to her, when her friends get married, they usually continued working until the first child came along before they quit, that is, if both husband and wife are working in Penang. If the man was from another state, naturally the girl would leave. One of her roommates was getting married soon and she, too, would leave.

Although she had been in Penang for four years, she saw very little of it before she met Faridah. They were the best of friends, did a lot of things together, bought the same things and sometimes wore the same beads and shoes. When she visited Faridah and saw the number of things she had bought for the house, Yati decided to do the same. She purchased a cupboard for the kitchen and a showcase cabinet for the house.[9] She also did a lot of crocheting.

Yati's Family

a) Ayah and Mak

Ayah was tall and still youthful-looking at 53 years. His parents were early settlers who came and *buka* (opened up) this area. The children all inherited a huge piece of *tanah pusaka* (hereditary land) with brothers and sisters living nearby. His parents were rubber tappers. He could not actually remember how many brothers and sisters he had – approximately eight or nine, he thought. He was the fifth child. He went to school for a few years.

[8] In fact, Yati was retrenched by Mostek.
[9] Such peer-group influences were very strong among the factory girls.

Upon reaching the age of 20 in 1952, he left for Singapore to work in the then Far East Military Army as a cook. He remained there for 15 years and returned in 1967. It was in Singapore that he married Mak (in 1960, at the age of 28) and started a family. From the old photos, he wore the "man about town" image – dark glasses, Elvis Presley hair-style, and trendy outfit – full of *gaya* (style). He was a "British protected person" while in Singapore. Life was easy then with all basic needs (food, shelter, and health) taken care of by the army. By the time he returned in 1967, he already had six children.

He returned to the *kampung*. With a gratuity of RM2,000 he built the present house. He also brought back from Singapore items like a refrigerator and furniture which were later sold off when tragedy struck. Although he went for a resettlement course as a barber before coming back, he never used this acquired skill at all. He worked at different jobs but was mainly tapping rubber in an estate for about 10 years. In between, they had already started selling pieces of the furniture and later the refrigerator, since there was no electricity in the *kampung* and they needed the money. It was about eight years ago that he became very sick – according to Mak, *orang buat* (bewitched). He became mentally ill and what followed then was the family's loss of their bread-winner. By then, there were already nine children, seven of them of school-going age. From here onwards, Mak took over and became the main narrator and actor in this story. Ayah no longer worked, he remained in the house, devoting much of his time to planting flowers and rearing birds (which he still did then).

Mak was short and plump and looked like a Japanese woman. She believed in having more than enough food for the children. Because of the larger number of children, she never bought *kueh* (cakes); she had to make them. Being the only child, her childhood days were spent playing. When she grew older, she helped her mother make *kueh* to sell. When she was 16, she went to Singapore to help look after her relative's children. It was in Singapore that she met Ayah and married him at the age of 19. The first child arrived a year later and from then on, she gave birth every year. She was a housewife in Singapore, busy with the six children who were born there. She said that during those days, life was comfortable. Yati added that she had heard from others that her mother had bangles upon bangles of gold on her hands then.

Mak continued to give birth almost every year after they returned from Singapore. However, the last five were more widely spaced, probably for the following reasons: her age, financial strain, her husband's sickness, and her own entry into the labour

market. She was no longer confined to the home as a housewife and producer of babies. Within this difficult period, two of her girls died. She attributed their deaths to sickness.

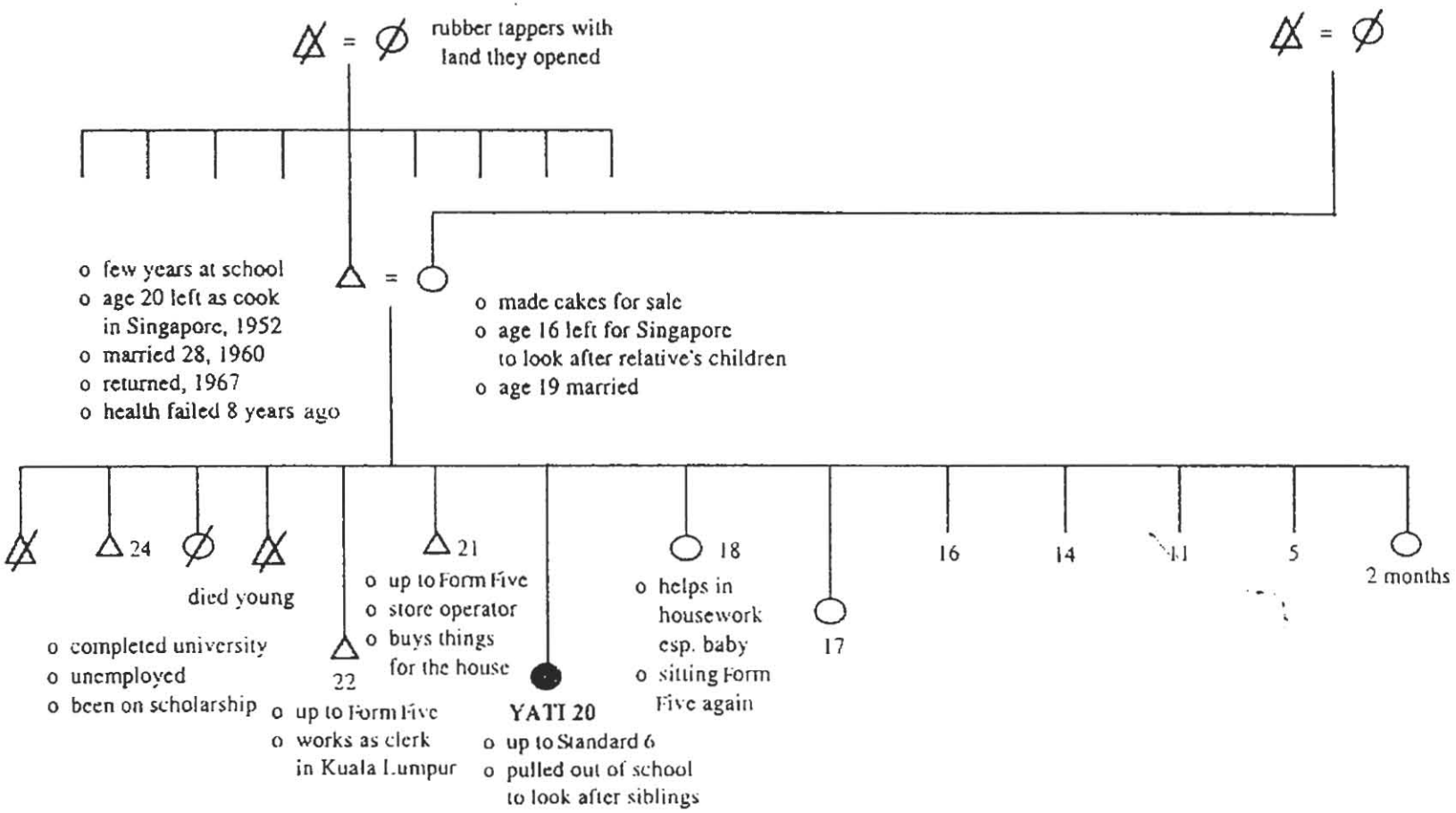
When father started falling ill, she helped him tap rubber and that was the first time she ever worked outside the house. And when Ayah's condition worsened, she became a full-time general worker in the rubber estate, earning RM6 a day to feed the whole family. The remaining furniture and jewellery were sold. Mak had to appeal to the Welfare Department for help. They were given RM20 a month, which was barely enough but with further appeal this was raised to RM90 which was a tremendous help. But things were still very tight financially and they could not afford to send all the children to school. At this time, there were seven of them in school, and transport alone cost about RM80 a month. Because the eldest son was already in Form 3 (Year 9), it was decided that he should complete it; the next son was in Form 2 (Year 8) while the third was in Form 1 (Year 7). The second eldest daughter (the eldest daughter died at a young age) had just finished Standard 6 (Year 6), the next three were in lower primary classes. With mother working full-time, it was necessary for someone to look after the younger ones. The choice of who had to stop school was quite obvious – the eldest daughter – in spite of her being a good student and enjoying school. Yati cried when she left school.

Life went on with Mak trying to make ends meet in whatever ways she could. The children helped out with odd jobs here and there. Over the years, *Mak's* pay had increased by only RM1, making it RM7 per day today. She said that she felt the financial relief when Yati came out to work in Penang about four years ago. The family was still receiving aid from the Welfare Department, but Mak thinks that will finish next year since most of her children were now working. She hoped that all her children could find regular *(tetap)* jobs soon and then she could enjoy better days.

b) Yati's siblings

Yati came from a big family. She had 13 brothers and sisters but three of them died when they were young (Figure 6.2). She was the eldest of the girls but in terms of seniority, she was the fifth. The youngest sister was only four years old. The four brothers before her went to school, to as high as Form 5 (Year 11), the eldest was in the University of Malaya, while the other three were working in Kuala Lumpur.

Figure 6.2
Yati's Family Map



Source: Household Response to Industrial Change Surveys, 1985-87.

The sister after her had just sat for her Form 5 exams (SPM). *"Adik saya pernah duduk di sini. Dia cuti. Saya tak bagi dia kerja di kilang. Ti rasa Ti seorang kerja di kilang cukuplah"* ("My younger sister stays here. She is on holiday. I don't want her to work in a factory. I feel that my working in the factory is enough"). Her expressions reveal more than her words. She speaks with a rather cynical smile, as though she was saying that "I know what it is like to work in a factory and no sister of mine will be in my shoes, whatever the cost."

Five of them were born in Singapore. When they returned to this *kampung asal* (village of origin), *Nenek* (grandma) was still alive in the village. It was, therefore, easy for her mother to raise the 13 children in the *kampung* because she could leave them with *Nenek* or with cousins when she went to work.

Call them the equivalent of the Waltons, or a soccer team if you wish: there are altogether 13 of them living in this one-bedroom house. So when it came to bed-time, all were lined up from one end of the house to the other.

The eldest son was 24 years old and was a recent graduate from University of Malaya. He had always been a scholarship-holder, ever since his secondary school. Mak said that she hardly spent money on this son's education. In fact, Mak had asked him to stop when he failed his Form 3 (SRP) exams but he was determined to try again. In Form 6 (Year 12), he was awarded the Bank Negara scholarship. When he obtained a place in the University of Malaya, he had to seek help from relatives and borrowed RM600 for fees, etc. While at university, he was on a Public Services Department scholarship. For his additional expenses – for example, the recent convocation – he asked money from Yati. He graduated with a degree in public administration. With no job offer till today, he works part-time for a relative who manufactures soya-sauce in the *kampung*. He also nets fish from the nearby tin mine once in a while. He sells off the bigger fish and rears the small ones until they are of an edible size.

The second child was a girl who died young. Next comes another son, 22 years old. He went to school until Form 5. Working in Petaling Jaya at Dutch Baby Industries Berhad (making condensed milk), he comes home quite regularly. Mak says that he does not earn much and with such escalating costs of living in Kuala Lumpur, he can only maintain himself.

The next son was 21 years old. He, too, left school after Form 5. "We were not that

interested in going to school. Only my elder brother was hardworking. Furthermore, with the family situation and lack of *perangsang* (encouragement) from my parents, we were not good in class," he says. He was working on a daily basis for a relative who ran a soya-sauce factory. He used to work in a funfair group, operating the merry-go-round, but found it boring. Although he was paid RM25 per night, it took him away from home and he did not like it. Working for the relative as a store operator, he went out for deliveries, coming home daily. He made RM18 a day. Mak said that it was usually this son that bought things for the house. So far, he has bought a rice cooker, electric kettle, and an electric fan. Mak said that when he saw other people buying items for their homes, he did the same.

Yati was close to this brother. While he took interest in things like what kind of hair-style or clothes suited Yati, the other older brother chided her for not wearing the *tudong*, a scarf to cover the head.

After Yati came 'Mah. She took her Form 5 or SPM again this year. She helped around the house, taking care of the little baby girls, helped Mak cook, washed the clothes, and cleaned. She was a great *kueh*-maker and had expressed to Yati how convenient it would be if they had that special machine to make a certain type of *kueh.* She intended to go for a typing course when the exams were over.

A'kak came next. She was 17 years old. She took on less responsibilities than 'Mah at home. Both 'Mah and A'kak made some extra money during the fruit season. They had some mangosteen trees in the compound. During the fruit season, they tied them up in bunches and sold them by the roadside or *bagi dua*[10] with a Chinese man from town. In the last season they each made about RM500. "It's so easy. Just go and look for mangosteens. We don't need any capital at all," 'Mah said.

The rest of the brothers and sisters were 16, 14, 11, and 5 years old; while the youngest was only two months.

The House

The house was built in 1967 when there were only six children. Now there are 13 of them, plus Ayah and Mak, and the house has not undergone any major renovation or extension. Thus, space was being used to the maximum. There were two television

[10] It means half-and-half: half for the girls and half for the retailer.

sets in the sitting room. The smaller one, which was not working now, was given to them by a relative. On the opposite side of the hall stood a bigger TV which they bought second-hand for RM124. It was bought about three months ago to prevent the kids from hanging around the relatives' houses late at night. Pushed against one side of the wall is a table, and standing in the middle portion of the wall opposite the table was the show-case cabinet which Yati bought. It was indeed an odd place for it, but this was the only available space. This cabinet was full of sets of crockery, cups, plates, etc. which Yati bought, to be used at only occasions like *Hari Raya*.[11] Right in the middle of the room and hanging from the beam, was baby's cradle, with just enough space for swinging. A fan stood next to the TV.

The kitchen was simple. Meals were served on the *pangkin*.[12] There were two old chairs with cushions, which Yati called "my mother's old-fashioned chairs", just next to the kitchen door. The three prominent items were the cupboard, rice cooker, and electric kettle. At night, the two bicycles were pushed into the kitchen.

Household Income

The average monthly income derived from various sources and expenditure was as follows:

Income (in RM)	
Mak's salary (7 x 26)	182
Welfare Department per month	90
Contributions from sons and daughters	100
Total	372
Expenditure	
Marketing (3 x 30) + rice + essentials	150
Kueh, biscuits, etc	20
Education (transport, pocket money, etc.)	70
Bills -- water and electricity	10
Miscellaneous	20
Total	270

Additional and/or seasonal income depended on the time of the year. For example, a major fruit crop earned them extra money.

[11] Celebrations at the end of the fasting month in Ramadan.
[12] Raised wooden floor used as an eating space.

Fears of Retrenchment

Yati's greatest worry now was the much talked-about retrenchment in Mostek. Although, officially, none of her friends had been retrenched, rumours have it that retrenchment will be on a "last in, first out" basis, and will start with the operators whose employment number is 5,000 and below. *"Jika Yati kena buang, Yati nak pergi Kuala Lumpur. Abang Yati ada di Kuala Lumpur"*, ("If I am retrenched, I shall go to Kuala Lumpur. My brother is in Kuala Lumpur"). He was then in his final year at University of Malaya on a scholarship. Yati has no idea what course he was doing since they hardly met and even if they did, *"dia tak cakap banyak dengan Yati"*, ("he does not speak much with me"). If she were retrenched, she planned to stay with her brother and try to get a job in one of the many factories there. Yati is certain that *"saya tak nak balik kampung. Tak ada kerja di kampung. Lagi pun sudah biasa di sini. Ada freedom"*, ("I do not want to go back to the village. There's no work in the village. Furthermore, I am used to the life here. I have some freedom"). Or she will try to get a job in Ipoh. She could commute daily between Ipoh and her *kampung*, which will cost her RM1.20 per trip. She hopes that the recession will be over in two years' time and she will be back to work in Penang. "We don't have any land at home to work on. Even the rubber trees don't belong to us. My brother has not found a job yet. It will be easier for the family if he has. If I work I can at least buy my little brothers and sisters some new clothes at each *Raya*. I feel so sorry for them. My mother is expecting another baby very soon. *Entahlah"*, ("I don't know").

And during all our conversations so far, the impression that she has given of her role in the family was modest. But having spoken to her family members, it was very clear that she was important and that everybody who was capable of working within and outside the house matters very much.

From the cases of Mak Teh and Yati, together with the impressions gathered from the rest of the sample of detailed individual and family histories, some important issues may be highlighted.

6.3.2 The Analysis

It is evident that the withdrawal of female workers from the domestic economy represented a major transition for many households. This is particularly true when we compare this current generation with the females of their parents' and grandparents'

generations. Their mothers generally had very little education, and were withdrawn from school in order to look after their siblings and do housework so that their own mothers could be released to work in *padi* and rubber fields as unpaid family workers. The essential difference between that generation and these young girls is that the modern generation substituted wage work for family labour to sustain the household economy. This inter-generational difference reflects the changing circumstances and opportunities. While their mothers had little or no education, and if there were any, it was often in religious schools, this modern generation has been able to take advantage of widespread education in rural areas made available by the policies of an independent Malaya in the sixties. In the seventies, this was reinforced by the universal education system, by more scholarships for the B*umiputras*, and the New Economic Policy which made employment restructuring, that is, the incorporation of Malays into the modern wage sector, its major goal. As a consequence of employment creation policy and the increasing number of youths entering the labour market, transnational corporations were encouraged to set up factories in newly-created FTZs.

A second feature is the issue of the life-course. It is clear, not only in the present young workers' but also in their parents' generation, that sibling order affects the opportunities open to children. The older ones are almost always the ones who were denied the chance to go to school, or to continue school, being forced to leave school early to assist with family economic activities, either in the field or in the house. Thus, it is not uncommon to see a great disparity in both education and occupation between the older and the younger children, the difference ranging from a *padi* farmer with three years' schooling to a younger sibling who is in university.

An added dimension is the question of sex order. In Mak Teh's family, her older siblings (although boys) had to do housework because Mak Teh was 16 years younger. But, by the time she was in Standard 6 (Year 6), she was withdrawn from school to look after her siblings. Similarly, Yati too was forced to leave school, although she was the fifth child, and was a good student and enjoyed school. In this sense, she was the proverbial sacrificial lamb. It was her withdrawal from school, and subsequent entrance into the wage sector, that enabled her older siblings to continue their education to Form 5; the eldest successfully completing his university education – although he was on scholarship. The future of her younger siblings at school is now assured because Yati is working and contributing to the family income.

In many ways, both families have become dependent on the working daughter (Salaff,

1981). While both the girls initially left home to work in the factories, and to assist with the economically depressed family situation, later this sense of responsibility towards their families increased as their families became more dependent on their incomes for necessities as well as extras. At times, the working daughter's income is even taken for granted by family members simply because of its regularity, which is so different from the income from village work. In the same way, if any of the other members of the household needed extra money, for some extraordinary expenditure such as medical expenses, she is the one they turn to because of her assured income.

This sense of responsibility grows in the girls – as reflected in statements by both Yati and Mak Teh, and other girls. Yati wants her younger sister to continue schooling so that she does not have to work in the factories. Mak Teh, in a rather maternal way, toyed with the idea of buying her brother a bike, or else keeping the money for his marriage. It is this sense of responsibility that has made these girls delay marriage to well beyond the national average age for marriage. Similarly, this responsibility gives them an important role in decision-making and an authority in the household, as clearly evidenced in Mak Teh's case. Of course, this is related to the length of time the girl has been working and to the extent of the household's dependence on her income. What has emerged in our observations is that while these factory workers are often reticent and meek in their urban context, they are quite different in their rural setting, having a quiet sense of authority.

The monetary contribution to the household may be indirect or direct. Indirectly it enables their parents' income to be used for other things, to provide a bit of flexibility to an otherwise insecure and tight economic situation. More direct contributions are purchases for the household (such as consumer durables, furniture, food, and extra clothes for the family), paying for the siblings' tuition fees, and contributing to house maintenance. The amassing of crockery sets with brand names like Corningware and Tupperware; furniture such as beds, cushion sets, dining tables, cupboards, and even modern kitchen cabinets; and electrical appliances such as televisions, rice cookers, fans, and blenders is done slowly owing to their limited budget. The bigger items are usually bought on hire purchase. But the almost universal tendency of these girls to buy expensive brand names shows a certain circuit of direct buying which operates among the factory workers. It raises the issue of rising ostentatious consumerism amongst the factory workers. For example, a set of Arcoroc (Corningware) plates and cups cost more than a production operator's average month's wage of RM250. Of crucial importance here is the locking-up of money in consumer durables, many of

which are seldom used, except for special occasions. Except for house renovation and some investment in jewellery, no money is being channelled into the buying of assets such as land or agricultural machinery. Is this because it has never been a tradition for females to invest in agricultural land, which they merely inherit rather than buy (see Young, 1983, for a discussion on Malay land inheritance); or is it because their own incomes are far too small and insecure (unlike government wage work) for such big outlays? Yet this pattern is dissimilar to the findings in other Asian countries, especially Thailand, where female outmigrants remit money for investment in land in their village (Young and Salih, 1986). Finally, has the disinterest in agricultural work, especially *padi* and now rubber, displayed by the younger generation of rural Malays (as evidenced in vast tracts of abandoned smallholder *padi* and rubber land, and labour shortage in the estates) created a general atmosphere that promotes a complete break with agriculture in this generation? It appears so. Few Malay youths express any interest in remaining in agriculture. For them, agricultural work, as seen in what their parents do, is very hard work and for very low returns. Even when they compare this with the lowest rungs in the government sector, the government job is preferred. But that is out of the question for the less educated, as government jobs become increasingly competitive for the large number of Malay youths entering the labour market. It is to the urban wage sector, as factory workers, that they have to turn. For rural Malay girls with some schooling, they do not have the option of their brothers who could become members of the uniformed services (mostly army and police) which drew extensively from rural areas. It would appear that circuit-breaking is occurring. This is an interesting question because it has important implications for the Malaysian economy and Malaysian development as a whole.

The stage of the life-cycle of the family is also affected by the sibling and sex order of the children, as can be deduced from the earlier discussion. Often the dependence of the families on the working daughter is affected quite dramatically by personal tragedies, such as death, or serious illness of a father or the major bread-winner. Usually when this happens, the burden falls very heavily on the mother, who is forced to explore all sorts of ways to make ends meet. Such strategies can clearly be seen in the case of Yati's mother where, as her husband's health failed, she was forced to work outside for the first time. As his health worsened, she had to change from part-time to full-time work on the estate. In such circumstances, it is inevitable that the children will suffer, in some cases, they are withdrawn from school (if there is no assistance from the Social Welfare Department and their schooling is not subsidized by scholarship) and forced to work in order to help with the family income. In Yati's

case, she was withdrawn from school at precisely this time and started work in the factories at 16. It is also important to note that in both the case studies, siblings died young during particularly sustained, economically-depressed times.

It is also evident from our cases that female children are more responsible and caring about their families than male children. Thus, female production workers will find ways and means to cut down on their expenditure in the urban context so that they can remit more money home. Male children often cannot find the extra money to send home and give the excuse that the cost of urban living is very high. Instead, there are a few cases where money is remitted from the village to them.

The question arises as to what happens if the daughter had to stop work. Two processes usually spell the end of the working daughter's contribution to household income. The first is marriage and the starting of their own family. There is not enough data to show conclusively that the girls leave their jobs at the time of marriage. It appears to depend upon who they marry and whether the husband lives in Penang or not. For example, those who marry civil servants stop working. Those who marry men from outside Penang naturally have to leave. But girls who marry fellow workers remained working until the birth of their first child. But even this is dependent on whether or not they have a relative such as a mother or aunt who can look after the baby. In fact, the practice of sending away children to grandparents to look after (often in the *kampung*) while the parents work in town is common and a prevalent household strategy among Malays.

The second way in which the contribution of the working daughter to the household income pool may cease is retrenchment. At the time of the research, the factories were retrenching workers due to the recession. Yati, Mak Teh, and other girls lived in fear of losing their jobs. Some felt shy about going back to the village and being stigmatized as having done something wrong in the factory. But the overwhelming concern was how their families would cope without their incomes.

The above questions and observations have been posed from the perspective of the working daughter in the household context. As in the discussion of the family life-course, much depends on the situation of the household and the adaptive strategies adopted by each household to cope with each contingency and to adjust to the long-term macro-changes affecting the family. However, these strategies are constrained by the stage of the family life-cycle and its life-course: so the options that they choose

have to be determined within these constraints. This is better seen through the analysis of individual life-histories within the context of the family life-cycle.

6.4 METHODS OF ANALYZING HOUSEHOLD HISTORIES[13]

This section examines the various methods of analyzing household histories, such as the study of average household size, cohort analysis and generational analysis. From this assessment, it becomes clear why the family life-cycle approach, leading towards life-course analysis is being used for family history and household histories.

It is important to distinguish conceptually between the study of households in the past, as by historians such as Laslett and the Cambridge Group and that of the contemporary households as household histories. The former is concerned "with great changes over the past centuries" (Cherlin, 1983: 61), while the latter with micro-level household structures, events, and transitions. Their basic similarities are: that both are interested in societal change, examining this issue by analyzing households or families; both incorporate some historical perspective; and both, by the inter-disciplinary nature of the concept of households are forced to use concepts and methods from a variety of social sciences, particularly history, sociology and demography. The differences between the historical study of families and the study of household histories lie in the scale (in terms of numbers of households and historical span), the aggregativeness of the data and therefore analysis, which all link back to the availability, type and quality of data on the household.[14]

Historians of families in the past made use of censuses, vital registers of births, deaths, marriages (especially parish records)[15] and even, where available, migration.[16] The research by Hareven and Langenbach (1978) on Amoskeag, and Hareven (1982) on

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[13] Sections here are taken from Young (1987) "Analyzing household histories." presented at the IUSSP-EWPI Seminar on Changing Family Structures and Life Courses in Less Developed Countries, Honolulu, 5-7 January.

[14] Some examples of the recent interest in the household approach is evidenced in the Seminar on Households and the World Economy in 1982 (see Smith *et. al.*, 1984), Symposium on Household: Changing Forms and Functions (see Netting *et al.*, 1984) and the two training courses and research seminars in Urbanization in Third World Countries and the Household Economy held in 1983 and 1985 sponsored by the IGU Working Group on Urbanization in Developing Countries.

[15] Examples from the works in Laslett and Wall (1972), Lee (1977), Levine (1977) and Wall (1983).

[16] Smith (1977) derived births, deaths, marriage patterns and migration from population registers of Nakahara. He supplemented these demographic information with tax and land records.

New England textile cities employed company records, vital records linking to census data, and oral histories for the richness often lacking in statistical analyses. The technique of linking different sets of data for reconstitution has also been used by Mitterauer and Sieder (1979) and Sieder and Mitterauer (1983) in their historical study of households in Austria. Whilst this group is constrained by the nature of their data, generally those who work on household histories,[17] because they use field techniques such as surveys, have a flexibility of what data to collect including retrospective data like life-histories and oral histories. However, their major drawback is recall and memory problems of the respondents. On a larger scale, but far rarer is the use of panel studies such as Elder's (1974) famous work which used Stolz and Jones study of adolescents in Oakland in the thirties, following them up in the sixties to study the impact of the Depression, and Elder's (1985) research based on the Michigan Study of Income Dynamics. Often the problems of such data sets are their high costs to collect, and even if the first survey had been done, the researcher who wants to follow up on this group may have superfluous data (as they have been collected for a different purpose) and very small unrepresentative groups.

The study of household size and structure in past times is related to the debate as to whether industrialization in Europe influenced extended households to become nuclear (see Lasch, 1975). Laslett (1972a, 1983) concluded that the mean household size had not varied much between the sixteenth and the late nineteenth centuries in England and that the extended family was not the norm before industrialization. Similar findings were found in Western Europe, Japan and North America (see Laslett and Wall, 1982). Many criticisms have been levelled at Laslett's (1972b) conclusions; the main ones being the fact that the evidence for England and Wales was based on cross-sectional data (from 100 parishes) which captured households at different stages of the life-cycle; the question of the operational definition of a household which was too narrow and different from that of the census-takers (these listings were not true population censuses as they were prepared for tax assessments and military recruitment); their failure to take into account cultural variations between countries; and that a major reason for small families in those days was that mortality was so high that three generation families were uncommon (Berkner, 1975). From the perspective of methodology, the important point to emphasize here is that the data, being cross-sectional, devoid of information on age, was not able to extract effectively, the different phases of the development cycle of the families.

[17] For example Carter (1984), and Young and Salih (1987).

To try to overcome the inherent problems of cross-sectional data which merely takes a "slice" of time, in the form of a snapshot, there were attempts to capture the family as process. A few methods emerged from this. Of some importance and certainly a technique often employed by demographers is that of the cohort method which can use census-type data by casting them into longitudinal sequence. By selecting an age-specific group of people, say, those aged 10 at the 1970 census and following them up at age 20 in the 1980 census, it is possible to analyze historical changes in the family. According to Ryder (1965), discontinuities in a pattern, that is, how successive cohorts in each stratum differ in composition and behaviour from previous ones signify social change. An example of how such a technique is used effectively is found in Uhlenberg's (1978) study of white American women from 1870 to 1930, comparing the timing of major events such as marriage, childbearing, widowhood, and death. Methodologically, the cohort technique is able to isolate specific age- groups, follow them through time in an aggregative manner, and measure their changes rather than deal with a mass of undifferentiated population at one point in time.

Another way of studying change over time in families is to trace differences between generations. Hill (1970) analyzed changes in long-term financial planning and consumption patterns of families among three generations. Greven (1970) examined the patterns of inheritance and transmission of property across generations among the first settlers of Andover, Massachusetts. However, conceptually and methodologically there are problems. Conceptually, the term "generation" may be used loosely as to cover at least three categories: generation as in ascendant-descendant (grandparent-parent-child), generation as life-stage (childhood, youth, adulthood), generation as cohort (people of the same age sharing similar historical and cultural experiences) (see Troll and Bengtson, 1979). As elaborated with many examples by Kertzer (1983), it is crucial that the concept of generation be properly defined. Methodologically, one of the major problems of using the generational approach is that one generation may in fact contain members from different age cohorts with very different historical experiences (see Vinovskis 1977: 266-9).

The study of mean household size and household composition had failed to take into account the developmental phases of the household. Generational analysis, while valuable for analyzing transmission of values, goods and services between parents and children does not identify processes within the family. In contrast to these approaches, that of the family life-cycle is an attempt to capture the different stages families pass through and the major events which delineate these stages. Developing from the early

works of Hill (1964) to Glick and Parke (1965), Duvall (1967), and Rogers (1962) – who refined Duvall's eight stages to a cumbersome 24 – and the application of the family life-cycle to India and US (Collver, 1963), Japan and China (Morioka, 1967), this approach has the advantage of viewing the family as passing through stages. Useful typologies can be developed from the family life-cycle, identifying important areas for analysis. Related to this is the emphasis on the importance of compositional and size effects on family life which impinges on the household as a unit of production, accumulation, consumption, and transmission.

Although the family life-cycle has sensitized researchers to the complexities of family research, it has a series of disadvantages. In spite of the fact that the family life-cycle assumes a developmental perspective on the family, giving it flexibility through role changes (Hill, 1964), examining the family as a collective unit (Hareven, 1978a), it remains a series of typologies based on stages of parenthood (Elder, cited in Hareven, 1978a: 99). At a methodological level, during empirical analysis, it is difficult to disentangle three effects – that of age, period, and cohort – on the life-cycle even though the conceptual distinction is simpler (Oppenheimer, 1982). When applied to families in history it is inappropriate as the stages are based on the contemporary family. Most family cycle models rely mainly on the changes introduced by the addition and departure of children from the family. In the past, these movements stretched over a longer time span which meant these events overlapped, blurring the sequential typology of stages. Similarly, the family life-cycle focuses on family members in creating the stages. In the past, the family and non-family members in a household were less distinct, incorporating boarders, lodgers and servants (Vinovskis, 1977: 273-4). In demographic terms, the impact of higher levels of mortality resulted in a less orderly sequence of stages, the higher birth rates meant that children were spread along a broader age range within the family, and often the family does not experience an "empty nest" stage (Hareven, 1978a: 99-100). Finally, the family life-cycle construct fails to deal with the timing and sequencing of events in the lives of family members.

It is precisely to overcome these inadequacies that the concept of the life-course was formulated. This concept accepted the family as process (Hareven: 1974); that individuals in a family move through transitions rather than stages (Hareven, 1978b); and most importantly, that the life-course encompasses both the individual and collective family development making it a truly family approach. Elder (1977: 279), the main proponent of the life-course approach introduces it as "processes of family

adaptation and change over time", involving "the timing, arrangement, and duration of events" in the "ever-changing pattern of inter-dependence and synchronization between the life-histories of family members and the cycle of generational exchange and succession". Of importance too, is the idea that the life-course concerns interaction between historical change and the changing household unit, and accepts that there is cumulative impact of earlier transitions on subsequent ones. Thus, the concepts later propounded by Hareven (1977, 1978b, 1982) on family time (the synchronization of individual with family transitions), historical time (of individual with family relates to important periods, e.g. the Depression, World War II, etc.) and industrial time (the industrial trade cycles) are a logical extension of the life-course construct.

While the life-course construct is now widely accepted as an organizing framework for analyzing household history, both by historians dealing with families in past time as well as by other social scientists dealing with contemporary households, the major problem is finding operational methods of analysis to implement its basic postulates. Both cohort analysis and dynamic event-analysis, the choice being dependent on whether the data available for analysis are cross-sectional as in census data or longitudinal as in panel studies or with retrospective data, have been used to analyze family history using the life-course construct as the theoretical basis. While cohort analysis as explained earlier relies on age-graded classifications of subject groups for comparative analysis (see Vinovskis, 1977: 276-82), event-analysis focuses on analysis of the timing, sequencing and duration of events. Life events have been classified as age-graded, non-normative-graded or history-graded (Schaie, cited in Simons and Thomas, 1983: 117). There have been some promising examples at devising methods for event-analysis (see Hogan, 1984, for an attempt to combine the two techniques in the analysis of life events, and the earlier effort by Modell *et al.*, 1976). However, no satisfactory model exists to date that can fully exploit as well as enhance the analytical power of the life-course construct. The Markov model has been suggested as one such technique (Tuma *et al.*, 1979). Other alternative approaches include those suggested by Carter (1984) and the Mitterauer-Sieder method, which will be discussed below.

Both the family life-cycle approach and the event-analysis method are amenable to Markov chain techniques in analyzing household transitions. While the family life-cycle format uses cross-sectional data, the event-analysis technique, as exemplified by Tuma *et al.*, (1979), generalizes the transition states to critical events in the household history and thus, can capture longitudinal processes. In a similar manner, when the data permit, Markov-chain analysis may also be applied to the life-course approach.

This requires the reduction of the family life-course to some summary state of events of transition and thus the summary or integration of individual transitions within the event-graded family life-course. Therefore, while the application of the Markov-chain technique to the dynamic analysis of events enables the analyst to fully exploit the rich detail of event-analysis data, as mentioned by Tuma *et al.*, (1979), this latter problem is still an intractable task.

Carter (1984) had considered the problems of modelling household histories as Markov processes. Most of the studies he reviewed had focused on household type sequences. He suggested that such work suffered from the same ambiguities as do household types themselves. For instance, the concentration on positional definition of household members in terms of kinship relationship to the head of household ignored such factors as seniority queues and the economic relationships between potentially independent household components. More importantly, even when a more adequate sequence of household types can be derived, as for example from the summary indexation of household events as mentioned above, it is not possible to define these transition states as though they were independent of previous household types or states, a mathematical requirement of Markov-chain analysis. It is in the nature of household histories that preceding states or transitions will affect current and future events. Duration of event for a given household or the length of stay in a given state will also influence transition probabilities. Historical events such as age at marriage and mean ages of maternity and paternity will all affect family formation, for instance at much later stages. Thus, the need to focus on the events in the household history and the decisions that give rise to these events. Therefore, the Markov-chain approach is not necessarily a very promising technique for analyzing household histories.

In general, Carter (1984) believes that available methods of synchronic, cross-sectional analysis do not provide an adequate substitute for the longitudinal approach. No matter how the classification of household types is arrived at, they fail to take account of changes in household composition that may influence the subsequent actions of household members. Carter (1984: 59) suggests that the minimal elements of a household history consist of the kinship relations between any given member of the household to the head of household, the position of that member in the household personnel system, rules of seniority in the household, and tracking of the movements of members in and out of the household unit, and the manner in which events affect the viability of the household unit and the opportunities of its members to pursue their own goals. Household histories, thus, are histories of changing household structure

according to movements of personnel and resources through the household. The tracking of these developments in the household economy over time requires the calculation and tracing of relevant indicators of household change. Carter had suggested several ratios as indicative of these dynamic changes in the household: the size of the household, the amount or value of resources, the producer/consumer ratio, and the ratio of resources to personnel, to name a few.

Carter's approach is essentially anthropological, relying on household genealogical and compositional data, and the various ratios at several points in the household historical time. The results are essentially ethnographic and highly descriptive, and while the potential is there, the scope for quantitative analysis is hampered by less than dense data over the period of observation in his household case studies.

A similar but more graphic approach, relying more heavily on family compositional data using serial records as sources, was undertaken by Mitterauer and Sieder (1979) (see also Sieder and Mitterauer, 1983). The Sieder and Mitterauer project was the reconstruction of the family life-course for different families in the past using census listings supplemented by vital records. They suggest several methods of analyzing these historical household data. Some of the quantitative methods relate to (i) analysis of changes in household composition, to make it possible to establish cross-connections between population structure and development of family cycles; (ii) analysis concerning duration, such as the length of co-residence of children with their parents, and (iii) frequencies of certain developmental processes, for example, the succession to household headship (Mitterauer and Sieder, 1979: 260-1).

A second group of methods rely on qualitative interpretation of specific events or sequences of events, which are not, in their view, amenable to computer-generated quantitative analysis. Such analysis pertains not only to the development of individual households but also to several interacting households or to individual careers traced through different households. Such cross-connections among households would not have been revealed by cross-sectional data, whereas the analysis of serial lists would present most clearly "the connections between individual biography and the development of familial groups" (Mitterauer and Sieder, 1979: 281).

The problem with the Mitterauer-Sieder approach, as well as the Carter approach, is the cumbersome detail of household micro-level data which do not lend themselves easily to aggregative analysis. Kertzer (1985: 103-4) had criticized the Sieder-

Mitterauer approach on two counts. One, it was too difficult to generalize from the mass of pictorial representations of individual household histories. Two, it failed to account for the timing and sequencing of family events. Whilst the life-course diagrams suggested below do incorporate timing and sequencing of household members' transitions, a similar problem of assimilating many complicated diagrams face us. The ability to summarize these diagrams without losing the richness and complexities of the family processes represents one of the major challenges to methodology in the analysis of household histories.

6.4.1 A Framework for the Analysis of Household Histories

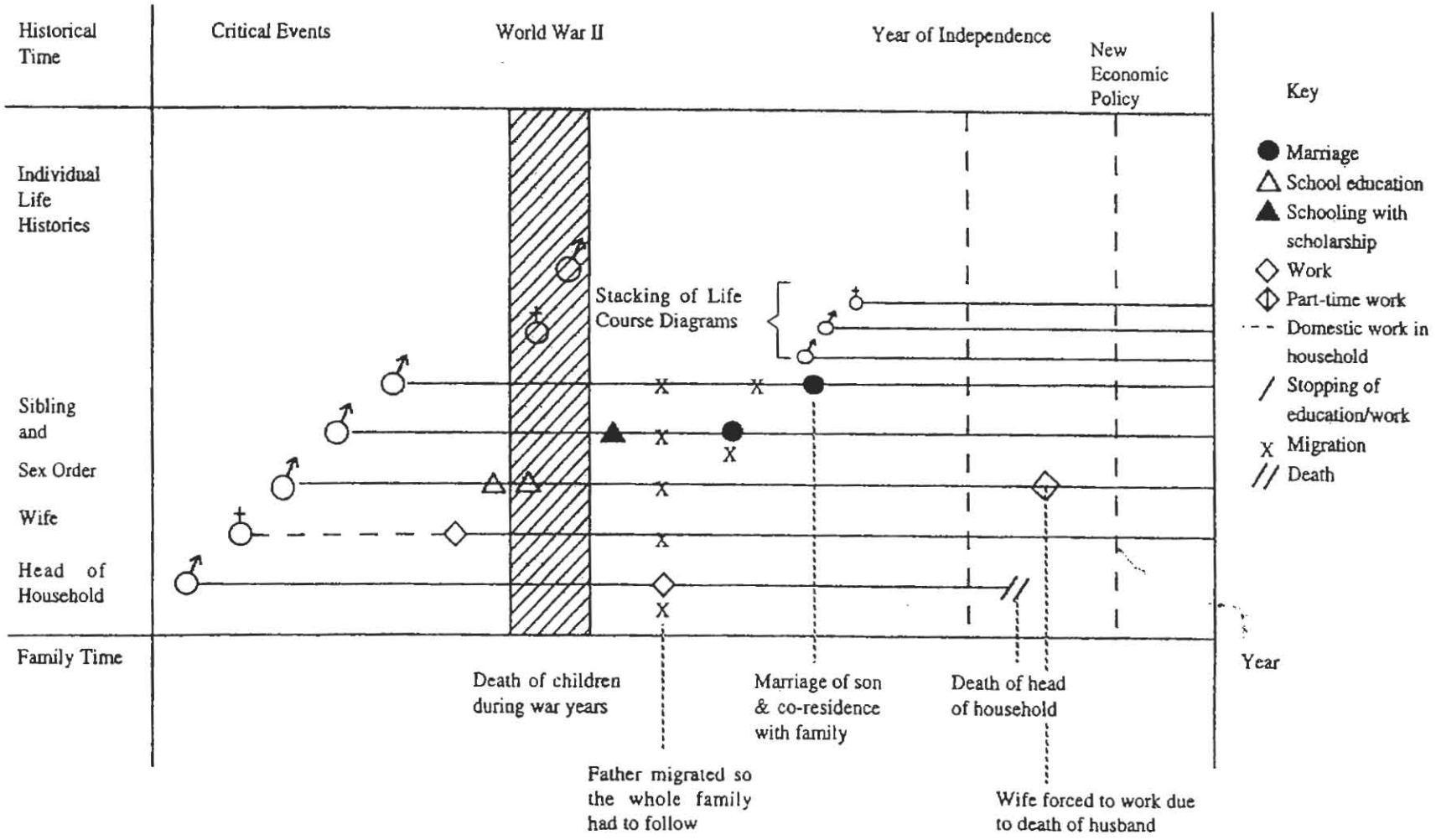
The Life-Course Framework

From the review of various approaches and methods in the analysis of household histories in the above section, the life-course framework appears to have a number of features useful in analyzing household histories. As Hareven (1978a: 103) suggests;

> "it offers a comprehensive integrative approach, which steers one to interpret individual and family transitions as part of a continuous interactive process ... it helps one view an individual transition as part of a cluster of other concurrent transitions affecting each other ... and it treats a cohort not only as belonging to its specific time period, but also as located in earlier times, its experience shaped therefore by different historical forces."

Life-course analysis, thus, focuses on transitions in individual and family behaviours involving two levels: one is the relationship between individual life-history and the collective history of one's family unit, and the other the relationship between individual and family changes and changes in the larger society (Hareven, 1978a: 98). The problem for analysts is to translate this household history framework into a practical methodology in order to extract meanings and patterns from these processes. The issue relates to both the problem of adequacy of method and the adequacy of data, as discussed in the previous section. The ultimate objective is both description and interpretation. The method proposed and applied within this framework involves three levels of analysis: first, at the level of representation and depiction; second, at the level of summary statistics in order to derive patterns of household transitions; and third, at the level of linkage between household transitions and broader historical change.

Figure 6.3
Hypothetical Structure of the Life-Course Diagram



The Life-Course Diagram

Using individual life-history data, obtained through retrospective surveys of every member of a contemporary household, it is possible to depict the history of any household in terms of a life-course diagram as in Figure 6.3. It is organized such as to represent the individual, family, and external transitions (or historical time in Hareven's terminology), with household members' individual career lines being arranged in the order of birth beginning with the household head. Events or transition points (birth, entry and termination of schooling, entry into the labour force, job changes, migration, marriage, birth of children, etc.) in the individual's life-history are given standard symbols, enabling the analyst to examine timing and duration of individual events and relate them to other members of the household. Family transitions are depicted in the lower portion of the life-course diagram, with vertical lines marking critical family events such as death of the household head, the addition of new producers or employed household members, etc. These events may then be related to the individual member's responses and life changes. Finally, historical time is represented in the upper portion of the diagram where critical events or reference points that may affect the household history can be indicated, or a whole transition period, such as the war years or some other significant historical event, may be shown. Details on these transitions can also be added to the diagram depending on the analyst's choice of the degree of significance and clarity intended.

These diagrams may be constructed for each household, which schematically maps each household history for descriptive and comparative purposes. Extensions of this basic diagram to cover generational transitions (say, for a three-generation household history, where the data permits) may be done by "stacking" the relevant household history diagrams. Two (or several) household histories may be compared by mapping the lifelines of critical members of each household, for example the heads of households, the working members of each household and any other member relevant to a particular analysis (for instance, marriage patterns, migration or employment history).

These life-course diagrams are useful in facilitating descriptions of family transitions, and in narrative explanations of critical household events and their impact on individual members. Synoptic judgements of the impact of external events on household history are also possible. It is the depiction of household processes that are buried in the individual life-histories, seen synchronically, and supplemented by household narrative history, which constitute the most useful feature of these life-

course diagrams.

This method of depicting household histories, theoretically is applicable to both the contemporary household, using retrospective life-history data, and to analysis of past households using serial lists or linked data, or, if one is fortunate, panel data. The latter application is of course too demanding of data, thus the life-course diagram may be used as a test of completeness in order to identify gaps in the description. It may also be possible to interpolate between missing data in some of the individual and family transitions.

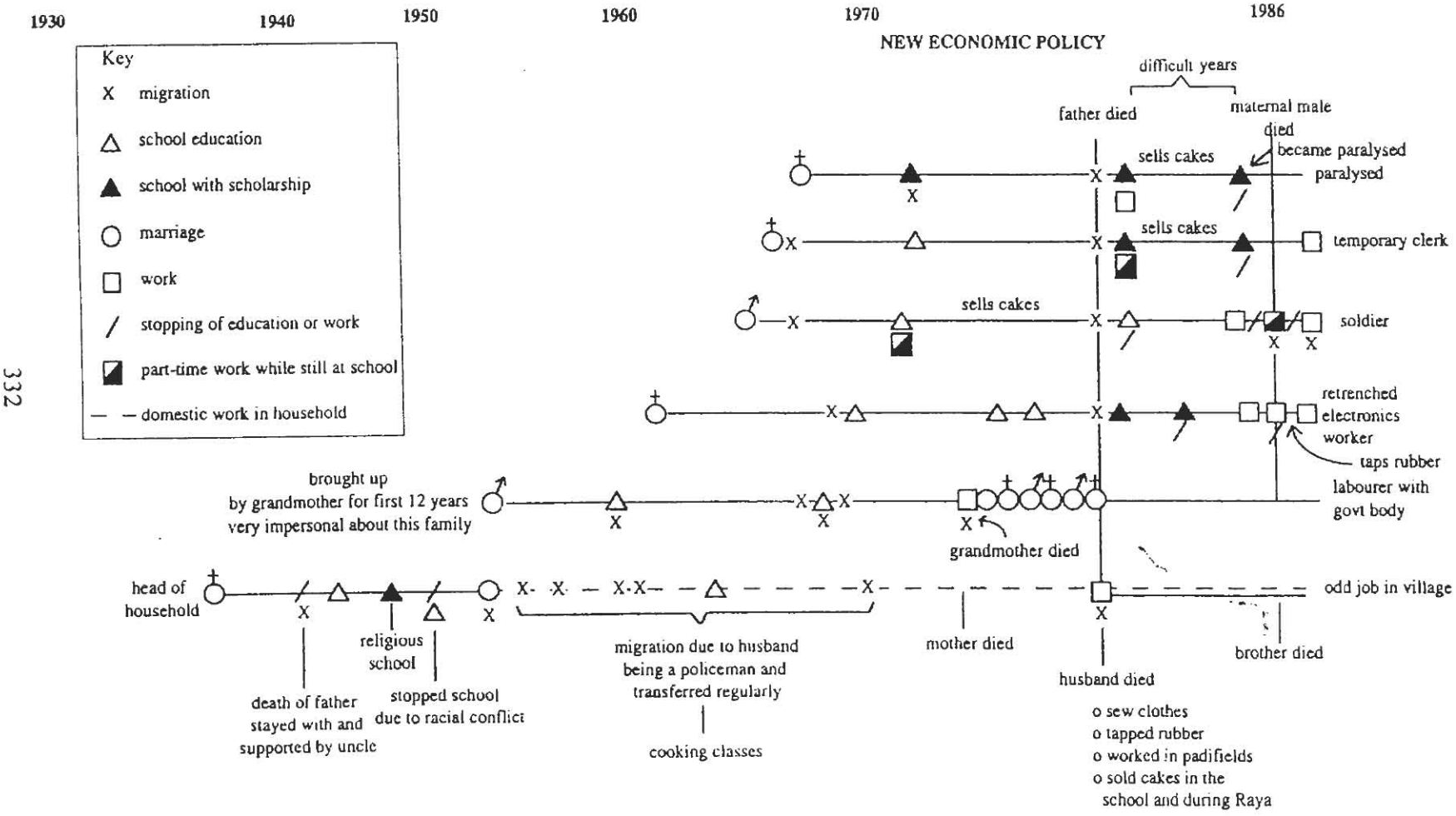
6.5 ANALYZING THE LIFE-COURSE AS HOUSEHOLD HISTORY

6.5.1 Life-Course Analysis of Two Malay Households

The two cases of household history as illustrated in Figures 6.4 and 6.5 summarize the life-histories of household members (including those who have migrated but contribute to the household income, or are subsidized by the household and therefore, participants in the income-pooling). They examine with more accuracy the transitions of individuals within the life-course. Unlike the individual case studies of Mak Teh and Yati, which had touched on family members in a more qualitative sense, the household case studies are able to depict the integration of the concepts of "individual", "family", and "industrial" times, meshed together within a household in "historical" time (see Hareven, 1977; 1978a; 1982). Thus, we are able to see in a clearer time perspective how personal tragedies such as the death of the main income-earner forces the household to adapt and cope in various ways, for instance by migrating, or by increasing the number of jobs for the other household members. Likewise, we are able to capture, albeit rather starkly, the different configuration of labour input within the domestic domain and productive work of family members through time. As in the individual case studies, the same issues of sibling order, sex order, labour input, and income-pooling, etc. within the household economy and household strategies are examined.

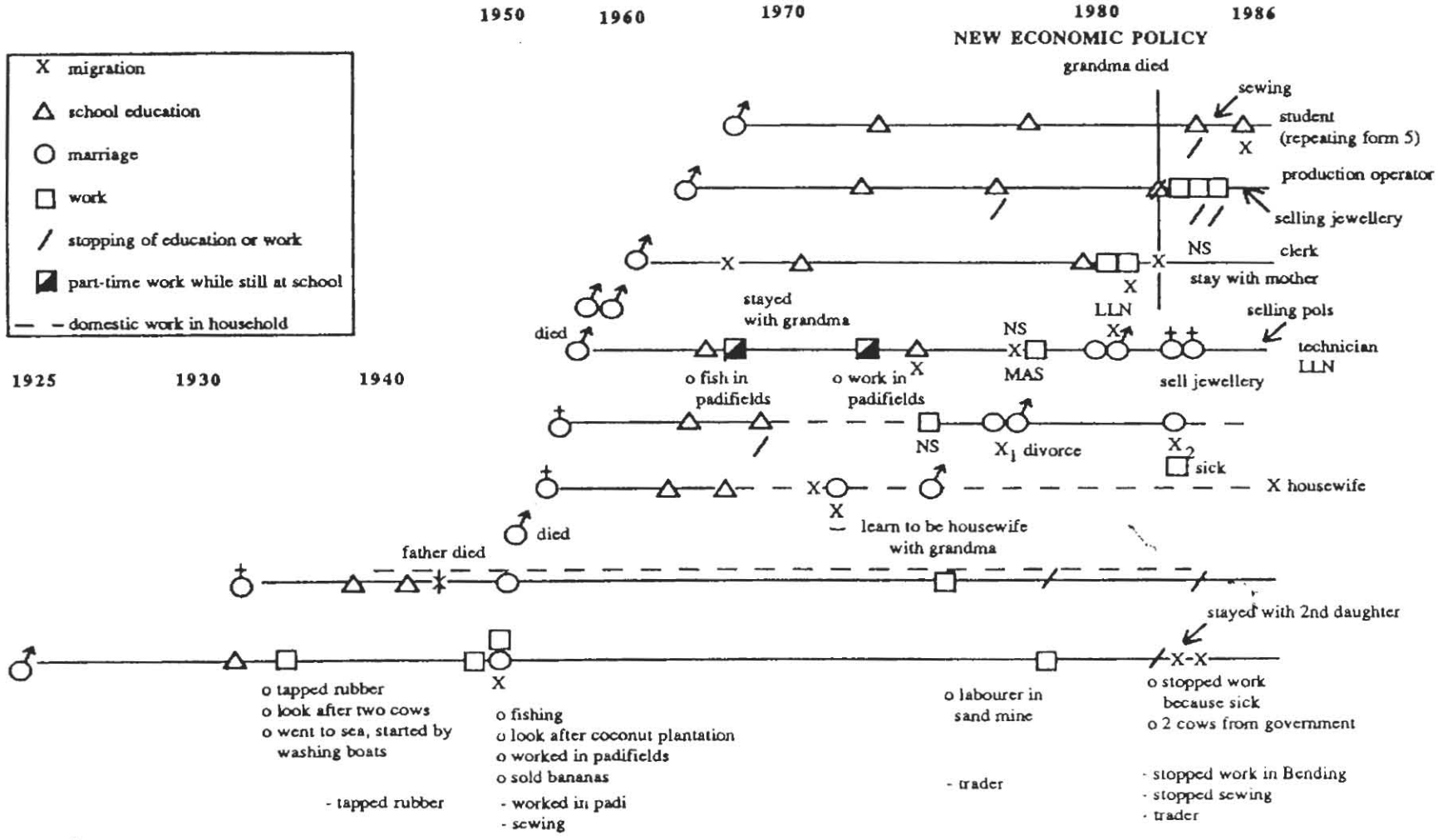
The diagrams are arranged with historical and family time along the horizontal axis and the parents and family members arranged along the vertical axis, according to sibling order and sex. Symbols are used to indicate the major transitions in the individual life-histories such as birth, schooling, migration, job changes, marriage, and their own family formation. In this way it is possible to see the inter-relationships

Figure 6.4
Life-Course Diagram of Household History: Case Study 1



Source: Household Response to Industrial Change Surveys, 1985-87.

Figure 6.5
Life Course Diagram of Household History: Case Study 2



between a family member's transition with the rest of the family and the significance of that transition at particular junctures of the family life-cycle when read vertically.

Figure 6.4 consists of a female-headed household with five children, the eldest son of whom is already married with five children. It is a poor household, belonging to the lower echelons of economic status in the village. It has just the basic essentials, possessing only a bicycle by way of transport, and only recently acquired a black-and-white television set. The life-history of the head of household was affected by the death of her father, which resulted in her migration to stay with her uncle. After marriage, when all her children were still at school and her younger daughter was only nine years old, the most traumatic event affected her family – the death of her husband. From being the rather carefree full-time housewife of a policeman, with time even for cooking classes, and a regular income and barracks provided, she was suddenly left with five school-going children, no income, and no housing. She brought her family back to her village of origin where her brother provided her with a small house. She was now forced to survive by taking on multiple jobs such as sewing, tapping rubber, working in the *padi* fields earning about RM100 per month during the planting and harvesting season, and selling cakes in the school and during *Hari Raya.* She also took on all types of *kerja kampung* (village work). She received only RM190 in widow's pension per month for the first nine months before settling at RM250 per month. This meant that she struggled to keep her children at school. Fortunately all received scholarships and were able to remain in school, supplementing their incomes by selling cakes for their mother.

It was during this economically-depressed period that the eldest daughter, while still in Form 6 (Year 12), left to work in the factories. She became a major contributor to the family income, giving all of her wages (RM230) to the family, but caused much stress when she was retrenched in mid-1986. To augment the family income she tapped rubber since her retrenchment, while applying for all types of work. A few months later the fourth child, a daughter, got a temporary job as a clerk for RM200 per month (she gave her mother most of it), which gave the family some reprieve, although they worry about what will happen when her job ends.

When the daughter started to work in the electronics factory, the household income situation appeared to ease somewhat, but the situation worsened when the eldest daughter was retrenched, followed by the sudden paralysis of the youngest who had just reached Form 5 (Year 11). Her medication was expensive. The boys in the family

did not contribute. In fact, the eldest was hardly perceived as part of the family, having been brought up entirely by the grandmother. He had been left with his grandmother because his father, as a policeman, was transferred regularly which would interrupt his schooling. After the death of the grandmother he lived only one year with his parents and siblings before marrying. After his marriage, his mother had to give him RM300 to set up house (this was before his father's death). As for the other son, he could hardly make ends meet. His mother gave him RM20-RM30 whenever she could, in spite of the fact that he was unmarried and was earning as a soldier. In this case, the family's economic situation was balanced rather precariously, depending very much on the two girls who were able to get work.

The second household (Figure 6.5) consisted of both husband and wife and six children, the oldest two girls already married. In contrast to the first case, at least three children have worked in the electronics factory and two were still actively contributing to the household income. With the capable entrepreneurship of their mother as a trader, this was a household well above the average economic status in the village, unlike the first household. The house was completely renovated and full of consumer durables, furniture, refrigerator, cabinets, colour television, carpets, and the like. As in the previous case study, aspects of household adaptive strategies, income pooling, sibling and sex order all play a role in this household. The head of the household was not the husband but the wife. Pak Cik (the husband) was quiet, meek, and sickly – and quite peripheral to the family. His relationship with his wife started to degenerate with his failing health, culminating in his leaving the house between 1984-85 to live with his second daughter. Because of Pak Cik's inability to earn enough (due to his ineptitude), Mak Cik (the wife) started to work in the *padi* fields and to sew clothes immediately after marriage. She said that life was much easier prior to marriage. After marriage it became very difficult, especially when the children arrived. Her first child died during these initial years of economic pressure.

The first two girls were then taken out of school early to help with the housework and to look after the younger siblings. The economic situation eased somewhat with the second daughter working as a production worker in National Semiconductor Company from the age of 16. She was to be a major income contributor for 11 years, helping in her siblings' education (none had a scholarship) and the household expenses. All the other children helped in pooling income by working in the *padi* fields, sewing, and later, when the mother became a trader, assisting her in selling crockery sets, carpets, bedspreads, pots, and jewellery. Even after her marriage and the arrival of her son, the

electronics worker continued working. This marriage was to end in divorce within the next year, so she and her son went back to her mother's household. In fact, she continued working until her second marriage six years later, at the time when her youngest sister entered the electronics factory and took over as the other major contributor to the household (other than the mother). The boys do not appear to contribute, except to help her sell her goods in their workplace.

The younger children comment on how easy their lives have been compared to their two older sisters. For example, the eldest daughter was so poor that her mother often gave her money to help her family. She was married off (arranged by her grandfather) after the second daughter had started taking over the housework. And it was the second daughter, the one who had contributed most to this household, who had a strong say in household decisions. Although the youngest sister was now the main contributor, certainly for most of the house renovations, she deferred to her eldest sister and mother.

What these life-course diagrams are able to show is the timing, sequencing and duration of events among individuals within the configuration of the family structure. In a sense it has depicted the synchronization of individual events with family events and integrated them into historical time.

6.6 CONCLUSION

The household histories have demonstrated the interplay of complex family transitional forces which impact on the migrant. They have shown how some females, because of their being females and their particular order in the family structure had to be taken out of school to help the family at times of economic crises. They also show the importance of timing and sequencing of events and how various factors are brought to bear on the female that positions her as the next household member to migrate. This chapter also shows the importance of household adaptive strategies. As certain events impact on the household and its members, the household adjusts to cope with the new circumstances. Thus, a person migrating to seek income, while being affected by and adjusting to the other constraints, is also a strategy to help the family members.

Her contribution to the rural household has become important because of its regularity. Her family has become dependent on it and she herself would prefer to remain in the factories, thus, the genuine fear of retrenchment. So what may have started off as a

temporary employment, as the family starts to depend on the worker's income, she sees her migration out of the village as permanent. And as shown in the previous chapter, the TNCs are having a longer-term interest in Malaysia as they themselves adjust to technological change. This will certainly add significantly to the dissolution of the two-circuits, making this rural-urban migration paramount.

There are at least three major advantages of using the household approach in the analysis of migration. The first concerns the linking up of the broader political economic factors as they impinge on the household. As argued earlier, these processes must be analyzed at different levels for a more meaningful study of migration. The second advantage is that the historical approach enables us to analyze how the different economic impacts have affected the household and how the household itself responded as the family life-cycle progressed.

Third, the household approach provides a better understanding of how migration processes operate. This deals with the question of who migrates and why he migrates. A cross-sectional study of migration usually describes the migrant in terms of his characteristics and what these imply. As to why he migrates, the answers are inevitably reduced to economic rationalization by the migrant. A household analysis allows one to integrate all the family elements, such as the family life-cycle exemplified as sibling order, labour allocation, etc. as demonstrated in the case studies, to get a better understanding of a complicated process.

The methodological issue of generalizing from the rich data embedded in a life-course diagram remains a problem that seeks a future solution. As a method, the life-course diagram imposes some discipline in the organization and treatment of individual and family demographic data. But the broad patterns are clear from the framework of analysis which lays great importance on the inter-relationships of forces – economic, social and political at the different levels as they affect the household and the individual decision to migrate.

CHAPTER 7
THE NEW ECONOMIC POLICY: BREAKING OF THE TWO-CIRCUITS OF MIGRATION

7.1 INTRODUCTION

This chapter examines how the NEP, over the last 20 years since 1970 has transformed the economy and brought about tremendous social change in Malaysia. This in turn has created major sectoral shifts in the economy which in turn affected internal migration and brought about the "third wave" of urbanization and saw the disintegration of the two-circuit system. The transformation of the economy between 1970-90 was induced by a new strategy of export-oriented industrialization, such as the development of FTZs in Penang (Chapter 5 and 6), an acceleration of rural development, a rapid growth of the public sector, and the implementation of regional development strategies to achieve balanced growth and population distribution that reduces the identification of race with occupation and location.

Associated with these major structural changes were labour shortages created in certain areas such as the plantations, construction, services and manufacturing which attracted initially illegal and later, legal migrant workers into the country. At the same time, the less-educated Chinese, from the smaller towns and villages were seeking better salaries as illegal migrants especially to Hong Kong, Taiwan and Japan. Yet another flow of legal migrants sought opportunities in Singapore, staying in the city state, and also as daily and weekly commuters across the causeway but living in Johor Bahru. Another group, of mostly males were seeking construction work in Saudi Arabia because of the better pay. Thus, a complex series of international migration streams beyond the national patterns were taking place in this two decades of tremendous change. This chapter examines these forces and how they affected the two-circuit system of migration, leading to its final dissolution.

7.2 SECTORAL SHIFTS IN EMPLOYMENT, 1970-90

During this period, the country underwent major sectoral shifts, as expected of a rapidly developing and urbanizing society (Tables 7.1 and 7.2). This is a manifestation of the two-circuits breaking at a national level. It was not a smooth transition. This is typical of a country that was fast metamorphosizing from an agricultural-based

economy to that of services and manufacturing, yet very open to the demands and cycles of the world economy. There were periods where economic growth spurred more migration into urban areas, such as the early and late 1980s when real GDP growth was between 7.4 to 8.7 per cent (Malaysia, Government of, 1989: 13). Yet during the recession of 1985 with a -1 per cent GDP growth, there was retrenchment and return migration, as shown in Chapters 5 and 6. It is clear that the major changes occurred

Table 7.1
Malaysia: Sectoral Distribution of Employment, 1970-90

Sector	1970	1975	1980	1985	1988	1989	1990
Agriculture, Forestry and Fishing	53.1	47.6	37.2	31.3	31.3	30.8	29.9
Mining	2.6	2.2	1.3	0.8	0.6	0.6	0.6
Primary Sector	**55.7**	**49.8**	**38.5**	**32.1**	**31.9**	**31.4**	**30.5**
Manufacturing	9.0	11.1	15.5	15.2	16.6	17.0	17.6
Construction	2.7	4.0	5.6	7.6	5.8	6.1	6.4
Secondary Sector	**11.7**	**15.1**	**21.1**	**22.8**	**22.4**	**23.1**	**24.0**
Transport and Communication	4.0	4.5	3.9	4.3	4.3	4.2	4.2
Commerce	16.6	17.6	20.2	22.6	23.9	24.4	24.9
Service Sector	**20.6**	**22.1**	**24.1**	**26.9**	**28.2**	**28.6**	**29.1**
Government Services	12.0	13.0	13.3	14.6	13.9	13.3	12.9
Total Employment ('000)	3,340	4,021	4,694	5,425	5,875	6,128	6,371
Labour Force	3,610	4,320	5,109	5,917	6,425	6,834	7,258
Unemployment (%)	7.5	6.9	5.7	7.6	10.0	9.5	9.0

Source: Malaysia, Ministry of Finance, Economic Reports (1970 to 1990). Ministry of Finance, Kuala Lumpur. Various years.

Table 7.2
Malaysia: Average Growth Rate of Sectoral Employment, 1970-90
(in percentage)

Sectoral	Average Growth Rate		
	1970-80	1980-85	1985-90
Agricultural, Forestry and Fishing	0.7	-0.1	2.3
Mining	-0.8	-5.3	-2.3
Primary Sector	**0.7**	**-0.3**	**2.2**
Manufacturing	9.6	1.0	6.3
Construction	11.4	7.0	-0.2
Secondary Sector	**10.0**	**2.7**	**4.3**
Transport and Communication	4.1	4.8	2.6
Commerce	5.1	6.1	4.3
Service Sector	**5.0**	**5.9**	**2.6**
Government Services	5.7	4.5	5.3
Total Employed	3.7	2.6	4.9

Source: Malaysia, Ministry of Finance, Economic Reports (1970 to 1990). Ministry of Finance, Kuala Lumpur. Various years.

between 1975 and 1980. While the main source of growth between 1971-75 was public investment, that of 1976-80 was external as well as domestic demand which induced a significant increase in domestic activities providing further stimulus to the economy (Malaysia, Government of, 1986:10). These important changes will be discussed below.

There was a major shift of employment from the primary sector to the secondary sector, particularly into that of manufacturing and construction. Between 1975 and 1980, the primary sector recorded the largest decline, of 11.3 percentage points. The

average growth rate between 1980-85 was negative. Concominantly, for the same period, the secondary sector jumped 6 percentage points, the highest, with manufacturing noting 4.4 percentage points. While agriculture, forestry and fishing accounted for more than half of the total workforce in 1970, it had declined to about 30 per cent by 1990. This sector fell by 10.4 percentage points between 1975-80. Younger agricultural workers in rural areas were migrating to rural areas with land development, either intrastate or to Pahang where the major schemes were. This was part of the rural-rural circuit of nearly exclusively Malays, with little to some primary education, and in most cases, were the informal to formal sector stream as discussed in Chapter 3.

The fall in employment in the primary sector was compensated by the growth of the secondary sector which grew from 11.7 per cent in 1970 to 22.8 per cent in 1985 and 24.0 per cent by 1990. Manufacturing created the most jobs, increasing from 9 per cent in 1970 to 17.6 per cent in 1990. Electronics and textiles, the two industries with large migrant workers, especially female, contributed most to this growth. This new occurrence of female migrants to electronics factories was captured in Chapter 5 and 6. Chapter 5 investigated female rural-urban migrants between the mid-1970s to the mid-1980s from rural agricultural pursuits going into lower-level production work, constituting a rural-urban flow that represented a break in the circuit. It also showed how dependent the national and regional economies were, for these multinational companies were open to the vicissitudes of international trade cycles which affected the demand for the semiconductors which, in turn, with cessation of demand, caused the migrants to be retrenched. Household histories were used to analyze further the structural cause and effect of these rural-urban migrant workers on their rural families in Chapter 6.

The industrialization policy had been a great success in creating work in the secondary and tertiary sectors and drawing migrants into these jobs. But in the process, it created two problems. The first was *tanah terbiar* or abandoned land in the *padi*-growing areas, especially areas outside major agricultural schemes (which were relatively poorer) and close to urban areas, in Penang, Province Wellesley, Perak, Melaka, Negeri Sembilan and Selangor. The older villagers remained but were unable to work their land effectively as machines for tilling, in the form of *kubotas* were just being introduced. The younger generation with some education migrated to urban areas or commuted to work in government-established industrial zones near their villages.

The second result of this accelerated industrial development was serious labour shortages. A phenomenon was occurring in the informal rubber and palm oil smallholders where, like *padi*, are labour-intensive even though the planting and harvesting cycles are different. The large plantations of the formal sector were also facing the same problem. These were filled by mostly illegal migrant workers from Indonesia and Philippines as there were no legal provisions in the country for the importation and employment of unskilled and semi-skilled aliens up to the early 1980s.

The construction sector recorded the highest average growth rate of all, until the recession and property slump of the mid-1980s (Table 7.2). Inspite of the recession, by 1990 it had doubled to 6.4 per cent of employment. The unprecedented growth in this sector attracted many foreign workers from Indonesia, Thailand and Philippines to fill the vacuum. As in the case of agriculture, owing to the lack of procedures in dealing with unskilled foreign workers, all entered illegally.

The paradox in this pattern of international migration was that while less-educated Malaysian men left as migrant workers to Singapore and Saudi Arabia in the 1970s, because of the better pay, the workers in the labour-surplus, poorer ASEAN countries were drawn to Malaysia's boom in the construction industry. At the same time, less-educated Chinese men and women left to work illegally in Hong Kong, Taiwan and Japan – drawn there by the high salaries. There were large groups within a whole Chinese village going to the same country, for example, Japan, illegally. There would be rags-to-riches stories of how individuals, worked for 2-3 years under very difficult socio-cultural conditions especially to Japan and the Middle-East, to come home to retire with their savings. Similarly, there would be stories of the suffering and pain individuals had to undergo through extreme exploitation in a foreign land with no recourse as they were illegal.

The declining momentum of the secondary sector in employment creation in the mid-1980s, as a result of the economic downturn, caused a shift towards the service sector as another avenue of employment generation. Thus, the service sector share of employment grew from 20.6 per cent in 1970 to 29.1 per cent in 1990. The most substantial growth was between 1980 to 1985, of 2.8 percentage points. But what is interesting here is that while the economy was in recession, and the other sectors shrank in employment in relative terms, especially manufacturing which is very sensitive to economic change, this sector registered the highest growth. Such a pattern

is not unusual in the services, especially the informal services, as it is known to be, like agriculture, to be a job-creator and labour-absorber (see Chapter 1). As experienced in Third World countries, workers get into petty trading, hawker food production, etc. typical of the ease of entry into the informal sector.

As part of the social contract of the NEP, in the decade of the 1970s and early 1980s, the government was the major source of employment creation. The rate of growth was 5.7 per cent per annum between 1970 to 1980 (Table 7.2). During the *Isi Penuh* exercise, of filling all vacancies, there was a massive recruitment drive (see Chapter 5). It was only with the deepening of the recession, manifested in a growing problem of government financing, that the freeze on jobs was instituted, leading to a substantial cut-back, as shown in Table 7.1 between 1985-88, where government service declined in employment. This trend was to continue during the recovery phase in the early 1990s with the privatization drive which began in 1985 as part of the economic recovery plan (Malaysia, Government of, 1986).

7.2.1 Women's Participation in the Labour Force

With the growth of the economy in the 1980s, except for the slump, this caused labour deficits in areas other than agriculture and construction. Women were joining the workforce in large numbers with unparalleled high rates of women participation in the labour force, of 37.2 per cent in 1970 to 46.7 per cent in 1990 As women moved into the modern formal sector, the percentage of women as unpaid family worker fell from 39.7 per cent in 1970 to 21.6 per cent in 1990 (Malaysia, Government of, 1991: 414-5). Further indication of this break of the two-circuit is shown in the over one and a half times increase in percentage of women classified as employee – from 38.9 per cent to 62.9 per cent in the same period. Women were increasingly playing an important role in the formal sector workforce.

Table 7.3 shows the percentage distribution of females in the industrial sector between 1970 to 1990. While agricultural activities continue to absorb the largest proportion of women, employing 28.2 per cent of all female workers in 1990 (as against 67.9 per cent in 1970), the major increases were in manufacturing (from 8.1 per cent in 1970 to 24.3 per cent in 1990) wholesale and retail trade (5.8 per cent to 19.7 per cent), and community, social and personal services (16.4 per cent to 21.4 per cent). Some of

these patterns were captured in the analysis of migration streams of 1965-70 (Chapter 3) and further elucidated at the village-level data towards the end of the 1970s (Chapter 4).

Table 7.3
Malaysia: Employment Distribution by Industry and Sex, 1970-90
(in percentage)

Industry	1970		1980		1985		1990	
	Male	Female	Male	Female	Male	Female	Male	Female
Agriculture, Forestry & Fishing	49.6	67.9	37.5	49.3	28.6	33.7	28.9	28.2
Mining & Quarrying	2.3	0.7	1.4	0.3	1.1	0.2	0.7	0.2
Manufacturing	9.3	8.1	11.8	16.3	13.0	18.9	15.2	24.3
Electricity, Gas & Water	1.0	0.1	0.2	0.1	0.8	0.5	0.9	0.1
Construction	3.1	0.5	6.4	1.0	10.7	1.2	8.7	0.7
Wholesale & Retail, Hotel & Restaurants	11.6	5.8	13.1	11.2	16.8	19.1	16.9	19.7
Transport, Storage & Communications	5.0	0.5	5.0	0.7	5.9	1.3	5.9	1.5
Finance, Insurance, Real Estate & Business Services	-	-	1.9	1.6	3.8	3.9	4.0	3.9
Community, Social & Personal Services	18.1	16.4	22.7	19.5	19.3	21.2	18.8	21.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia, Government of, Sixth Malaysia Plan 1991-1996, 1991:416.

In terms of the occupational structure, women were mostly concentrated in the low-skilled, labour intensive-jobs in the agricultural sector and in low-paying, semi-skilled, assembly-type production operations in the industrial sector (Table 7.4). The main

growth areas were production (10.4 per cent to 22.3 per cent), clerical (4.1 per cent to 14.1 per cent), sales (4.9 per cent to 11.4 per cent) and services workers (8.4 per cent to 14.1 per cent). While women were still important as agricultural workers, the percentage had shrunk from 66.8 per cent in 1970 to 28.1 per cent in 1990.

Table 7.4
Malaysia: Employment Distribution by Occupation and Sex, 1970-90
(in percentage)

	1970		1980		1985		1990	
Occupation	Male	Female	Male	Female	Male	Female	Male	Female
Professional, Technical & Related Workers	4.6	5.3	6.4	8.5	6.8	9.1	6.4	9.4
Administrative & Managerial Workers	1.0	0.1	1.4	0.3	3.2	0.6	2.8	0.6
Clerical & Related Workers	5.4	4.1	6.8	11.1	7.4	14.2	7.0	14.1
Sales & Related Workers	9.8	4.9	10.3	7.2	11.1	11.0	11.4	11.4
Service Workers	8.1	8.4	9.0	9.0	10.1	13.7	9.9	14.1
Agricultural Workers	47.6	66.8	35.9	46.3	28.7	33.7	29.4	28.1
Production & Related Workers	23.5	10.4	30.2	17.6	32.7	17.7	33.1	22.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia, Government of, Sixth Malaysia Plan 1991-1996, 1991:417.

A major consequence of this structural transformation of women in the labour force was the rising demand for foreign workers as domestic maids to look after the family needs as more women work outside the home. Most came from Indonesia and Philippines. It was not until May 1984 that an agreement was signed with Indonesia to regulate the inflow of Indonesian workers into the plantation sector and later, extended

to domestic maids. By 1985, a similar agreement was signed with the Philippines. As women migrated out of agricultural work to the modern sectors, the need for foreign workers in the already depleting agricultural sector was heightened. This added to the already major deficit caused by Malaysian males leaving agriculture for urban employment.

Male participation in agriculture and forestry shrank from 49.6 per cent in 1970 to 28.9 per cent in 1990 (Table 7.3). Although construction registered an increase in males, it was obviously not sufficient for the needs propelled by the increased economic growth, thus, the great demand for foreign workers, especially in the low-paying manual-type work. It must be borne in mind that Malaysian construction workers had been leaving for Singapore and the Middle East in the 1970s and 1980s.

This pattern is also reflected in the occupational changes between 1970 to 1990 for males. In 1970, 47.6 per cent were agricultural workers. By 1990, it had fallen to 29.4 per cent, inducing serious labour shortages that were filled by foreign workers and machinery. This decline was compensated by a major increase in production workers.

What this shows is a general movement out of primary industries and occupations into the secondary and tertiary for both males and especially females. A result of this sectoral shift was labour shortages filled by foreign workers. Foreign workers also took the place of Malaysians in lower-level work who left for Saudi Arabia, Hong Kong, Taiwan, Japan and to a lesser extent Singapore to seek higher pay. The demand in the plantation sector was so great that in 1986 recruitment from Bangladesh and Thailand for the plantation and construction industries were allowed. So important has foreign workers become that by 1995, it was estimated there were about 1.2 million alien workers in the country. This accounts for about 14 per cent of the total labour force and 7 per cent of the total population of about 20 million (Azizah, 2003). The total is likely to be in the realm of 2 million as it would include family members who came in illegally and not calculated as part of the workforce.

7.2.2 Ethnicity and Employment

Central to the success of the NEP is whether it has accelerated the restructuring of the Malaysian society in order to eliminate the identification of race with economic function and geographic location. So far the earlier sections have shown how

employment has shifted from the primary sector to secondary and tertiary sectors within the two decades. They also demonstrated the increasing involvement of women in the modern sectors in line with male participation patterns in this transformation. Labour deficits occurred in plantation, construction, manufacturing and services, which were filled initially by illegal and later legal migrant workers. This section now examines the changing ethnic composition of the employment structure.

An analysis of the main ethnic groups' participation in the three major sectors from 1970 to 1990 (Table 7.5) shows that Malay contribution in the primary sector has nearly diminished by half (61.1 per cent in 1970 to 33.4 per cent in 1990). This was compensated mainly by the growth in the tertiary sector. About a quarter of the Chinese were in the primary sector in 1970 and this has fallen to 11.6 per cent by 1990, with relatively higher growth in tertiary (36.8 per cent to 50.3 per cent) for the same period. The Chinese were stagnant in the secondary sector. The patterns noted by the Indians were similar to that of the Malays – shrinking out of primary to mostly secondary.

Further details on the industrial and occupational structures indicate the impact of the NEP in breaking down the predominance of certain ethnic groups in specific industries and occupations. Table 7.6 shows that Malays, who dominated the traditional agriculture, forestry and fishing sector have declined in importance from 66.6 per cent in 1970 to 36.7 per cent in 1990. They have moved into manufacturing (from 5.3 per cent in 1970 to 17.0 per cent, nearly a three-fold increase) and services (16.1 to 23.5 per cent). Even in commerce, an industry traditionally controlled by the Chinese, Malays had doubled their participation from 5.8 per cent to 12.4 per cent. For the Chinese it had continued to increase, but not at as high a rate as the Malays. Similarly, the Chinese who had been associated with manufacturing saw their participation grow only 5.1 percentage point compared to the Malays at 11.7 percentage points. This suggests that the NEP has been effective in diminishing the relationship between race and industry.

More detailed investigation into the occupational changes again reinforce the above trends (Table 7.7). Agricultural workers have fallen by nearly half, from 48.3 per cent to 28.3 per cent between 1970 and 1990. Increases were noted in the clerical, sales, services, and professional and technical as well as administrative and managerial

Table 7.5
Malaysia: Major Sector by Ethnicity, 1970-90
(in percentage)

	1970				1980				1990			
Sector	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total
Primary	61.1	25.4	51.1	46.8	46.1	19.6	19.6	36.1	33.4	11.6	23.1	27.7
Secondary	15.0	37.8	18.9	23.6	22.4	40.8	40.8	29.2	26.5	38.1	42.5	30.8
Tertiary	24.3	36.8	29.9	29.6	31.5	39.5	39.5	34.7	40.1	50.3	38.4	35.8
Total No. ('000)	1,477.6	1,043.6	301.4	2,850.3	2,211.5	2211.5	1,558.0	4,264.4	3,533.4	2,175.0	570.6	6,621.0
%	100.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia, Government of, Fourth Malaysia Plan 1976-1981, 1981: 57; Malaysia, Government of, Sixth Malaysia Plan 1986-1991, 1991:36.

Table 7.6
Malaysia: Employment by Industry by Ethnicity, 1970-90
(in percentage)

Industry	1970				1980				1990			
	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total
Agriculture Forestry & Fishing	66.6	29.2	50.0	50.5	51.2	19.4	42.2	39.7	36.7	13.5	21.8	27.7
Mining & Quarrying	1.5	5.4	2.5	2.6	1.0	2.7	1.9	1.6	0.5	0.7	0.7	0.6
Manufacturing	5.3	16.7	4.9	11.4	11.3	23.6	13.8	15.6	17.0	21.8	28.0	19.4
Construction	1.2	5.4	1.6	4.0	3.9	8.9	3.9	5.6	4.8	9.7	4.7	6.4
Utilities	0.5	0.3	1.9	0.8	0.7	0.1	1.6	0.6	0.8	0.2	1.3	0.7
Transport, Storage & Communications	3.5	4.6	7.2	3.4	4.0	4.5	5.6	4.3	4.0	4.2	6.4	4.3
Commerce	5.8	22.2	13.2	10.9	9.6	23.2	11.4	14.0	12.4	30.6	15.1	18.7
Services	16.1	16.4	23.4	16.4	14.3	17.4	19.4	18.3	23.5	19.0	11.8	21.9
Total No. ('000)	1,428.7	1,031.3	283.7	3,395.9	2,725.0	1,613.9	439.1	4,816.9	3,825.4	2,182.2	562.7	6,621.0
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia, Government of, Fourth Malaysia Plan 1976-1981, 1976: 80-1; Malaysia, Government of, Sixth Malaysia Plan 1986 -1991, 1991: 36.

Table 7.7
Malaysia: Employment by Occupation by Ethnicity, 1970-90
(in percentage)

	1970				1980				1990			
Occupation	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total	Malay	Chinese	Indian	Total
Professional & Technical	4.3	5.1	4.9	4.7	5.7	6.0	6.7	6.0	9.2	8.2	7.9	8.8
Administration & Management	0.5	1.8	0.8	1.1	0.5	2.0	0.5	1.1	1.4	4.3	1.5	2.4
Clerical & Related	3.4	6.2	8.1	4.9	6.7	8.2	7.1	7.3	9.2	10.9	9.0	9.7
Sales & Related	4.6	15.3	9.5	8.4	5.4	18.1	7.2	9.8	7.1	19.7	8.8	11.5
Service Workers	6.7	8.5	10.9	7.4	8.5	8.6	9.5	8.7	12.4	9.5	14.5	11.6
Agricultural Workers	62.3	21.2	41.0	48.3	50.2	19.6	37.3	38.7	37.4	13.5	23.3	28.3
Prod. Transport Workers	18.0	41.6	24.7	25.2	22.9	37.4	31.5	28.5	23.2	33.8	34.8	27.6
Total No. ('000)	1,447.6	1,043.6	301.4	3,395.9	2,725.0	1,613.9	439.1	4,816.9	3,825.4	2,182.2	562.7	6,621.0
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia, Government of, Fourth Malaysia Plan 1976-1981, 1981: 59; Malaysia, Government of, Sixth Malaysia Plan 1986 -1991, 1991: 34.

workers. Closer inspection shows that Malay agricultural workers have declined from 62.3 per cent in 1970 to 37.4 per cent in 1990. The highest growth has been in clerical and services (about 6 percentage points), professional and managerial, and production and transport workers (about 5 percentage points). The traditional domain of the Chinese, that of production and transport workers has fallen by about 8 percentage points. When comparing Malays and Chinese, the Chinese are growing at a slower rate in the other areas, which they have been linked to in the past, such as sales, clerical and most importantly, the professional and technical workers. Instead, these are the occupations for which the Malays are gaining ground pointing to the success of the NEP.

This sector has provided evidence of Malays successfully penetrating the modern industrial sectors and taking occupations associated with the developed economy. As part of the process, more women and foreign workers have entered the workforce. But what are the implications for urbanization, the geographical component of the NEP?

7.3 THE THIRD WAVE OF URBANIZATION, 1970-91

In terms of urban development, the 1970s and 1980s had culminated into the third wave of urbanization based largely on Malay rural-urban migration and their participation in the modern sectors of the economy (see Chapter 2 for urbanization up to 1970). The growth of the economy, stimulated by both deliberate government policies and performance in the world economy brought about the sectoral shifts in Malaysia's development in line with industrial and occupational changes, which were blurring the traditional association with race and occupation. The urban restructuring programme in the NEP dealt with the second part of the two-pronged development strategy of eliminating the identification of race and economic function and geographic location (Malaysia, Government of 1971: 1). Migration was the tool. Has it under a deliberate policy been able to move Malays out of poor rural occupations, mostly in the informal sector to the urban areas to reap the benefits of participation in the modern, formal economy? It is necessary to emphasize the planned nature of the policy because the government did not want an influx of poor peasants flocking into overpopulated towns only to merge with an already large pool of urban

unemployed. This would have been politically suicidal. Already the May 1969 racial riots had demonstrated how fragile and potentially explosive such a situation could become. This section reviews the urbanization process, distribution of urban areas by state, and especially the ethnic composition, while the next section will deal with regional development, which played a crucial role in bridging gaps and balancing the inequalities.

7.3.1 Rapid Urbanization

By 1980, 37.5 per cent of the population in Peninsular Malaysia was urbanized compared with 14.8 per cent in 1970. The level of urbanization for Malaysia as a whole was 35.8 per cent in 1980 compared with 26.8 per cent in 1970. This had been the most dramatic increase. The population in urban areas, initially bulwarked by rural-urban migration, will later see natural increase playing a greater role, with rural-urban migration becoming less important. This became the case in 1991.

There had already been some concern that 10,000 and above as a cut-off point for the definition of urban may be unrealistic especially with the rapid development of conglomerations and built-up areas around these towns between 1970-80. Thus, the Census in 1991[1] decided to change the definition of urban to include contiguous built-up areas around towns of 10,000 or more. As a consequence, by 1991, 50.7 per cent of the Malaysian population was urban (Table 7.8).

To get a sense of the change between 1970 and 1990, Table 7.8 displays the percentage of urban population by state, using the 1970/80 and the 1991 definition for 1980 and 1991 for a better comparison. Although the level of urbanization is higher with the 1991 definition, it reflects more accurately the functional meaning of urbanization, against a more simplistic numerical definition. The level of urbanization in 1991 showed that, except for Perlis and Pahang, almost all states had at least one-third of their population living in urban areas – a far cry from the 1970s. The world economy, other government development policies, and the NEP all played a role in the

[1] In the 1991 Census, urban areas were defined as cities of 10,000 persons and their adjoining built-up areas. Built-up areas were defined as areas contiguous to a gazetted area with at least 60 per cent of its population (10 years or more) engaged in non-agricultural activities and at least 30 per cent of the houses with modern toilet facilities (Khoo and Van, 1996:4).

Table 7.8
Malaysia: Level of Urbanization by State, Malaysia, 1970, 1980 and 1991

State	Percentage of Urban Population				
	1970	1980		1991	
		1970/1980 Definition	1991 Definition	1970/1980 Definition	1991 Definition
Johor	26.3	35.2	37.5	32.1	47.8
Kedah	12.6	22.5	23.0	22.1	32.5
Kelantan	15.1	28.1	28.1	28.7	33.5
Melaka	25.1	23.8	27.2	17.9	38.7
Negeri Sembilan	21.6	32.6	35.9	33.5	42.0
Pahang	19.0	26.1	26.7	25.9	30.4
Perak	27.5	33.8	36.4	36.7	53.6
Perlis	-	8.9	8.9	7.8	26.6
Penang	51.0	47.5	56.1	39.5	75.0
Sabah	16.9	19.9	24.4	21.9	33.2
Sarawak	15.5	18.0	23.9	24.5	37.5
Selangor	9.5	40.9	46.3	49.4	75.2
Terengganu	27.9	40.9	42.9	36.9	44.5
Wilayah Persekutuan					
Kuala Lumpur	100.0	100.0	100.0	100.0	100.0
Labuan	-	46.3	46.3	48.4	48.4
Malaysia	26.8	35.8	38.8	36.3	50.7

Source: Khoo and Van, 1996:9.

urbanization of this country. As expected, Wilayah (where Kuala Lumpur, the capital city is) had a 100 per cent urban population with Selangor and Penang, having 75.2 per cent and 75.0 per cent, respectively. The increase in urbanization in Selangor is due to the growth of towns; that of Terengganu a result of administrative boundaries. On the whole, the patterns of urbanization between the states had not changed much between 1980 and 1990. However, if the 1970/80 definition had been retained, the level of urbanization in Malaysia in 1991 would only be 36.3 per cent, a growth of 0.5 percentage point, with several states registering a decline in urban population, which would have been unrealistic. Using the new definition, between 1980-91, the urban rate grew at a faster rate of 5.1 per cent than the growth of the total population at 2.6 per cent (Khoo and Van, 1996:10-11).

Table 7.9 shows the rate of urbanization by state between 1970-91. Between 1970-80, the rate of urbanization was highest for Selangor (14.6 per cent), Kelantan (6.2 per cent), and Kedah (5.8 per cent). By 1980-91, all have generally slowed down except for Perlis (achieving urban status for the first time) and Selangor (4.4 per cent), due to rapid economic development which attracted a large inflow of internal and international migrants, and suburbanization.

Khoo and Van (1996: 14), using a decomposition exercise of the components of urban growth concluded that the main elements of urban population growth in Peninsular Malaysia between 1980-91 was natural increase (52 per cent) and net reclassification (37 per cent). Net migration displayed a sharp increase to 10 per cent between 1980-91 as against 5 per cent over 1970-80. The reason was that migrants tended to settle in the periphery areas. Further, as a result of suburbanization, there was a net outflow from the core areas to the built-up areas. In fact, even in states which experienced outmigration, they were mainly net outflows from urban areas, a trend for both the intercensal periods of 1970-80 and 1980-91.

Since migration is an important component in the reclassified areas, it is useful to estimate its role between 1986-91. As expected of a rapidly industrializing country with over half its population in urban areas, the larger inflow (net inflow of 318,300 persons) of migrants was to the urban fringe areas; rural-urban migrants (net inflow of 48,600 persons) gravitated to these built-up areas; with a net outflow of 77,000 persons from the urban core to rural areas, which is in final analysis, mostly suburbanization. (Khoo and Van, 1996: 16-7).

Table 7.9
Malaysia: Rate of Urbanization by State, Malaysia, 1970-91

State	Average Annual Growth Rates (per cent)					
	Urban Population		Total Population		Rate of Urbanization (per cent)	
	1970-80	1980-90[a]	1970-80	1980-91	1970-80	1980-91[b]
Johor	5.1	4.7	2.1	2.5	3.0	2.2
Kedah	7.0	4.9	1.2	1.7	5.8	3.2
Kelantan	8.5	4.5	2.3	2.9	6.2	1.6
Melaka	0.5	4.3	1.0	1.1	-0.5	3.2
Negeri Sembilan	5.5	3.5	1.4	2.1	4.1	1.4
Pahang	7.4	4.0	4.2	2.8	3.2	1.2
Perak	3.1	4.2	1.1	0.7	2.0	3.5
Perlis	-	12.1	1.8	2.2	-	9.9
Pulau Pinang	0.8	4.2	1.5	1.5	0.7	2.7
Sabah	5.4	8.5	3.8	5.7	1.6	2.8
Sarawak	3.9	6.7	2.4	2.6	1.5	4.1
Selangor	18.3	8.7	3.7	4.3	14.6	4.4
Terengganu	7.2	3.8	2.6	3.4	4.6	0.4
Wilayah Persekutuan						
Kuala Lumpur	3.5	2.0	-	2.0	-	-
Labuan	-	7.0	4.3	6.5	-	0.5
Malaysia	5.2	5.1	2.3	2.6	2.9	2.5

Source: Khoo and Van, 1996:9.
Note: [a+b] Based on 1991 definition of urban areas.

7.3.2 Growth of Urban Areas and Decentralization

In terms of the growth of cities, while 11 towns crossed the threshold of 10,000 in 1970, this grew to 36 towns by 1980. As a continuation of the 1957-70 trend, the number of urban areas rose to four in the lagging states of Kedah, Perlis, Kelantan and Terengganu. Again, mirroring the 1957-70 patterns, the 1980s witnessed the relative decline of the dominance of the four largest towns of Kuala Lumpur, George Town, Ipoh and Johor Bahru. The government gave priority to the development of intermediate towns such as Kota Bharu, Alor Setar and Kuantan which possessed strong potential for growth. There was policy concern that the hierarchy of urban areas should not be skewed towards only the largest cities. In addition, by 1980, 37 new townships involving a population of only 104,400 persons were established in the four regional development authorities of DARA, KEJORA, KETENGAH and KESEDAR in Pahang and the east coast states. This was an attempt to create small centres as nodes throughout these large land development schemes as a means to exploit economies of scale and infrastructural advantages.

To get a sense of the growth of towns and the changing distribution, between 1980 and 1991, Table 7.10 displays the urban size class of this period. The distribution of urban areas by size shows that the number of urban centres and the total population within each size had increased markedly over the intercensal years (Malaysia, Department of Statistics, 1995:32). In spite of the redefinition of urban areas in 1991, the percentage share of the size classes, with the exception of those between 50,000 and 149,999 persons, remained stable during the intercensal years. There is nearly a doubling of towns between 10,000-24,999 and in the next size up, from 9 to 23 between 1980-91. But the percentage of population for these two groups have remained the same. The increase in cities over 75,000-149,999 was due to an upgrading of urban areas from the 50,000-74,999 size class. What this suggests, following from Chapter 2 which examined the second wave of urbanization, up to 1970, is that urban areas are continuing to grow, especially in the lower levels which implies decentralization from the larger cities.

Another way of decentralizing was placement of industrial estates throughout the peninsula. For such estates to succeed they had to be close to large urban settlements to draw the surplus population, at the same time, exploit the more established infrastructure. Accessibility was another important ingredient. Thus, in 1971 out of

Table 7.10
Peninsular Malaysia: Population in Urban Areas by Ethnic Group
('000)

Ethnic Group	1970				1980				1990			
	Urban		Total		Urban		Total		Urban		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Malay	713	27	4,822	53	1,359	33	6,384	54	2,976	45	8,493	58
Chinese	1,557	59	3,274	36	2,234	54	4,136	35	2,849	44	4,579	31
Indian	338	13	978	10	508	12	1,239	10	662	10	1,441	10
Others	30	1	73	1	47	1	90	1	40	1	92	1
Total	2,638	100	9,147	100	4,148	100	11,849	100	6,527	100.0	14,605	100.0

Source: Malaysia, Government of, Fourth Malaysia Plan 1981-1985, 1981: 79, Malaysia, Government of, Fifth Malaysia Plan 1986-1990, 1986: 135.

nine industrial estates in Peninsular Malaysia only one was located in the underdeveloped states. By 1980 their total had increased to 13 and between 1971-80 these states had 8 per cent of the total industries approved by the Malaysian Industrial Development Authority (MIDA). The growth of urbanization is one of the products of the industralization process, the foundations having been laid in the late 1970s. But while industralization will be catalytic, it is likely to be increasingly capital-intensive. Indications of this trend were obvious in the transfer from labour-intensive to capital-intensive semiconductor industries in the FTZs (Chapter 5). However, migrant workers will continue to be imported to help alleviate this transition, but as their cost rise, the pressure to convert to capital-intensive production will mount. Bearing this in mind, it is likely that urban expansion will continue in the secondary sector, especially manufacturing, but with tertiary continuing to grow.

This sectoral shift of population has aggravated the shortages of labour in the plantation sector especially rubber and oil palm, as discussed earlier. This deficit, which had occurred mainly among the younger segment of the labour force, had already been felt in the late 1970s as a result of the displacement of labour to urban areas, including Singapore and the Middle-East. Here, the impact of the formal education system is in restructuring the rural labour force towards the non-primary sectors and therefore, to urbanization. In order to cope with the labour shortage, particularly of the unskilled type, a process of capital substitution had to occur, (as in the research and development into mechanical rubber-tapping, etc.) but to fill the gap, the intake of foreign workers expanded. And as mentioned earlier, the migration of rural workers into urban areas, to manufacturing and the services, continued to further worsen the rural labour shortages.

This increased urbanization in the 1980s concentrated in the major cities of Kuala Lumpur, George Town, Johor Bahru and Ipoh as much as it had in the 1970s owing to the momentum created by the expansion of employment. However, government policies directed at the second-tier cities caused a regional shift of the share of urban population as well as rural population (the latter more by natural growth than through migration) towards the east coast and the south to secondary cities (Kuantan, Seremban, Alor Setar, Kota Baru and Kuala Terengganu). The process of metropolitanization, which focusses on conurbations such as the Klang Valley and the George Town-Butterworth-Bukit Mertajam complex continue to expand.

7.3.3 Ethnic Composition of Urban Areas

The ethnic composition of the urban population had changed with the increased participation of Malays in urban activities. As illustrated in Table 7.11 the percentage of Malays in 1990 who lived in urban areas had increased to 45 per cent compared to only 27 per cent in 1970. In absolute terms, the Malay urban population had increased by nearly 2.3 million between 1970 to 1990. Malay urban population grew at a rate of 6.0 per cent per annum; their share of the urban population reaching 45 per cent. Although the rate of growth of urban population was highest for Malays, the Chinese still accounted for more than half of the total urban population in 1980.

Table 7.11
Malaysia: Number and Population Distribution of Urban Centres by Size Class, 1980 and 1991

	1980		1991	
Size Class	Urban Centres (%)	Population ('000)	Urban Centres (%)	Population ('000)
150,000 & over	55	2,456.1	54	4,799.4
75,000 - 149,999	15	661.2	19	1,665.5
50,000 - 74,999	11	500.7	6	538.0
25,000 – 49,999	7	321.0	9	810.0
10,000 – 24,999	12	553.4	12	1,085.8
A Urban Areas	100	4,492.4	100	8,898.6

Source: Malaysia, Department of Statistics, 1995: 32.

However, the Chinese had decreased their urban population from 59.0 per cent in 1970 to 44 per cent in 1990. The Malays had increased their urban share while that of the Indians also declined. Between 1970-80, the Malays experienced the fastest rate of

urbanization of 6.7 per cent per annum and 6.1 per cent between 1980-90. This compares to 3 per cent per annum and 2.7 per cent per annum during the respective periods for the Chinese. This rate of Malay urbanization is much higher than the national average of 5.6 per cent per annum, indicating rapid and continuing urbanization through rural-urban migration as well as a high rate of natural increase. By 1990 Malays will be the largest urban population – an achievement of the NEP, all within two decades. This is similar to the trends discussed earlier, of Malays playing increasingly a greater role in what had been deemed Chinese-dominated sectors.

However, the urbanization of the Malays is not evenly spread over all urban areas. The urban development strategy in the Fourth Malaysia Plan 1981-85 had called for an acceleration of the development of towns. They were more predominant in the Malay lagging states, of the east coast, particularly in Kuala Trengganu and Kota Bharu. Although part of the government efforts to increase participation of Malays in the urban economy were concentrated in Kuala Lumpur, in 1980, Malays constituted only 28.4 per cent of the total population in the capital city. However, in absolute numbers, Kuala Lumpur has the largest number of Malays with the highest annual growth rate.

7.4 A COMPLEX URBAN SCENARIO

Two factors affect the aims of urban restructuring and exacerbate existing problems. First, there is a lack of understanding of rural-urban processes such as rural-urban linkages. There is a tendency to think of urban and rural development as two separate issues without enough attempts to integrate them into regional development. Second, there is a misconception that migration is solely an agent of restructuring instead of the dialectical relationship between migration and development change. These issues have been central to this thesis and discussed in the earlier chapters. Not only is migration structural but the complexities of cause and effect are often inextricably embedded in the structures. In this sense, migration is not only a response to the broader political and economic processes but in itself conditions the very structures which affect it. Understanding these two problems will result in the formulation of more appropriate and effective policies which are based on a better understanding of the issues which themselves are often dictated by Malaysia's dependent position in the world economy. For example, as Malaysia continues to develop the electronics and textile industries, the leaders in manufacturing, which by 1990, had become the largest contributor to

GDP, at 27 per cent (the next largest is agriculture at 18.7 per cent), the government must expect the cyclical nature of recessions and their negative impacts owing to the vulnerability of the Malaysian economy. The country must anticipate extreme variations in its growth performance of severe recessions (1985-86) to boom conditions (1988-90). The end of the decade saw growth in the world economy which facilitated the expansion of output and trade as well as investment and capital flows, adding to a rapidly increasing domestic demand.

There are several indicators which point to an urban future that is far more complex in spite of much success of current policy. It is in pre-empting these spontaneous changes that the proper choice of strategy and policy can be made before the problem becomes overwhelming. These changes relate to the question of release of labour from an increasingly modern agricultural sector, and their absorption in a future urban economic arrangement. The first and most important of these processes involves the country's land development programmes and policies aimed at eradicating poverty within the rural sector. Several factors, however, militate against the continued expansion of the agricultural sector in this manner, and make the provision of urban alternatives inevitable and critical.

While the above seems to imply that an increased urban migration is inevitable in the country due to several pressures in rural areas and complementary urban attractions, there is also much urbanization response arising from prosperity. This is especially so at the lower levels of the city hierarchy where nodal responses are generated largely by structural changes in the surrounding hinterland. The best example of this incipient urbanization is in the study region of the MADA, where rising incomes from *padi* farming due to double-cropping have created increasing demand for goods, and thus the growth of central place functions in the Kedah plain. Similarly, this is evident in the FELDA policy of centralizing commercial facilities in numerous new urban centres in their land schemes. Another example of this incipient urbanization is the emergence of spontaneous lower-order centres in some of the regional development schemes, particularly in north Pahang.

A third development seen from the 1980s is the process of dispersed urbanization in the rural areas. Several case studies have pointed to the spontaneous growth of small towns in north Pahang (as a result of the maturity and productivity of the FELDA schemes), as well as the development of new towns in the regional development

schemes, such as Pahang Tenggara and Johor Tenggara. This prospect is lessened only by the lack of settlers and migrants to these schemes. The growth of these lower-order centres were also a result of regional productivity and the process of rural industrialization which were given greater emphasis in the 1990s.

From the mid-1970s, there was a considerable migration of female labour into the FTZs of Penang and Kuala Lumpur. In the 1980s, the growth of the export platform industries, particularly in electronics, continued, in spite of the recession of 1985 which saw some critical shutdowns and retrenchments (Chapter 5). The economic boom since 1987 translated not only to a surge in the demand for export products, but also a growing shortage of labour. These changes in the urban labour force were affected by two trends in the export-oriented manufacturing industries.

First, there was a move towards long-term conversion to more capital-intensive techniques in these industries. The electronics industry converted to machines which took over the work of about 20-30 girls in one assembly line. New testing and wafer production technologies were introduced, bringing the FTZ manufacturing in Penang to a higher level. Basic low-level production lines which were labour-intensive moved to less developed Third World countries.

Second, there was a tendency to cope in the short-run by increasing the employment of temporary labour and the reduction of indirect labour. These evolutionary processes suggest that in the 1970s which depended on cheap labour, now had to change their technological structure. The labour involved will increasingly shift to jobs in the tertiary and the government sectors. The export zones were able to train the better production workers to a higher level, in line with their own technological development. For the others, work in these FTZs became a stepping-stone in the growth of the labour force in these urban concentrations. Meanwhile, the factories in these export platform industries will increase their capitalization and go for more educated and skilled workers, less in numbers, but more productive.

The emergence of a female labour force in the urban areas, studied in this thesis in Chapters 5 and 6 is one of the particular aspects of the growth of the urban working class in Malaysia in the 1970s and 1980s. A second important feature which appeared was the emergence of a more permanent Malay middle class – permanently inserted into the urban economy as the restructuring objective continued to be actively pursued

by the government. This was the nascent Malay urban class who would remain in the cities, marry and bring up families who will be completely urban. Links with villages will slowly diminish as the older generation, who may not have migrated with their children, dies out.

Another implication of the trend of urbanization in the 1980s is its impact on village-level development. For the "traditional" villages, those that are still in the periphery of the economy, there will be a continuation of the outmigration of youthful labour to urban areas. This outmigration has significant impact on the level of productivity and agricultural production in the rural areas. While some of this decline will be compensated by the development of the "new" towns, such as those in the FELDA schemes, the effect of such rural outmigration will be to increase the already large rural-urban gap in income and welfare. Rural poverty remains the major development problem of the 1980s, and the widening of the rural-urban gap is due mainly to the inability of rural income growth to match the rate of expansion in the urban industrial sector. Thus, only with the increase of off-farm employment and the creation of a class of rural wage workers will this process of depletion of rural population be stemmed.

Thus, as the heavily-invested agricultural schemes, such as MADA, where the field study of this dissertation was located, moves into more productive *padi* strains, from double-cropping to triple, or five crops within two years, *kabotas* and combine harvesters, designed for the needs of *padi*-growing areas will replace workers. Wage workers will be the order of the day. Replanting, which used to be very labour-intensive will be replaced, through sheer necessity, by hand-sowing. Unused land, as a consequence of outmigration, or the elderly being unable to work them, will be consolidated through renting of contiguous parcels to facilitate the use of machinery. Harvests will be more capital-intensive, and more productive. For the first time, the whole labour process of *padi*-farming in the region will change. From small plots, using family and limited *ambil upah* workers from surrounding *kampungs*, *padi*-growing has transformed to large acreages, using new rice strains, modern techniques of cultivation, planting and harvesting, with machinery playing a major role. The farmer becomes an employer, within the formal sector.

The foreign-born during the first wave of urbanization were the Chinese and Indians brought into Colonial Malaya (Chapter 2). In the 1980s and 1990s their importance had dwindled owing to attrition through death. Instead, the new immigrants especially

from 1980-90 which made up 2.1 per cent (about 300,000) of Peninsular Malaysia's population comprised 54.5 per cent Indonesian, 11.9 per cent Thais, 1.9 per cent Filipinos and another 31.7 per cent other foreigners (Malaysia, Department of Statistics, 1995:36-8). This situation is more severe in East Malaysia where as many as 1 in 4 are foreign.

The impact of these developments is that most of these illegal Indonesian immigrants settled in Wilayah Persekutuan, Selangor and Johor. Although most came as initial individuals, working in plantation, construction, manufacturing and services, their families continued to drift in illegally across the narrowest part of the Straits of Malacca. Natural increase has added to their growth. Such enclaves are found throughout the urban conglomerations, often as squatters[2] taking over the self-employed type of petty trading associated with the informal sector of the earlier Chinese and later, Malays. There is concern over direct conflict with the locals, strains on urban facilities, bringing in contagious diseases, 'deviant' religious teachings and crimes. Between 1985-91, aliens accounted for 1.5-3 per cent of crimes in the country. But, more worrying is that aliens comprised 14.7-18.2 per cent of all murders and 48.2 per cent of group robbery in the country (Azizah, 2003). They are now estimated to be about 4 million, and are accessing the healthcare services, schooling and low-cost housing. There has been a lot of resentment and antagonism against these foreingners by Malaysians whose lives are negatively affected by their presence and employment. When the economy is good such sentiments are contained. They would flare up in economic slumps. Most importantly, would this slant the ethnic balance and consequently, the power politics? This is particularly relevant in Sabah and Sarawak where the Indonesian and Filipino workers comprise nearly a quarter of the population.

There was also a stream of highly-educated Malaysians, mostly non-Malays, who emigrated to Singapore, UK, and Australasia as well as Canada and the US. It was not difficult as all were educated in English, benefitting from the vestiges of the colonial education system. Some of these were students who went overseas for tertiary education, but remained. This happened during two periods. The first was the Malayanization period, of the 1960s. Malay was introduced as the national language

[2] In 1987, City Hall statistics showed that Indonesians were found in 56 squatter settlements, accounting for at least 68 per cent of the capital's squatter population of about 182,000 (Azizah: 2003).

and the medium of instruction in schools. There was overt preferential treatment of Malays. The second was after the 1969 race riots which created much insecurity among the non-Malays leading to a brain drain. With the economic boom, a small flow of these Malaysians have returned from overseas, especially when the parents felt that their children should develop with their extended families still in Malaysia. Such were the complex flows of people which added to the intricacies of the somewhat simplistic two-circuit system.

7.5 REGIONAL DEVELOPMENT AND THE TWO-CIRCUIT SYSTEM

This final section appraises how the regional development policies between 1970 to 1990 contributed to the breaking of the two-circuit system of migration. The data presented are at a macro-level, in line with the earlier parts of this chapter, providing a broad sweep of how regional development impacted on migration, not only in alleviating poverty but also in restructuring society.

In terms of migration, the Northern Region of Perlis, Kedah, Penang and Perak, was characterized by a mobile population with a large but narrowly-based (essentially electronic and textiles) manufacturing sector with little natural resources. The Central Region of Selangor, Wilayah, Negeri Sembilan and Melaka received the largest number of migrants because of its growing and diversified economic sectors. It was resource-exploitation of the land-rich states of Pahang with massive land development schemes and Terengganu exploiting petroleum which attracted migration in the Eastern Region. Although the Southern Region of Johor had a balanced economic structure, it lost migrants as its natural resources were rapidly exhausted (Malaysia, Government of 1986: 167-8).

Some of the key economic, demographic, socio-economic and natural resources indicators are shown in Table 7.12. In terms of economic indicators, the Central Region has the highest with GDP per capita at $5322 against the rest, hovering at about $3100. Similarly, the Central Region records the highest for GDP per capita growth. For net internal migrants, the Central Region has a net positive number of nearly 1 million, lowest unemployment rate and is only overtaken by the Eastern Region for highest population growth rate of 3.4 per cent. As expected, the socio-economic and motorcars all show the better economic conditions of the Central Region in contrast to

Table 7.12
Malaysia: Selected Key Regional Indicators, 1980 and 1985

Sector	Regions				
	Northern	Central[a]	Eastern	Southern	Malaysia
Economic (in 1978 prices)					
Per capita GDP ($)					
1980	2,811	4,602	2,631	2,916	3,221
1985	3,162	5,322	3,111	3,324	3,758
Ratio of *per capita* GDP to Malaysian average					
1980	0.87	1.43	0.82	0.91	1.00
1985	0.84	1.42	0.83	0.88	1.00
Per capita GCP growth (% p.a.), 1981-85	2.4	2.9	3.4	2.7	3.1
Demographic					
Population ('000)					
1980	4,039.9	3,545.1	2,243.1	1,644.9	13,879.2
1985	4,360.4	4,092.6	2,661.8	1,854.0	15,791.1
Population growth rate (% p.a.), 1981-85	1.5	2.9	3.4	2.4	2.6
Unemployment rate (%)					
1980	6.1	4.5	6.5	5.3	5.7
1985	7.7	6.6	8.1	6.9	7.6
Net internal migration ('000), 1981-95	-144.4	95.5	49.5	-12.5	n.a.
Socio-Economic					
Infant mortality rate (per 1,000 live births)					
1980	25.1	21.2	29.7	24.6	21.6
1985	19.2	14.3	21.6	22.7	18.3
Acute care hospital bed (per 1,000 population)					
1980	1.7	1.7	1.3	1.6	1.6
1985	1.8	1.5	1.7	1.7	1.7
Per cent of population with Piped water[b]					
1980	69.1	78.3	43.5	48.8	58.8
1985	80.6	86.4	54.0	69.0	69.9
Per cent of population with electricity					
1980	39.8	57.3	39.7	40.3	49.9
1985	65.6	85.5	59.7	62.9	71.3
Motorcars and motorcycles Registered (per 1,000 population)					
1980	169	221	116	214	178
1985	254	389	180	197	248
Natural resources, 1981-85					
New land development by FELDA:					
Area ('000 ha.)	9.7	22.0	80.6	19.7	162.2
Number of settlers ('000)	2.4	4.7	12.5	5.0	24.5
Idle land development ('000 ha.):					
Padi	5.9	0.4	2.6	1.1	11.0
Non-*padi*	3.5	2.0	7.7	1.4	15.6
Log production ('000 cu.m.)	8,334	5,207	29,729	8,477	166,405
Forest regeneration ('000 ha.)	64.8	33.3	221.5	34.4	396.6
Mineral production					
Tin ore ('000 tonnes)	106.6	68.7	9.6	2.8	187.7
Crude petroleum ('000 barrels)	-	-	146,803	-	344,670

Source: Adapted from Malaysia, Government of, Fifth Malaysia Plan 1991-1996, 1996:170-1.
Notes: [a] Including the Federal Territory of Labuan
[b] Combined figures for Kedah/ Perlis, and Selangor/ the Federal Territory of Kuala Lumpur

the Eastern. The importance of land development in the Eastern Region compared to the rest of the country is reflected in the highest acreage and number of settlers. Its forestry value is shown in the largest amount of log production. Petroleum production is only in the Eastern Region, in Terengganu.

Finally, Table 7.13 shows the GDP by region and industry of origin for 1985. The Central Region dominates in the tertiary and secondary industries of manufacturing, wholesale and retail, finance and government services, reemphasizing its prominent economic position with a per capita GDP of $5322 in 1985, which is about 42 per cent higher than the national average. The growth was propelled by Selangor and Wilayah. The dynamic manufacturing sector contributed about 50 per cent of the total increase in manufacturing output and 35 per cent of new jobs created in the country (Malaysia, Government of, 1986: 178). Other than manufacturing, the industries which grew faster than the national average were wholesale and retail, hotels and restaurants, finance, real estate and business services. The expansion of government employment was important especially as it coincided with the *Isi Penuh* exercise. In contrast, agriculture is most important for the Northern and the Eastern Regions. The Eastern Region's mainstay of the economy was agriculture, being 34 per cent of the regional GDP in 1985. The population here grew faster than the national average because Pahang was the largest recipient of migrants in the land development schemes and these settlers had larger families and higher fertility rates unlike urban-bound migrants.ndicators like infant mortality rate, per cent of population with piped water, electricity

Some trends continued into the economic growth period of the latter part of the decade. Selangor recorded the highest proportion of net inmigrants which constituted 6.2 per cent of the total population between 1986-91. Other states noted a different pattern from the 1980-85 patterns. For example, Perlis, Johor and Penang became net inflow states but to a lesser extent if compared to Selangor (Tan, 1996:8-10). Selangor drew migrants from all over, but especially from Wilayah (which had a low average growth) because of suburbanization. Johor's inflow was due to the rapid development of Johor Bahru (owing to its proximity to Singapore) and the second-tier towns with intensification of agriculture.

Table 7.13
Malaysia: Gross Domestic Product by Region and Industry of Region, 1985
($ million in 1978 prices)

Sector	Region				
	Northern	Central[a]	Eastern	Southern	Malaysia
Agriculture, Forestry, Livestock & Fishing	3,108	1,908	2,812	1,735	12,046
Mining and Quarrying	1,093	763	1,476	175	6,006
Manufacturing	2,864	5,767	703	1,379	11,357
Construction	634	1,165	411	332	3,048
Electricity, Gas & Water	240	419	109	87	988
Transport, Storage & Communications	922	1,686	359	390	3,805
Wholesale and Retail Trade, Hotels, & Restaurants	1,469	4,059	539	696	7,551
Finance, Insurance, Real estate & Business Services	1,244	2,323	567	501	5,212
Government Services	1,790	2,774	1,105	722	7,270
Other Services	291	706	120	86	1,312
Total	13,655	21,570	8,201	6,103	58,595
GDP at Purchasers' Value ($ million)	13,789	21,781	8,281	6,163	59,344
Population ('000)	4,360.4	4,092.6	2,661.8	1,854.0	15,791.1
Per capita GDP ($)	3,162	5,322	3,111	3,324	3,748.0
Ratio to Malaysian Average	0.84	1.42	0.83	0.88	1.00

Source: Adapted from Fifth Malaysia Plan 1986-1990, 1986: 175.
Note: [a] Including the Federal Territory of Labuan.

Another major reversal was recorded by Pahang. With the deceleration of land development schemes, this former major inmigration state became a net loss state. Wilayah which attracted migrants from all states because of its being the centre for government, financial and business, education as well as other services witnessed an outflow to Selangor. Penang which used to lose migrants became a minor inmigration state mainly because of the uptake of its FTZ industries and other tertiary-level activities from 1987 onwards.

Kedah and Perak continued to be outmigration states as previously. All the other states noted negative netmigrants, an indication of people leaving agriculture for the more modern areas of secondary and tertiary sector activities.

In view of these developments, as anticipated, the dominant flow in interstate migration was urban-urban which constituted 55 per cent of all migration between 1986-91 (Tan, 1996:22). This is a manifestation of over half the total population in the country being urban by 1991. Urban-rural migration made up 18.5 per cent. As the rural population has become proportionally smaller, the rural-urban and rural-rural migration streams were 16.1 per cent and 10.4 per cent, respectively. The release of population to urban areas remain staggered mainly by the impact of the regional development policies of the 1970s and 1980s. As about 30 per cent of the labour force is in agriculture, by the mid-1980s there will always remain a rural-rural movement not only of agriculturalists but workers associated with agri-business and activities in rural areas and small towns below 10,000 persons.

Closer examination of the urban-urban flow showed that the dominant group, of 28 per cent was made up of migrants moving between the largest cities of over 75,000 (Tan, 1996:23). Most of the rural to urban migrants also headed to these large cities (11.0 per cent).

It would be appropriate to discuss the impact of the heavily-invested land development schemes in Malaysia which have often been compared to the low-investment *transmigrasi* of Indonesia (see Chapter 2). The aim of the Malaysian government was to shift landless, poor farmers who were almost exclusively Malay to modern sector agriculture such as rubber and palm oil. Small urban nodes were created with modern amenities and facilities as part of the process of socializing Malays into a new life-

style. There was also some hope that in establishing these schemes a Malay entrepreneur middle-class would be created (Alladin, 1973).

Some of the effects were direct, for example, the movement of landless farmers, often from traditional *padi* to the more modern rubber and oil palm agriculture. This was picked up in Chapter 3 as a rural-rural stream, informal to formal. There is no question that poverty has been alleviated and restructuring achieved but at great cost to the government. Millions were spent for a handful of poor farmers as FELDA was unlikely to be able to deal with more than one-fifth of Malay landlessness (Abdul Aziz, 1964:43). Some of the other effects were indirect. For example, by increasing the incomes of these settlers and providing schools in these schemes, they were able to educate the second generation who then migrated to urban areas.

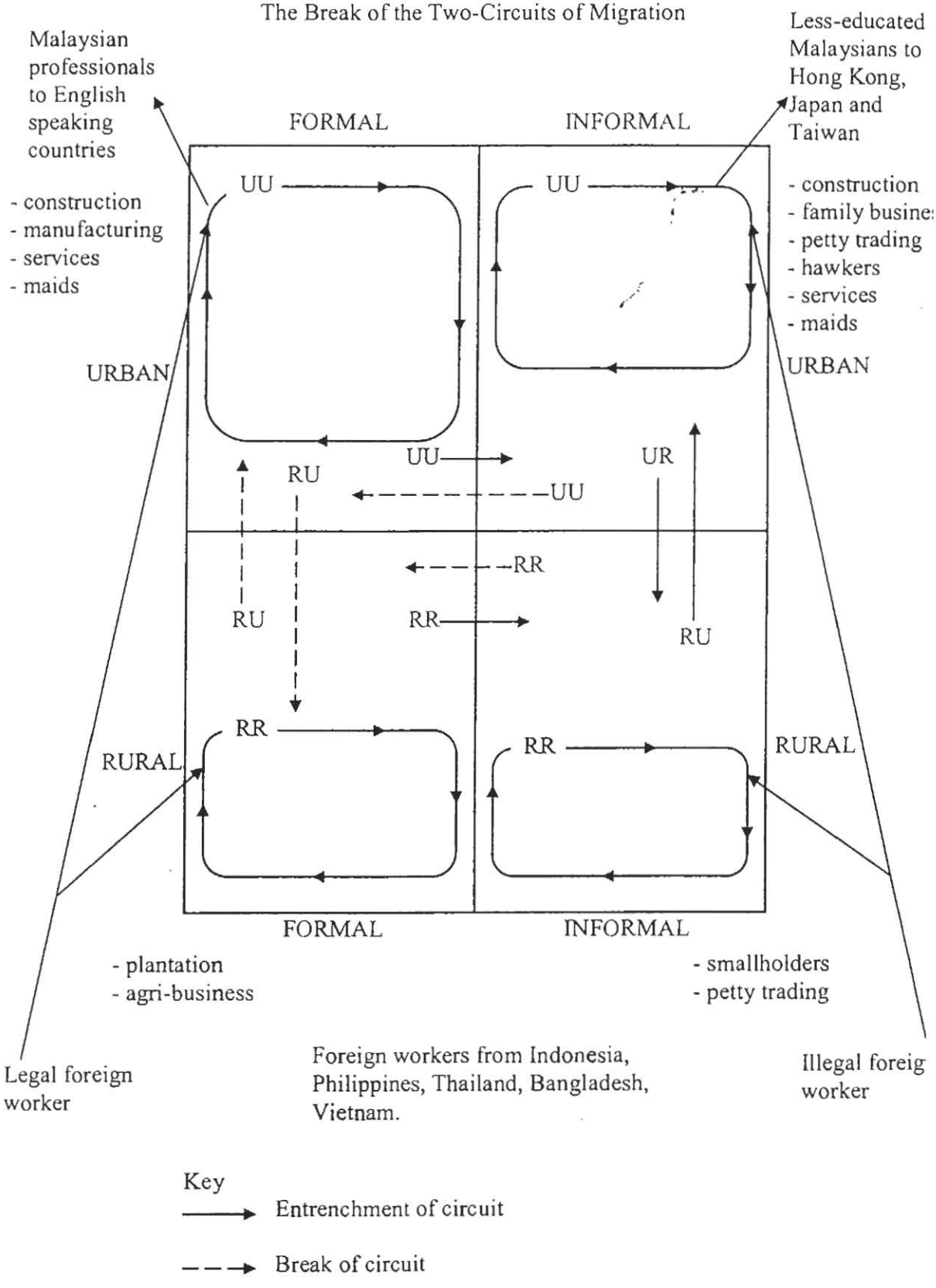
Thus, the regional development policies succeeded in increasing incomes and improving standards of living as well as a more equitable provision of public services – but at a tremendous cost. This was done though the RDAs where gains were made mostly by *bumiputras* (the target group) as well as the other ethnic groups through their participation in various programmes and economic activities generated through forward and backward linkages of regional programmes.

7.6 THE FINAL DISINTEGRATION OF THE TWO-CIRCUIT OF MIGRATION

With all these rapid changes in urbanization, sectoral shifts in industry and occupation with the Malay role being enhanced as a result of the NEP, the two-circuit system has crumbled within a span of twenty over years. Figure 7.1 illustrates the final dissolution of the two-circuits, depicting schematically the migration streams, including the leakages in and out of the system.

In the formal sector there will be a very strong urban-urban flow as over half the country's population is urbanized. Migrants from the urban areas will flow within and between major connurbations. For example, the Kuala Lumpur-Petaling Jaya and Kelang on the west, with Seremban in the south will coalesce and become the largest metropolitan region. Likewise, the same will happen to Penang, Perai, Sg. Petani and Kulim in the north-east with Bukit Mertajam in the west. The other capital cities will continue to develop and merge with smaller towns as development continues along

Figure 7.1
The Break of the Two-Circuits of Migration



Key

——→ Entrenchment of circuit

– – → Break of circuit

major roads, with Johor Bahru and a lesser extent Melaka, gaining substantially from the advantage of being next to Singapore. Urban to urban migrants will mostly move between these cities and less to lower-order towns. There may be some step-wise migration especially from lower-order towns and from industrial estates on the fringes of these towns. This new migration pattern will reflect that of industrialized countries.

As shown in Chapter 3 and the 1980-91 trends, there will continue to be a significant urban to rural flow mainly as a consequence of suburbanization. Returning urban migrants to the rural areas will be minimal, unlike the 1960s and 1970s. The rural-urban stream will continue, as more rural youths from other rural environments, other than the second generation from land developing schemes get educated and leave for the cities. It will become a smaller stream now, as the government has succeeded in staggering the outflow.

Within the formal rural sector, there will remain a rural-rural movement consisting mostly of government servants and wage agricultural workers reflecting the modernization of the agricultural sector, especially *padi*. Legal foreign workers will be part of this flow. Thus, the streams which represent the breaking of the two-circuits remain, but their importance will be overshadowed by the urban-urban and urban-rural migration.

In the informal sector, the urban-urban flow within the sector will continue, consisting of hawkers, etc. The illegal foreign workers will contribute to this group. More importantly, informal sector workers have been able to seek employment in the formal manufacturing and services sector, which constitute a very important break in the circuit, of a trend which did not play a vital role in the early 1970s. This is possible because of the massive creation of employment in the secondary and tertiary sectors.

As far as the urban-rural and rural-urban streams within the informal sector are concerned, they will still continue but of less significance. Even the rural-rural flow which was important, especially the settlers to land schemes, has now diminished with the deceleration in the 1990s of land development. There may be some less-educated family members of traditional farms who may migrate to work in plantations. But this would be very small.

What can be deduced from this is that the rigidity of the two-circuits has been weakened. The circuits which entrenched the structure has become unimportant, in particular the urban-urban and rural-rural flows from the formal to the informal sector. Movements which represented the break, such as the rural-urban and urban-rural within the formal sectors are less significant. Also, migrants from rural-rural, but informal to formal has fallen in numbers, although the urban-urban, from informal to formal, may have gained relevance. As these migration streams merge and their impact lessens, the rise of the urban-urban and urban-rural within the formal sector gains prominence.

This discussion will not be complete if it does not incorporate the impact of migrant workers into the country and their role in the two-circuits. As mentioned earlier, with the shift of labour out of agriculture into the secondary and tertiary sectors, illegal and legal foreign workers had to fill the vacuum in the plantations. Smallholders tended to employ illegal workers. With the growth in construction, foreign male migrants filled the gap. As Malaysian women played a bigger role in the labour force, foreign maids were recruited mostly from Philippines and later Indonesia. The Filipino maids tended to use Malaysia as a stepping stone to Singapore, Hong Kong and later to UK and Canada - for the far higher salaries and opportunities. In recent years, as the number of Filipino maids declined, the Indonesians have become the largest group of domestic maids. Maids are now coming from newer sources such as Thailand, Myanmar, Vietnam, etc. as Philippines and Indonesia deplete their labour supplies. Formal sector services, such as hotels and restaurants recruit workers from Philippines because of their ability to speak English. It is common to see small family-run restaurants and hawkers also employing foreign workers, often illegally. These industries and manufacturing have taken foreign workers of both sexes. And as discussed earlier, Malaysia has lost high-calibre professionals, to English-speaking countries, although there has been some returning in the boom years. At the same time, the less-educated informal workers have left initially for the Middle-East, but in the recession of the 1980s, for Hong Kong, Japan and Taiwan. Singapore has absorbed both levels but only on a legal basis.

Such is the complex picture of the migration patterns in Malaysia in the 1970s and 1980s. The forces described so far are intensifying into the 1990s. As more Malaysians move out of agriculture and the lower-level jobs for which they do not want, these will be filled by foreign workers as is the experience of the developed

countries. In fact, the illegal foreign workers with their families and children will become the new Malaysians, adding a new dimension to the socio-cultural complexion of this country.

CHAPTER 8
CONCLUSION

8.1 INTRODUCTION

This final chapter recapitulates the major arguments and research issues raised in this thesis. It suggests priority areas for further research, bearing in mind the major theoretical arguments of the study, and concludes on policy implications and the final disintegration of the two-circuit system of migration.

8.2 RECAPITULATION

The structural analysis of internal migration, at the national, local, family and individual levels as undertaken in this thesis, has pointed out certain social and economic rigidities in Malaysian society which reveal themselves in a particular pattern of movement of people between jobs and territories. This had been hypothesized as taking the form of a two-circuit system of migration structured according to strata, industry and formal-informal sector classification (Chapter 1). These circuits of migration, as they are called, were a product of the historical development of the Malaysian economy since its colonial phase.

The Malaysian economy itself, because of the nature of its incorporation and integration into the world economy, had developed according to the model of a neo-colonial economy specializing in the production of primary commodities for export to the industrialized markets. As a result of colonial labour and land policies, among others, the population structure took a multi-ethnic character with a close identification of race with occupation and location. Up to 1970, the indigenous population was made up largely of Malays located in rural areas pursuing agricultural activities, while their urban population, still low compared to the Chinese, was basically in government service. The non-Malays, mostly Chinese, lived mainly in the urban areas, and were engaged in the trade and services sector, as well as in the tin mines and rubber estates. The level of industrialization was still low, given the limited domestic market and the import substitution policy adopted.

The study presented here has tried to show the historical and political economic basis of this strategy. The historical evolution of urbanization and the urban system has been traced by considering two "waves" of urbanization during two periods in

the modern development of Malaysia, between 1785 and 1930, and between 1931 to 1970. The development of the urban system was characterized as a direct product of the penetration of colonial capitalism and the subsequent integration of Malaysia into the world economic system. The first two waves of urbanization, thus, were determined by the trends and cyclical rhythms of the process of articulation of the Malaysian economy in the international division of labour (Chapter 2).

The analysis of national migration streams between 1965-70 in Chapter 3 in terms of its ethnic and economic characteristics, has shown, however, that the population shifts are highly structured. They reflect basically the institutional rigidity and the lack of major transformation in Malaysia's economy up to 1970. The migration streams whether defined by the rural or urban, formal or informal dichotomy, displayed at a macro-level the Malay-Chinese differences, especially in the type of occupation and industry and rural or urban economies each ethnic group gravitated to. Despite some important universal features in each migration stream, which reflects their selectivities, such as sex, age and education, Malays remained less diversified economically. Education was their main route to breaking the two-circuits, and into the modern sector occupations.

The analysis of economic structure and migration at the village level in Chapter 4 reaffirms that there has been little change to this situation in spite of economic growth up till 1970. There were, of course, periods of population redistribution when the country was disrupted by external influences. The Malaysian economy prospered through tremendous expansion of its primary export sector which affected the smaller towns, while import-substitution introduced in the 1960s reinforced the larger towns.

The major activity, however, has been in rural areas, particularly with the implementation of rural development programmes after Independence in 1957. These programmes have successfully held back the inevitable flow of rural labour to urban areas. The lowering of rural-urban differentials by providing alternative employment opportunities, increasing productivity and wages, facilities and amenities including infrastructure (as in the Simpang Empat case study) affected the decision to migrate in a way that would not, then, create a disequilibrium in the spatial labour market. The high labour absorptive capacity of agriculture, especially the smallholding sector, combined with a traditional affinity to the land

and the existence of a still under-utilized land frontier, have contributed much to the contemporary population distribution in the country.

These national patterns were further reinforced in the study of the *padi*-growing villages in the Muda region in the late 1970s. As the data were collected from purposive surveys on mobility and migration, including detailed household and individual life-histories, many of the structures and processes elucidated helped to explain the inflexibilities of the system. At the regional-local context, a typology of mobility groups provided a fuller understanding on how the scale of a study, and from the rural-end can highlight the importance of the different types of mobility and migration (and how they affect each other) and the stages of the life-cycle. The extent of commuting affects the outmigration rates; its prevalence understates the extent of outmigration, at the same time minimizing the pressure caused by inmigrants to congested urban areas.

The investment into *padi*-growing in the MADA areas was a typical example of how the rural population had been held back from becoming a major influx into urban areas. Bringing development into the area and improving incomes with good infrastructure, facilities and amenities meant that rural-urban migration could be held back, to be released gently and in a more controlled manner.

The entrenched nature of the two-circuits of migration had been well demonstrated in this thesis. The distributional questions of wealth ownership by the different ethnic groups, poverty, employment restructuring and population redistribution formed the basic rationale for economic development, migration policy and urban restructuring under the NEP. Urbanization and rural-urban migration became a vital instrument to restructure society and economy.

Chapter 5 examined how the industrialization policies of the government in the FTZs of Penang attracted Malay female rural-urban migrants, thus, destroying the two-circuits system and starting the third wave of urbanization from the 1970s. It demonstrated the openness of the Malaysian economy, exposing the workers, their families, the state and nation to the boom and burst of world trade cycles. Most important, these new migrants will become the nascent Malay urban industrial class.

While this chapter provided a backdrop to the industrialization process and rural-urban migration, Chapter 6 hones into the household approach and how the

interplay of complex family forces impact on the migrant and her family. Not only is household adaptive strategies important for influencing migration but the very structures of the household, and where the female is placed can determine her act of leaving to work elsewhere.

The final chapter pulls together the major strands of this thesis, the sectoral shifts in employment from agriculture to manufacturing and services, increasing women's participation in the labour force which was displaying, for the first time, Malay inroads not only into the modern sectors, but areas previously associated with the Chinese. The beginning of the NEP in 1970 heralded the third wave of migration and urbanization, which were analyzed at macro- and micro-levels in Chapter 4, 5 and 6. Although economic growth during this period, on the whole, was exemplary, there were troughs when less-educated Malaysians left to work overseas. A small trickle of professionals left throughout as is typical of developed countries, although the vibrancy and political stability of the 1980s and 1990s drew some back. Rapid urbanization between 1970-91 culminated in about 51 per cent of the population by 1991 being urban, with Malays, again for the first time, comprising most of it. Government policies in education, rural development, land development, decentralization, industrialization, and regional development successfully increased urbanization in an orderly way. Spurred by high economic growth, a vacuum was created for a massive flood of foreign workers. Ultimately, this interplay of somewhat contradictory thrusts from the government, set in train diverse processes and led to the final disintegration of the two-circuit system. The pattern of migration has become more complicated, going beyond national boundaries.

8.3 FUTURE THEORETICAL AND METHODOLOGY RESEARCH

This thesis has argued that migration is an integral component of the major processes of structural change in a country. Therefore, it has to be studied as part of the historical and evolving process of development of the country. While migration is a response to political, economic and social forces, in itself it conditions those very structures. Therefore, migration cannot be analyzed in isolation, out of the development experience and context of the country which often tends to be the approach in large-scale migration studies.

In order to link the individual's migration to the broader development patterns, future research must try to adopt the multi-level approach, from the international, to the national, regional, local, household and the individual. Not only should there be

these different scales, the importance of which would vary depending on that country's particular development experience, but the analysis has to also incorporate a historical perspective. The importance of the different levels may change at different times. For example, the world economy had affected Malaysia and Penang more strongly, owing to the government's policy in developing FTZs and the semiconductor industry beginning in the 1970s which immediately opened the country to trade cycle fluctuations which then affected migrant workers. Yet this impact is not felt to the same extent in the *padi*-growing areas of Kedah when fewer daughters of *padi* household had migrated to the FTZ factories in the 1970s.

While this thesis tried to tread the strands affecting the individual's decision to migrate, to that of her family, with the local, regional and national economies impacting on the processes, this could have been refined further. The critical moves analysis lent further evidence on the universality of the stages of the life-cycle in determining when individuals migrate. There are "critical" points, for example, termination of education, attainment of first job, marriage, etc. in an individual's life which would apply to most people, making her more prone to migrate. These critical points, when translated into age reflected national patterns of migration.

More refined critical moves analyses may be able to separate the life-cycle effects from the macro-economic impacts. If the political and economic influences are more powerful, they will override the socio-cultural differences between ethnic groups, as well as the stage of the individual's life-cycle. By linking life-histories to family histories, future studies may be able to quantify what was done descriptively in Chapter 6 of this study. Such investigation may be able to isolate factors in the household of the individual which conditions and sets thresholds on critical moves.

Generational migration studies would be able to encapsulate the above concerns. Large surveys would have enough cases to test the concept of critical moves. Panel studies, where all the critical moves of all family members may be analyzed against the family's life-situation, e.g. size of family, household income, occupation of head of household, etc. may be used to further explore household strategies and their relationship with the local, up to the national economic structures. A bigger database, of different countries may be able to extricate the family events, which exists for most individuals from other extraneous factors. Are these 'critical points' the same for different ethnic groups in different countries which have different developmental experiences? It is true that life-histories are very similar because of

the influence of demographic variables. The age when the events occur may vary owing to different family and other circumstances. It would be interesting to know what causes the variations and why. With larger numbers, more sophisticated analyses may be carried out. It may prove that the life-course and the family life-course can be quite predictive for migration. And if there are other cross-country studies, a more meaningful theory on migration may emerge.

To deal with such diverse issues which impact on mobility and migration, the approach in future studies has to be multi-disciplinary drawing from political-economy, development studies, and geography – the more integrative-type social sciences compared to the more discipline-based ones of economics, statistics, and to a lesser extent, demography. As discussed in Chapter 1, the various discipline-based type analyses of migration have tended to view this complicated process from mainly one angle. Perhaps this has done some disservice to the subject, by preventing the development of new more insightful and inclusive theoretical frameworks on the subject of migration.

Future research on this topic must take into account that different types of mobility, from daily commuters to weekly commuters all affect the extent of migration. For similar reasons, an urban-ended study and a rural-based one will elicit different patterns. This thesis tried to deal with this issue, by studying mobility and migration from the village-end in Muda, tracing outmigrants to both rural and urban destinations, and researching into the urban migrants in the Penang factories. This approach has certainly given a fuller perspective on mobility and migration.

Similarly, this perspective has revealed that the different types of mobility may reflect the individual's life-cycle. Therefore, stayers were mostly the young, the dependent and the old. Intending migrants were those at the threshold of a stage of their life-cycle, to leave for further studies, to start a job or embark on a new one, or to get married. Among active outmigrants were those going for further studies or the majority, who are economically active, looking for better opportunities. It was precisely that the research was conducted at the rural-end, that it captured the large number of outmigrants who were in fact, passive ones, migrating as dependants or for family reasons.

Case studies, often criticized for their lack of representativeness will continue to play a vital role for researchers to get a broader understanding of these complicated migration processes, especially the softer data such as the reasons, perception, etc.

While large-scale studies do provide estimates of magnitudes, directions and characteristics of migrants so important for policy makers, it is still for the smaller surveys and case studies to pick up the processes.

8.4 POLICY IMPLICATIONS

The implementation of the NEP since 1970 has brought about a major transformation of the economy and a period of tremendous social change in Malaysia. A number of critical developments propelled these changes which impacted on migration and urbanization and caused major labour shortages that attracted foreign workers to fill the gap.

There were various forces operating in the rural and urban areas which "controlled" the extent of outmigration from rural areas, preventing the rural-urban flood so typical of Third World countries. In those situations, rural migrants "voting with their feet" further added to the urban unemployed, often causing the proliferation of squatters and the primate city syndrome, as for example, in Thailand and the Philippines. The constraining factors from the rural-end were initially an acceleration of rural development including the major *in situ* injection of capital into *padi* areas such as the Muda area, and the massive land development schemes like FELDA which tapered off towards the end of the 1990s.

Included in this group of outmigration restraining measures is the implementation of the regional development strategies which not only brought factories and jobs to rural areas but also to the periphery of small towns. This, allowed rural inhabitants to commute, rather than migrate, and created work in these urban centres for its own growing small-town population, thus further holding back potential migrants to the Kuala Lumpur region.

As jobs were being created or upgraded in these areas, other investments especially on education, and health were rapidly being improved as a continuation of the rural development impetus implemented after Independence in 1957 but accelerated during the NEP. This produced a cohort of potential migrants who were adequately educated for the urban areas.

From the urban-end, the public sector expanded to absorb the more educated Malays for higher government positions as well as the massive numbers in the lower echelons of the government, as petty officials, clerks and especially the

uniformed services. To this traditional pathway was added the new migrants in the manufacturing sector, specifically in the FTZs and industrial estates of smaller towns.

Owing mainly to the impact of the NEP, the two-circuit system has been broken, has dissolved, so that the circuits have merged and the boundaries blurred, with significant leakages into and out of the system through immigration and emigration. This is now producing the patterns of high mobility between urban areas, and more importantly commuting which so typifies the developed economies.

As the economy matures, the rate of urbanization will decline. As discussed in Chapter 7, towns and conurbations will coalesce. Urban-urban migration will be the most important stream with urban-rural being a suburbanization process. Commuters will increase, but not of the circular migration type, caused by impermanent work so characteristic of Third World countries. They will come from the surrounding urban centres and rural areas made accessible by the heavy investment into infrastructure such as highways and commuter trains, a mark of the 1990s government. This will further deter migration into cities. Rural areas will become more urban in character as the dispersal effects of economic development continues to spread. The nature of farming will change with capital intensification. The lower-level towns will continue to grow. In Malaysia, a large urban middle class will continue to develop comprising mainly Malays. The wants and needs of this group co-mingled with their non-Malay counterparts will become, like the pattern in developed countries, international and cosmopolitan. They will, like the rest of the global cities become recipients of the internationalization of culture and all that it stands for.

Whilst the restructuring agenda of the NEP has been successful, the eradication of poverty and income disparities have had less success. Added to this will be the issues raised in Chapter 7 of the new immigrants of mostly Indonesians embedded in the urban areas. Except for the Asian currency crisis of the 1997 and 1998, for which some of the effects are still felt today, the 1990s were characterized by exceptional economic growth driven by manufacturing and construction. Rural incomes had increased from about RM951 in 1990 to RM1300 in 1995. Poverty households have declined from 21.8 per cent to 18 per cent for the same period (Malaysia, Government of, 1996:156). The per capita income in nominal terms increased from RM1,106 in 1970 to RM9,786 in 1995. Measured in terms of purchasing power parity, improvement in the per capital income was even more

significant, rising from US$978 to US$9470 in the same period (Malaysia, Government of, 1996:4-5). The NEP, becoming the National Development Policy (NDP) after 1990 has morphed into the National Vision Policy (NVP) by 2001 where integration among the ethnic groups will be given priority through a distributive agenda to build on a united and equitable society. After all, there is a clear logic running through these 35 years of planning. With structural inequalities between races and regions, it would be impossible to foster integration. While the early years have concentrated on restructuring and alleviation of poverty, often through major investments and at great costs, the 1990s were characterized by massive infrastructural works. The first decade of the new century will see more emphasis on the softer aspects of development such as building a resilient nation by fostering unity, cultivating a tolerant, and more caring society, and raising the quality of life. The Eighth Malaysia Plan 2001-2005, clearly spells out the aim to reduce absolute poverty, bridge income imbalances between ethnic groups within rural and urban areas, and between rich and poor regions. The development of a knowledge economy powered by knowledge workers emphasize the importance of education and skills development, with IT playing a major role. As envisaged by the government, a new phase of manufacturing driven by technology stressing a shift up the value-added chain will be implemented by the Second Industrial Master Plan (Malaysia, Government of, 2001: 9-13).

Urban population in Malaysia reached 61.8 per cent by 2000 (Malaysia, Government of, 2001:87-8) with natural increase and boundary change as major contributors. The role of migration continues to diminish with commuting increasing in importance. The dissolution of the two-circuit system is complete.

Migration has been an effective policy tool in social engineering relative to other policy instruments in effecting population distribution and urbanization. It has worked best as part of a larger set of policies such as those on rural development programmes and industrialization. As an explicit development policy migration will have played its final role. It will be replaced by policies directed at income imbalances, product-driven growth, housing, logistics and transportation, employment, and new planes of industrialization, with the nurturing of appropriate human capital to support this higher level of development, and other government programmes that will have only indirect effects on migration.

APPENDIX A
MACRO DATA SOURCES

This appendix discusses the major macro-level data source used in this study, i.e. the 1970 Population Census.[1] The first part examines the nature of the 1970 Population Census and the two percent sample derived from it. The second section looks at the census questions and tabulations on migration. The third section discusses the data-associated problems. The fourth part concentrates on the definition problem of variable-period migrants.

1a. The 1970 Population Census

The 1970 Population Census provides, for the first time, a comprehensive range of migration statistics for Peninsular Malaysia[2] unequalled by most other Asian and Pacific countries (see Cho, 1976). The reasons for using the 1970 Population Census are its rich source of migration information.

The 1970 Population Census data used in this study were derived from a two percent sample created by the Malaysian Department of Statistics from the 1970 Population Census. One in every fiftieth household was systematically selected. The Census Sample Tape proved representative of the 1970 Population Census. This was demonstrated by the small variations (less than 0.2 percent in most cases) between the two sets of data for nine variables of demographic, economic and location importance.[3]

Because the data were in individual file format, they afforded maximum flexibility for cross-tabulations or other statistical analyses. Although the Census Sample Tape fulfilled the needs of this study – to provide a national setting for the case study in Kedah, its sample size is too small for studies involving smaller geographical units (for example, the *mukim* or administrative district) than the state (see Figure A.1). A 10 percent sample will be more appropriate for detailed migration analyses.

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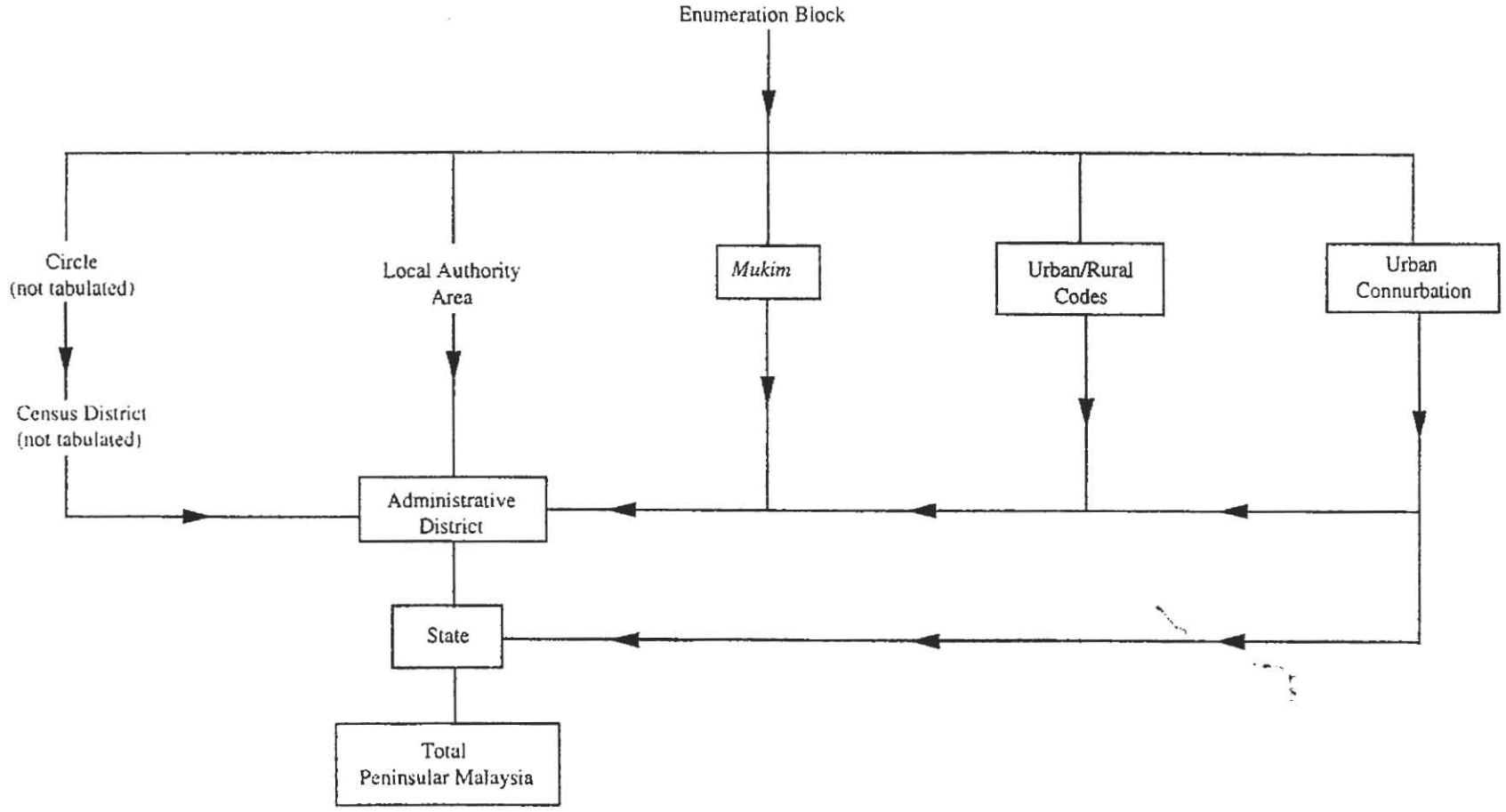
[1] Variable-period migrants were derived from the 1970 Population Census and used in the analysis of the migration stream between 1965-70 (Chapter 3).

[2] Previous censuses only had information on state of birth and present location (Del Tufo, 1949; Fell, 1960).

[3] The nine variables selected were: Demographic (sex, community, age), Economic (occupation, cooking fuel consumed – as an indicator of household economic status), Locational (present state residence, rural-urban strata, previous state residence, and number of years lived in locality).

Figure A.1
Peninsular Malaysia: Geographical Level of 1970 Population Census Tabulations



Key
Geographical levels used in thesis

Source: Adapted from Malaysia. Department of Statistics, 1977.

The 1970 Population Census was a *de facto* census, enumerating the population as they were located on census night. It includes people in hospitals, on holiday, business trips, at school or away from their usual home for other reasons. Technically, internal migration should deal with the *de jure* population or people who change their usual place of residence (Shyrock and Siegel, 1971: 648). Partially to alleviate this problem, a category for visitors was created in the 1970 Population Census to separate them from permanent residents. They made up 1.3 percent of the population (Census Sample Tape, 1970). However, this does not include the other migratory people. A question on usual residence should be put into the future census to facilitate more accurate migration analysis.[4] The question might be framed as follows:

> Are you a usual resident (stayed here at least 6 months) of this dwelling?
>
> Yes .....
>
> If no, give name of usual residence:
>
> *Kampung*/town .....
>
> *Mukim*[5] .....
>
> Administrative District .....
>
> State .....

1b. The Two Percent Census Sample Tape, 1970

A two percent sample tape was created from the 1970 Population and Housing Census of Peninsular Malaysia. The sampling unit was the household except in cases where non-private living quarters were encountered. In the latter cases, the sampling unit was the person. The sampling procedure was to take a systematic sample of every fiftieth household (be it a private or non-private household) commencing from a random start.

At the Australian National University, Canberra, the Census Sample Tape in ICL BCD was translated to EBCDIC for the UNIVAC-1108 and DEC-10 computers. The data

[4] Those who are lost from migration counts tend to be a selective group. They are likely to be the most mobile, aged 15-30 years.

[5] It is necessary to include *mukim* owing to identical *kampung* names even within the same Administrative District.

afforded maximum flexibility in analysis because they were in individual file format (as against matrix form).

To assess the similarity between the Census Sample Tape and the 1970 Population Census, the variables considered representative of important demographic, economic and locational characteristics were compared between the two sets of data (see Table A.1-A.9). The variations between the 1970 Population Census and the Census Sample Tape were relatively small, often less than one decimal place. However, the differences tended to increase with smaller categories.

Although the Census Sample Tape fulfils the particular needs of this study – to provide a general background of migration for the case study, it was too small for detailed migration studies. Depending on the type of migration analysis, most results derived from areas smaller (areal size or population) than the state level (for example, the *mukim* or administrative district) may be spurious.[6]

2. Census Questions and Tabulations on Migration

Seven questions from Form Five of the 1970 Population Census are related to migration. These questions provided a host of new possibilities for migration analysis. Lifetime migrants could be distinguished from variable-period migrants. Stayers (those who have never left their locality[7] of birth) could be compared with movers (those enumerated in a different place from birthplace). Different types of migrants could be classified by a three-way cross-tabulation: birthplace by previous residence by present residence. Return migrants (those with a previous state residence – other than their birth-state – enumerated in their state of birth) could be identified (see work on primary, secondary and return migration in the United States by Eldridge, 1965). The duration of residence question facilitated cut-off points for migrants of different cohorts and periods. The use of different geographical units for previous residence and present residence distinguished intra- from inter-state migrants. The ability to separate different hierarchical spatial limits (*mukim*, administrative district, state – see Figure A.1) and duration of residence provided a variety of criteria for migrant definitions.

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[6] See Figure A.1 for the geographical units of the 1970 Population Census.

[7] Enumerators were instructed to leave out intra-locality moves (movements between houses in the same *kampung*, town or suburb) (Malaysia, Department of Statistics, 1977).

Table A.1
Sex

	Census		Two per cent sample		Difference
Sex	No.	%	No.	%	%
Male	4,413,068	50.26	88,430	50.32	-0.06
Female	4,367,660	49.74	87,294	49.68	0.06
Total	8,780,728	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.

Table A.2
Ethnicity

	Census		Two per cent sample		Difference
Ethnicity	No.	%	No.	%	%
Malay	4,663,284	53.11	93,506	53.21	-0.10
Chinese	3,117,896	35.51	62,505	35.56	-0.05
Indian	933,250	10.63	18,451	10.50	0.13
Other	66,298	0.76	1,262	0.72	0.04
Total	8,780,728	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.

Table A.3
Age

Age-groups	Census		Two per cent sample		Difference
	No.	%	No.	%	%
0-4	1,370,428	15.56	27,471	15.63	-0.07
5-9	1,357,800	15.41	27,096	15.42	-0.01
10-14	1,197,886	13.60	23,858	13.58	0.02
15-19	976,597	11.09	19,520	11.11	-0.02
20-24	744,936	8.46	14,825	8.44	0.02
25-29	549,683	6.24	10,768	6.13	0.09
30-34	534,171	6.06	10,773	6.13	-0.07
35-39	420,352	4.77	8,401	4.78	-0.01
40-44	373,721	4.24	7,434	4.23	0.01
45-49	310,228	3.52	6,316	3.59	-0.07
50-54	275,817	3.13	5,590	3.18	-0.05
55-59	223,353	2.53	4,415	2.51	0.03
60-64	194,868	2.21	3,713	2.11	0.1
>65	279,717	3.18	5,540	3.15	0.05
Total	8,809,557	100.00	175,724	100.00	

Source: Malaysia. Department of Statistics 1977 and Census Sample Tape, 1970.

Table A.4
Occupation

Occupation	Census		Two per cent sample		Difference
	No.	%	No.	%	%
Professional, technical & related workers	129,436	2.14	2,633	2.17	-0.03
Administrative & managerial workers	20,308	0.34	353	0.29	0.05
Clerical & related workers	133,341	2.20	2,649	2.20	0.00
Sales workers	236,676	3.91	4,749	3.92	-0.01
Service workers	225,417	3.72	4,409	3.64	0.08
Agricultural, animal husbandry & forestry workers, fishermen & hunters	1,322,133	21.84	26,617	2197	-0.13
Production & related workers, transport equipment operators & labourers	542,764	8.96	8,989	7.42	1.54
Others	3,444,684	56.89	70,758	58.40	-1.51
Total	6,054,759	100.00	121,157	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.

Table A.5
Present Location Urban/Rural Strata

Occupation	Census		Two per cent sample		Difference
	No.	%	No.	%	%
Metropolitan Urban	1,469,423	16.73	29,179	16.61	0.12
Urban Large	1,055,571	12.02	21,091	12.22	0.02
Urban Small	1,149,657	13.09	23,285	13.25	-0.16
Rural	5,106,077	58.15	102,169	58.14	0.01
Total	8,780,728	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.

Table A.6
State of Previous Residence

State	Census		Two per cent sample		Difference
	No.	%	No.	%	%
Johore	325,723	13.46	6,702	13.82	-0.36
Kedah	272,359	11.26	5,851	12.07	-0.81
Kelantan	144,716	5.98	3,537	7.30	-0.68
Malacca	81,337	3.36	1,825	3.76	-0.40
Negeri Sembilan	140,667	5.81	3,083	6.57	-0.76
Pahang	179,260	7.41	2537	5.23	2.18
Penang	176,252	7.28	3,517	7.25	0.03
Perak	419,741	17.35	9,892	20.40	-3.05
Perlis	38,057	1.57	677	1.40	0.17
Selangor	536,361	22.17	8,820	18.19	3.98
Terengganu	105,245	4.35	1,942	4.01	0.34
Total	2,419,718	100.00	48,483	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970

Table A.7
Number of Years Lived in Locality

No. of Completed Years	Census		Two per cent sample		Difference
	No.	%	No.	%	%
<1	754,791	8.60	15,035	8.56	0.04
1	475,220	5.41	9,518	5.42	-0.01
2	505,811	5.76	10,373	5.90	-0.14
3	451,045	5.14	9,131	5.20	-0.06
4	401,127	4.57	8,051	4.58	-0.01
5	377,426	4.30	7,630	4.34	-0.04
6-10	1,582,248	18.02	31,571	17.97	0.05
11-20	1,910,555	21.76	37,992	21.62	0.14
>21	2,322,505	26.45	46,423	26.42	0.03
Total	8,780,728	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970

Table A.8
Cooking Fuel

Type of Fuel	Census		Two per cent sample		Difference
	No.	%	No.	%	%
Electricity	10,794	0.67	1,156	0.66	0.02
Gas	137,601	8.63	15,256	8.68	-0.05
Kerosene/Oil	249,736	15.66	26,442	15.05	0.61
Charcoal/Wood	1,178,710	73.90	31,600	74.89	-0.99
Other	18,077	1.13	1,270	0.72	0.41
Total[1]	1,594,918	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.
Note:[1]The total for census is household, for the two per cent sample it is individual.

Table A.9
State of Present Residence

State	Census		Two per cent sample		Difference
	No.	%	No.	%	%
Johor	1,271,794	14.48	25,086	14.28	0.2
Kedah	952,421	10.85	19,102	10.87	-0.02
Kelantan	684,312	7.79	13,754	7.83	-0.04
Malacca	403,061	4.59	8,164	4.65	-0.06
Negeri Sembilan	480,053	5.47	9,849	5.60	-0.13
Pahang	503,031	5.73	9,935	5.65	0.08
Penang	773,327	8.81	15,367	8.74	0.07
Perak	1,561,184	17.78	31,527	17.94	-0.16
Perlis	120,996	1.38	2,498	1.42	-0.04
Selangor	1,625,625	18.51	32,331	18.40	0.11
Terengganu	404,924	4.61	8,111	4.62	-0.01
Total	8,780,728	100.00	175,724	100.00	

Source: Malaysia, Department of Statistics 1977 and Census Sample Tape, 1970.

3. Data-associated Problems

Four types of problems were encountered. They were caused by both the nature of the questions and the census data collection. The first set of problems is related to the working definitions of migrants which will be dealt with in the sections discussing the migrants.

The second problem is the inability to identify the number of inter-censal migrants between 1957 and 1970. Direct comparisons and calculations, for example, census survival ratios, life-table survival ratios,[8] natural increase, gross and net-migration, spatial patterns and migrant characteristics between the two censuses were impossible without resorting to further estimates.

A similar problem is the inability to ascertain the location of the total population at a previous fixed period (for example, place of residence five years ago). Although the United Nations (1970: 23) recommended two questions on internal migration in censuses: previous residence and duration of stay in present residence, some demographers favour the fixed period for its simplicity and specificity (Shyrock and Siegel, 1971: 646-8). The advantages and disadvantages for both methods are tabulated in Table A.10.

It would therefore, be useful to incorporate a question on a previous residence at a fixed period in the 1980 Census. For example:

> Did you live at this address in August 1975? (i.e. 5 years ago)[9]
>
> Yes (skip to next question)
>
> If no, give the name of:
>
> *Kampung*/town .....
>
> *Mukim* .....
>
> Administrative District .....
>
> State .....

[8] See Shyrock and Siegel, Volume II, 1971, Chapter Two and United Nations, 1970: 24-36.

[9] Ten years would relate to 1970 but the problems of memory recall and attrition from mortality and emigration would be too large.

Table A.10
Advantages and Disadvantages of Variable-Period and Fixed-Period Duration Migration Questions in Censuses

Variable-Period		Fixed-Period (5 years)	
Deals with: most recent move prior to census enumeration		location 5 years ago	
Able to derive:			
- period migration (e.g. those who moved between 1965-70) - migration cohorts (e.g. those who moved in 1969 aged 20) - migration stream of different cohorts or periods	) able to choose different time periods	- migrant cohorts (e.g. those who moved in 1970 or 1969 aged 20)	
- migrant characteristics[1] of different cohorts or periods		- migrant characteristics of 1970 and 1965	
Able to calculate:			
- gross migration - net migration - migration flows - migrant characteristics - census survival ratio - life-table survival ratio - natural increase	) for 1970 only	- gross migration - net migration - migration flows - migration characteristics - census survival ratio - life-table survival ratio - natural increase	) for fixed period 1965 and 1970
Variable		Non-Variable	
Excludes following persons:			
- those dead in 1970 - emigration and immigration at previous move		- 0-5 years old children - deaths between 1965-70 - emigration between 1965-70	
Does not account for:			
- previous intervening moves before the most recent move enumerated in 1970		- intervening moves after the enumerated location in 1965 and 1970	

[1] All migrant characteristics relate to the time of enumeration, not time of move.

The third problem arises from the transverse-type data which do not relate to the migration characteristics of the migrants at the time of move. For example, it is impossible to know if an occupation enumerated at census time is the same as at the time of move. This problem applies to the cross-tabulations of migrants with any of the socio-demographic and economic variables. The magnitude of this problem intensifies with increasing time lapse between the time of migration and the time of census enumeration. Similarly, the comparison of migrants from different periods introduces inaccuracies where the attrition of mortality and emigration is likely to be most severe among migrants who moved, say 21 years ago. Thus a more useful way of collecting migration data is to relate actual moves to certain important variables such as age, location and occupation. To illustrate this example, a matrix of the last three moves and their respective ages, location and occupations is set out below.

Last Three Migration	Age	*Kg*/Town	*Mukim*	Admin. District	State	Major Occupation Time of Migration
First						
Second						
Third						

The fourth problem concerns eliciting only the state name for the birthplace question. Owing to the variation in area among some of the states in Peninsular Malaysia this level of generality is unsatisfactory.[10] A 50 km. move in Pahang or Johor may remain an intra-state move, whereas moving a similar distance in Malacca or Perlis is likely to produce an inter-state migration.[11] A way to overcome this problem is to frame the birthplace question as follows:

Place of birth?

Kampung/town .....

Mukim .....

Administrative District .....

State .....

[10] The state as a delimiter of birthplace causes problems in cross tabulations of residence (birth, previous and present).

[11] This is one reason for both the higher inter-state lifetime and variable-period migrants and lower proportions of intra-state migrants for the really smallest states of Malacca, Perlis, and Penang.

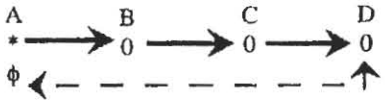
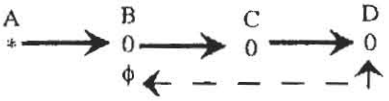
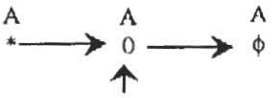
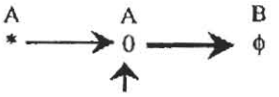
Despite these problems, census data provide a valuable overview of migration in a national context. The Simpang Empat Mobility and Migration Surveys, the Young Workers Survey, and the Household Response to Industrial Change Surveys are aimed to overcome the inherent problems associated with the structure of migration questions and the nature of the collection of data in censuses. These surveys are designed for specific purposes and are able to elicit information in far greater depth on the nature and processes of migration. National-level statistics combined with the bespoke surveys provide very valuable data on migration.

4. Variable-Period Migrants

Variable-period migrants are people who have moved at least once, between their birthplace and present location. They may be divided into intra- and inter-district and intra- and interstate migrants. In this thesis, migrants who moved between 1965-70 were drawn out for the analysis of migration streams and their characteristics in Chapter 3. Return migrants can also be identified. However, the use of variable-period migrants has some difficulties, as shown in Table A.11. If the birthplace is also the previous residence, the distinction cannot be made (2). Similarly, where moves after birth are within the same state, they cannot be detected (8).[12] But because the previous residence does not use the state as the delimiter (as in lifetime migration), intra-state migration can be identified (6, 7).

[12] Since 1970 there has been high rates of circulation to Singapore from Kelantan and Terengganu.

Table A.11
Variable-Period Migrant: Definitional Problems Using the 1970 Malaysian Population Census Data

	Pattern of Move	Actual Number of Moves	Moves Noted by Census Definition	Census Definition
1.		0	0	Non Migrant
2.		1	1	Variable Period Migrant
3.		3	1	Variable Period Migrant
4.		3+1 Return to Place of Birth	2	Variable Period Migrant
5.		3+1 Return to Place of Previous Residence	2	Variable Period Migrant
6.		1	1	Intra-State Migrant
7.		2	2	Intra-State Migrant
8.		2	2	Variable Period Migrant

Key

*	Birthplace
0	Previous Residence
ϕ	Place of Enumeration
→	Outward Inter-State Move
← –	Return Inter-State Move
→	Outward Intra-State Move
← –	Return Intra-State Move
↑	Place of Previous Residence

APPENDIX B
SIMPANG EMPAT MOBILITY AND MIGRATION SURVEYS, I AND II, 1976-77

1. Reconnaissance of the Selected Region

A reconnaissance was made of 20 *kampungs* in the southern section of the Muda Agricultural Development Authority (MADA).[1] The aims of the reconnaissance were to get an overall impression of the region and the nature of mobility and migration. Of particular interest were the ethnic composition, the age and kinds of settlements, the types of mobility and migration, and possible relationships between migration and accessibility, economic conditions and attitudes towards education. Meetings were arranged with both the Malay and Chinese local leaders where these issues of the *kampung* and migration were discussed.

The meetings had three objectives. They were an attempt to become familiar with the different migration concepts as perceived by the Malays and the Chinese so that the questions in the survey can be meaningfully framed. They were also to provide the opportunity to gather information about the *kampungs* (type, age, population size and socio-economic characteristics) and their relationship with mobility and migration. Finally, these meetings were a chance to gauge the potential cooperation of the local leaders for the study. Such cooperation is vital to the success of research in small communities.

The meetings helped in at least three ways. First, they clarified different concepts and terminologies of mobility and migration. These concepts varied between Malays and Chinese. Although both Malays and Chinese viewed the leaving of a village as outmigration, its nature and permanence were perceived differently. For the Malays, migration from the village (other than for marriage and education) was considered as *makan gaji*, meaning to seek wage employment.[2] Migration was not considered permanent. The outmigrant was expected to return to his *kampung asal* (village of origin) at the end of his working life. In contrast, the concept of the *kampung asal* was meaningless for the Chinese who considered outmigration as a "search for livelihood",

[1] The reasons for concentrating in the south were: the north was less homogeneous, had patches of infertile soils and problems of irrigation. Because it is a problem area, it has attracted much research; consequently, farmers there had become antagonistic towards surveys.

[2] See Nagata (1974) and Wilson (1967) for similar concepts of Malay migration.

not limited to wage employment. They did not have the same attachment to the village (although ties with the family are very strong) and tended to view outmigration as permanent.[3] This is an important difference for as the thesis shows, most rural-urban migration for Malays is into wage-work, often in the government with retirement back to the village. This return migration, on a permanent basis, did not occur among the Chinese.

Second, the meetings helped to focus on certain migration types and their nature. It became clear that circular migration, recently given prominence in Southeast Asia, in Hugo's (1975) research in West Java or what Nagata (1974), picturesquely called an "urban interlude" in Malaysia, is unimportant in this region.[4] It occurred among a few labourers in unstable urban jobs. The more common circulation was that of seasonal hired *padi* labourers which formed a rural-rural circuit.

Malay and Chinese outmigrants were found in markedly different occupations, a product of a fragmented labour market. Another reflection of the different labour markets for both the Malay and Chinese were the characteristics of return migrants. Malay return migrants were mainly retired petty government officials, soldiers and more recently, factory girls returning for marriage. Among Chinese, return migrants tended to reflect the relative instability of their job markets. The occupation of outmigrants determined the distance and strata (urban and rural) of their destination. Thus, rural-rural streams consisted of land settlers and marriage migrants. Rural-urban streams comprised migrants in government, manufacturing and commercial sectors as well as students. These migrants had more education than those who remained behind.

It the recent past, marriage was the major cause of migration. There was little population pressure as shown in such comments: "Why did we have to leave the village?" Migration was mainly rural-rural. Within the last 10 years, the character of migration had changed. Population pressure, as evidenced by the lack of farming land was felt in all the villages. People left in search of new land or to land settlement schemes. Most village leaders encouraged migration. Parents tried to further the education of their children as a means for them to escape the arduous life of *padi*-

[3] This lack of attachment to the village of origin may be a characteristic of generations other than the original immigrants of Overseas Chinese. The immigrants were known for their strong ties with their home villages in South China to which they planned to return to die. See Young, 1973: 13-5 for a case study of the Chinese in New Zealand.

[4] Unfortunately, Nagata (1974) did not quantify the extent of circulation in her study. It appears to be important in the poor east coast state of Kelantan (per. comm., Maude, 1979).

farmers. With the increasing accessibility of these villages, outmigration was no longer perceived as a major event.[5] With more villagers becoming educated, the importance of rural-urban migration had increased. Today more migrants were single, leaving for further education and work in urban areas.

The initial impact of double-cropping appeared to have slackened the outmigration of the less educated by providing more work for this group during the harvesting and planting periods. However, the general impression was that two counter-balancing forces were affecting migration. On the one hand, rural-urban migration was likely to increase with the rise of incomes, aspirations and availability of education and accessibility. On the other hand, the modern amenities and facilities in the area may hold educated migrants back provided they are able to secure a job commensurate with their education in the village or within commuting distance.

2. Selection of Study *Kampungs*

The third result of the meetings was a focus on meaningful criteria for village selection and a context for the study of selected *kampungs*. Three possible selections were borne in mind during the reconnaissance. These were to contrast the following *kampungs*:

1. High income and low income,
2. Double- and single-cropping,
3. Road accessibility and inaccessibility.

During the reconnaissance it became clear that the first comparison was meaningless. Owing to the lack of extremes in economic wealth of villages in the region, inter-village economic disparities were less than that of intra-village. Taking into account the small totals of the micro-study and the fact that socio-economic impact is difficult to assess without a time-series analysis, such a comparison is of little value. The assumption behind the second option was that a double-cropping village would be economically better-off than a single-cropping village. But in fact, incomes between the two were not substantially different as single-cropping farmers worked as hired labourers in doubling-cropping areas during their off-season (per. comm., MADA researchers, 1976). The third possibility of an accessible and an inaccessible *kampung* appeared to be a more useful comparison. During the reconnaissance, it was observed that *kampungs* with road

[5] A *ketua kampung* (village headman) commented how five years ago whenever someone left the *kampung*, there would be a *kenduri* (feast) because no one knew when they would see him again. Nowadays, return visits were so common that outmigration was no longer considered a big event.

accessibility had more mobility and migration than inaccessible *kampungs*. Similar conclusions were noted by Leinbach (1976) in his analysis of the impact of transport on villages in Kedah.

Based on these considerations, a highly accessible area comprising the predominantly Chinese *pekan* of Simpang Empat and its contiguous *kampungs* of Kg. Jalan Tokai and the Malay-populated *kampungs* of Kg. Benua, Kg. Selarong Batang and Kg. Selarong Panjang were selected (for convenience this area will be referred to as Simpang Empat). Located on the north-south trunk road, eight miles from Alor Setar, it had all the modern amenities and facilities of piped water, electricity (television and telephone), primary and secondary schools and a government health clinic. To provide some idea of its level of development, Simpang Empat had one private health clinic and a television and radio repair shop.[6] The *pekan* had most of the commercial and service functions characteristic of a fast-growing centre.

For comparison, Kg. Pisang, an inaccessible village, was selected[7] (see Figure B.1 for a map of their location). Within the vicinity of Simpang Empat, Kg. Pisang is about 10 miles from Alor Setar. Unlike Simpang Empat through which regular transport such as buses and taxis ply, Kg. Pisang's bus service is reachable one mile by foot or bicycle through the shortest route across *padi* fields. Kg. Pisang is a scattered settlement which can be reached only by bund roads, the quality of which degenerates rapidly during the rainy season. Houses are in clusters of three or four appearing as *pulau* (islands) during the rainy season when accessibility becomes very difficult. There are public water stand pipes but no electricity. There were no schools and only one small seasonal *kedai runcit* (provision store).[8] Basically rural in character, the population is mainly Malay *padi*-farmers unlike Simpang Empat with its more diversified community and occupational structure. As noticed during the reconnaissance, Chinese were seldom found in inaccessible *kampungs*. Both areas had double-cropping by 1972.

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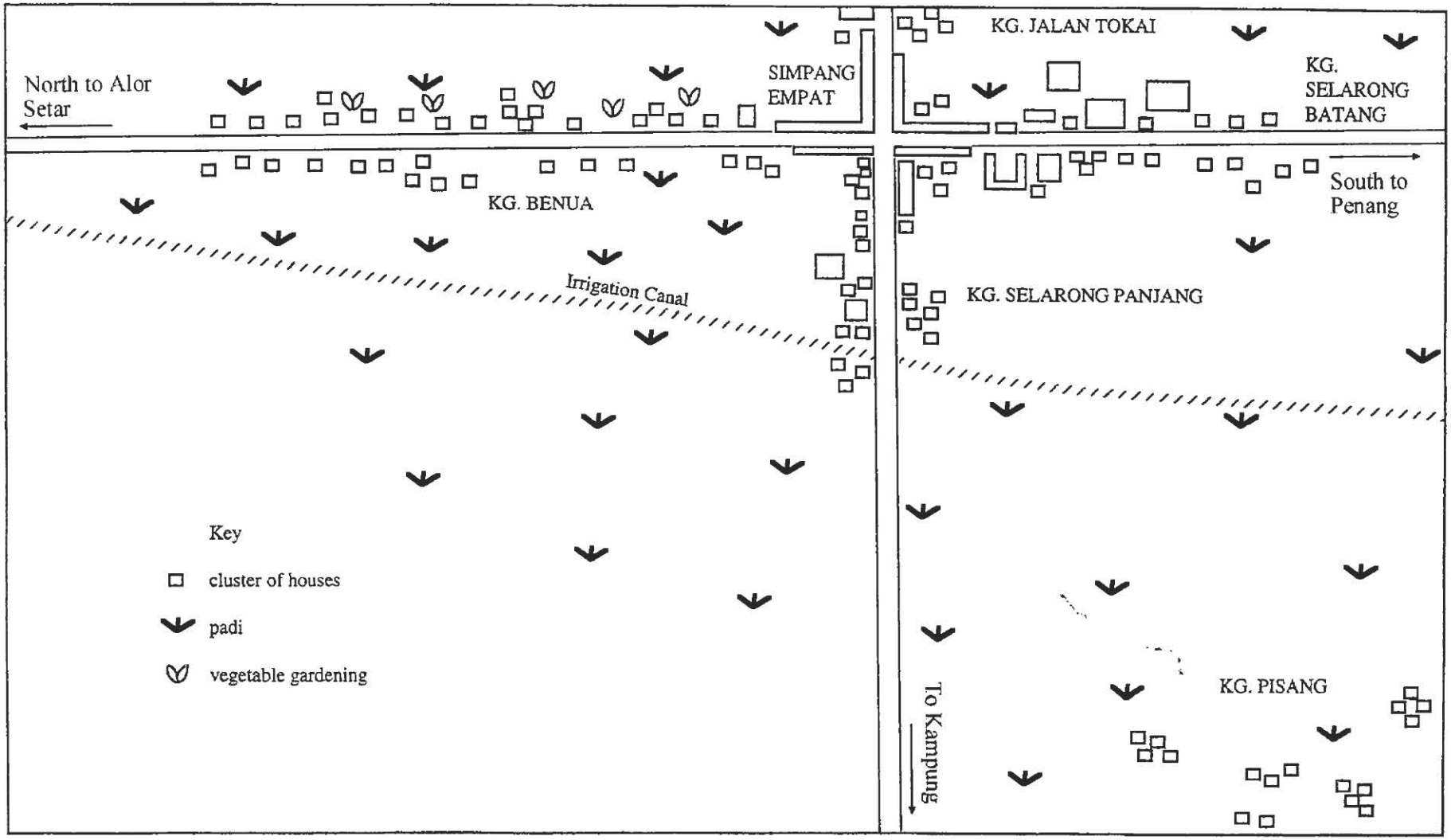
[6] To illustrate the awareness of some of the respondents, a retired Malay tailor questioned me on the reasons for Malaysian students demonstrating against the late Prime Minister, Tun Abdul Razak, on his visit to Australia in 1975. There were eight families who had children studying in overseas universities and a rice-mill proprietor who owned a house in London and whose children were educated overseas since secondary school.

[7] A number of less accessible villages, with mixed economies located in the eastern foothills (rubber and rice) and on the western coast (*padi* and fish) were examined as possibilities during the reconnaissance. Because the comparative *kampungs* should share similar socio-economic characteristics, Kg. Pisang was selected.

[8] It is a shack, five feet by three feet, which has groceries during the harvesting period (availability of money). It sells necessities such as kerosene, oil, sugar, salt, etc. in small packets, a reflection of a poor-spending population.

Figure B.1
Location of Survey *Kampungs*, Kedah



3. Methods of Data Collection and Problems Encountered

The delimitation of a migration area is crucial as it determines the extent of migration. Instead of using the statistical boundary which is of little meaning for the inhabitants of the village, the sociological boundary was used. The Malays knew which *kampung* they belonged to and the boundaries as this is defined by the *surau* (religious hall) or mosque attendance. In contrast, although some Chinese knew which *kampung* they belonged to, the boundary was unclear to most. They tended to perceive their location in terms of mileage from Alor Setar. To rectify this inconsistency between the two communities, the Malay perceived boundaries were assumed to apply to the Chinese.

Because the areas of the *kampungs* were small, all movement crossing a boundary would be recorded. This study would therefore, account for greater mobility and migration than larger villages. However, these *kampungs* would be considered quite representative of the irrigated regions of Kedah (see Cheng, 1975), Province Wellesley (see Purcal, 1965) and Krian. Interviews began after the *kampung* boundaries were established. No house-listing was necessary owing to the familiarity of the *kampungs* by the field assistants (who came from these *kampungs*), the linear pattern of settlement and the fact that Survey I was a census.

A number of steps were taken to ensure cooperation. I had been visiting the area for six weeks and living there (with a *padi*-farming family) two weeks before interviewing began. Word about the study had spread rapidly. To ensure trust, publicity was given to the nature and aims of the research. Meetings were held with the local community leaders. Pamphlets in Bahasa Malaysia (Rumi and Jawi scripts), Chinese and English were distributed from mosques, MADA offices, coffee shops and community leaders' houses. The leaders showed support for this study and helped in building rapport. I attended numerous social occasions which gave me the opportunity to meet more villagers. That I lived there and participated in their activities was probably the greatest factor in dispelling fear and distrust among the villagers. Because I was living with Chinese families I took great pains not to appear to affiliate myself with the Chinese.[9]

Consequently, the non-response rate was negligible (Table B.1). Only household heads refused to cooperate. They were mainly Chinese, from a range of socio-economic backgrounds. The Malay refusals were chiefly from rich families. The most helpful

[9] In this respect I am particularly grateful to the families of the Malay field assistants and the Malay leaders who involved me in their social activities.

were the poor and the educated (particularly teachers). Those unable to give information were disabled, for example, *nyanyuk* (senile), deaf, deaf-mutes or insane. No Chinese appeared in this group as their old lived in vertically extended families, unlike Malays who lived alone, usually next door to a family member. Three households known to be involved in illegal practices were not interviewed. Returned questionnaires with unreliable information tended to be higher among the Chinese.[10] The Malays who provided unreliable information were from rich households while the Chinese came from a range of socio-economic classes. The unreliable information was under-statement of land acreage and income both partially rectified by cross-checking with the neighbours and our own estimation.

Table B.1
Non-response Rate for Stage I

	Simpang Empat		Kg. Pisang		
Nature of Non-response	Malay	Chinese	Malay	Chinese	Total
Refused to cooperate	5	18	1	0	24
Unable to give information	7	0	1	0	8
Did not interview	2	1	0	0	3
Unreliable information	5	15	3	0	23
Total	19	34	3	0	58

Non-response: 3.5 per cent.
Non-response (including unreliable information): 5.9 per cent.

Owing to increasing familiarity with the area, a large-scale pre-test was unnecessary. Instead, more time was spent briefing the field assistants on methods, techniques and content of the questionnaires. Initially, these questionnaires were tested on family members and friends and difficulties which emerged were clarified immediately. Once interviewing began, every evening was spent checking and editing so that major problems encountered were corrected immediately. Our working as a team and the team camaraderie which quickly developed ensured that the data were of a high quality.

[10] The Chinese are a particularly difficult group to interview. The same problem had been encountered by other researchers working among Chinese (see Humphreys, 1971). I do not know to what extent this is a characteristic of Overseas Chinese, who may be suspicious owing to their insecurity as an immigrant group. For example, the New Zealand Chinese were also difficult to interview (Young, 1973).

Some of the problems encountered in Stage I are discussed below. Categorization was difficult for the less obvious cases. For example, it was hard to conceptually separate a daily commuter from one who slept four days per week in the *kampung*. Similarly, it was difficult to differentiate between a villager who returned monthly for two days and another outmigrant who may return more regularly for social visits. Therefore, I had to use the concept of where the person considered his permanent home to be. Thus, the person who returned twice a month and considered his home the town he worked in was classified an outmigrant.

Some jobs were difficult to classify, owing to their general nature (such as odd job) and seasonality. For example, the construction of the rice-drying factory created work for odd job labourers, food hawkers, caterers and even launderers who reverted to family workers at the end of the project. For these reasons major and secondary jobs were recorded, bearing in mind that some types of occupations were characterized by impermanence. Such temporary work were responses to sudden opportunities.

There were problems in the location of a few *kampungs* which could not be found in the 1:126720 (two miles to one inch) map of the states of Peninsular Malaysia. In such cases the nearest *kampung* to the unknown one was recorded. The Chinese names of some *kampungs* could not be identified. Fortunately, there were very few (less than five) of these instances as most Chinese migrated to larger known settlements.

All locations were classified by the 1970 population figures irrespective of the time of move. Thus, a person migrating to Alor Setar in 1950 would have the 1970 population of that town noted, rather than the 1950 population. The distance to relocations were always calculated from the survey area, even though the later moves did not incur a return to the study area. For example, a move from Simpang Empat to Kuala Lumpur and then to Seremban is in fact 309 miles and 30 miles, respectively. However, by this system the distances were calculated as Simpang Empat to Kuala Lumpur and Simpang Empat to Seremban, a distance of 309 miles and 336 miles, respectively.

The returned income data from Stage I, particularly for the Chinese tended to be inaccurate. All information on income was checked against our own estimates[11] and

[11] We generally knew who were giving us understated income information. This sensitivity was due to having local field assistants. The field assistants were very good at estimating income as they came from similar socio-economic backgrounds. See Section 5 below for a discussion of the advantages and disadvantages of employing local field assistants.

rectified. Most people tended to under-estimate their incomes. The wage employment income was more reliable. However, these economic data were used only in a general way in Stage I of this study with Stage II providing greater accuracy and depth.

There was age misreporting among older Malays (above 65 years) due to a genuine disinterest in age (see Djamour, 1959). This could not be checked against the identity card age as the age registered there was also wrong. To overcome this problem we estimated by relating time to important local events, such as the building of the Wan Mat Saman canal (1885), *tahun gelap* (eclipse of the sun in 1932), beginning and ending of World War II (1941, 1945) and the respondent's life history. In contrast, the Chinese were accurate with their age reporting. For older people we used the Chinese calendar, a cycle of 12 animal years (see Chander, 1973; Saw, 1967, for a discussion of the problems of age reporting and heaping).

The reasons for migration were stated reasons by the source family rather than the migrants themselves in Stage I. Similarly, the characteristics of the migrants relate to their present situation rather than the time of departure. But as Stage I was conceived as a means to gather general information, it fulfilled its purposes. Stage II and the life-history questionnaires collected detailed data on various aspects before and after migration.

Both university and local youths were employed in this survey. On the whole the employment of local youths proved very successful.

4. Questionnaire Format

These meetings were held informally, often in the houses of the leaders. The questionnaire format provides an idea of the types of questions which were framed in a discussive way, depending on the types of answers.

Concepts of migration:

1. What is mobility?
   What is migration?

Types of migration:

2. What are the types of mobility and migration?

   a) Are there people who go elsewhere to work daily but return to the village at night? Why?

b) Are there people who go elsewhere to work but return to the village to sleep at weekends? Why?
c) Do many come back to the village after working a few months in another place? Why?
d) Do they leave and never come back except for *Hari Raya* (end of fasting season), Chinese New Year or other holidays? Why?
e) How many people have left the village but come back here to settle? Why?

3. Why do these people go elsewhere to work? What jobs do they have?
4. Why do others leave the village?
5. Where do these different people go? Do they go to rural or urban areas?
6. Do they travel far?
7. What factors within the community encourages migration? What factors in the *kampung* discourage migration?
8. How do they travel, by bus, train, etc?
9. What do you think are the effects of migration? Is it good or bad? Why?
10. What are the effects of migration on this village, on the family?
11. Is migration and mobility more common nowadays than before? What was it like before MADA, before Independence? What is its extent nowadays? When did it become more prounounced? Why did it become more pronounced?
12. What do you think will happen in the next 10 years?

5. Training of Field Assistants

Originally it was planned to recruit and train Social Science university students to assist in the surveys. However, after some preliminary discussions with staff at both Universiti Sains Malaysia and MADA, and observing the presence of local unemployed youths in the *kampungs*, it was decided to employ local youths instead. Six field assistants, three Malays and three Chinese, were selected from the local communities. The minimum educational qualification was Form 5.[12] They were selected for their ability to speak different Chinese dialects, initiative, tenacity, general interest in the project and personality. Although there were changes in field assistants, the bulk of Stage I, Stage II and tracer surveys were conducted by the original field assistants.[13] The core members were present when new recruits were trained. This eased training difficulties and ensured consistency. Another advantage was that the interviewers were also the coders for the major part of the research.

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[12] Five males and one female were selected. Four had attained Form 5 with the intention to pursue their education. The other two were back in the *kampung* for their long vacation from Universiti Malaya.

[13] The two university students had to leave for their new term. One commenced sixth form classes at Alor Setar. Two got jobs in Alor Setar and Kuala Lumpur. The two who commuted to Alor Setar worked for the project on some nights and at weekends. Most of the Stage II data coding was done by four students at Universiti Sains Malaysia.

Although there are advantages and disadvantages in employing local youths, the good points far outweigh the bad. The major advantages were as follows:

1. Were familiar with the area, therefore knew the location of houses. This was particularly useful where the houses were isolated or concealed (for example, the slum section).
2. Knew the villagers personally, or at least were recognised by them which meant easy access to respondents. The amount of trust displayed by respondents in Simpang Empat was contrasted with Kg. Pisang, where the field workers did not reside.
3. Had knowledge of local conditions and could easily identify unreliable data. There was no need to drill them beforehand about economic aspects of the area, for example type of *padi* grown, average yield per *relung* of the different *padi* types, etc[14]
4. Were conversant with the local dialects, particularly Kedah Malay. The Chinese could speak Mandarin, Hakka, Teochew, Hokkien and Cantonese, in addition to Kedah Malay.
5. Because they were from the area, there were no practical problems of housing and transport. Problems of familiarization and adaptation to the local rural environment did not exist.

The major disadvantages were:

1. Familiarity may be a disadvantage if the respondent should feel antagonistic towards the interviewer. However, this did not occur as the field assistant usually replaced himself with another interviewer beforehand.
2. If the individual field assistant fears the public opinion of the villagers he may be at a disadvantage. But this is a personality trait which can be avoided by relegating him to coding.
3. Other researchers who have worked with local youths feel that they lack initiative. Having worked closely with both local youths and outsiders for 11 months I feel that the problem lies in the local youths' comparative lack of education rather than lack of initiative.
4. The field assistants were encouraged to keep diaries throughout this research. Local youths tended to take certain events for granted (because these incidents

[14] All except one field assistant was from a farming family. Their intimate knowledge of local conditions was sharply contrasted with the university students in Penang who coded most of the Stage II data.

were obvious to them) which may be of considerable interest to the researcher. One way of circumventing this problem was to tell them from the beginning exactly what was wanted.

In retrospect the success was due to the fact that they were an excellent group to work with. Because all lived and worked so closely together, points of misunderstanding in the questionnaires, interview and coding problems could be openly discussed and experiences shared. A strong feeling of comradeship developed between us.

It was invaluable that the field assistants understood the aims of the research, and how it related to them as young local residents. Creating and sustaining an interest was critical, in the face of the more tedious, fatiguing and sometimes discouraging aspects of field research.

6. Contents of the Simpang Empat Mobility and Migration Surveys and Questionnaires

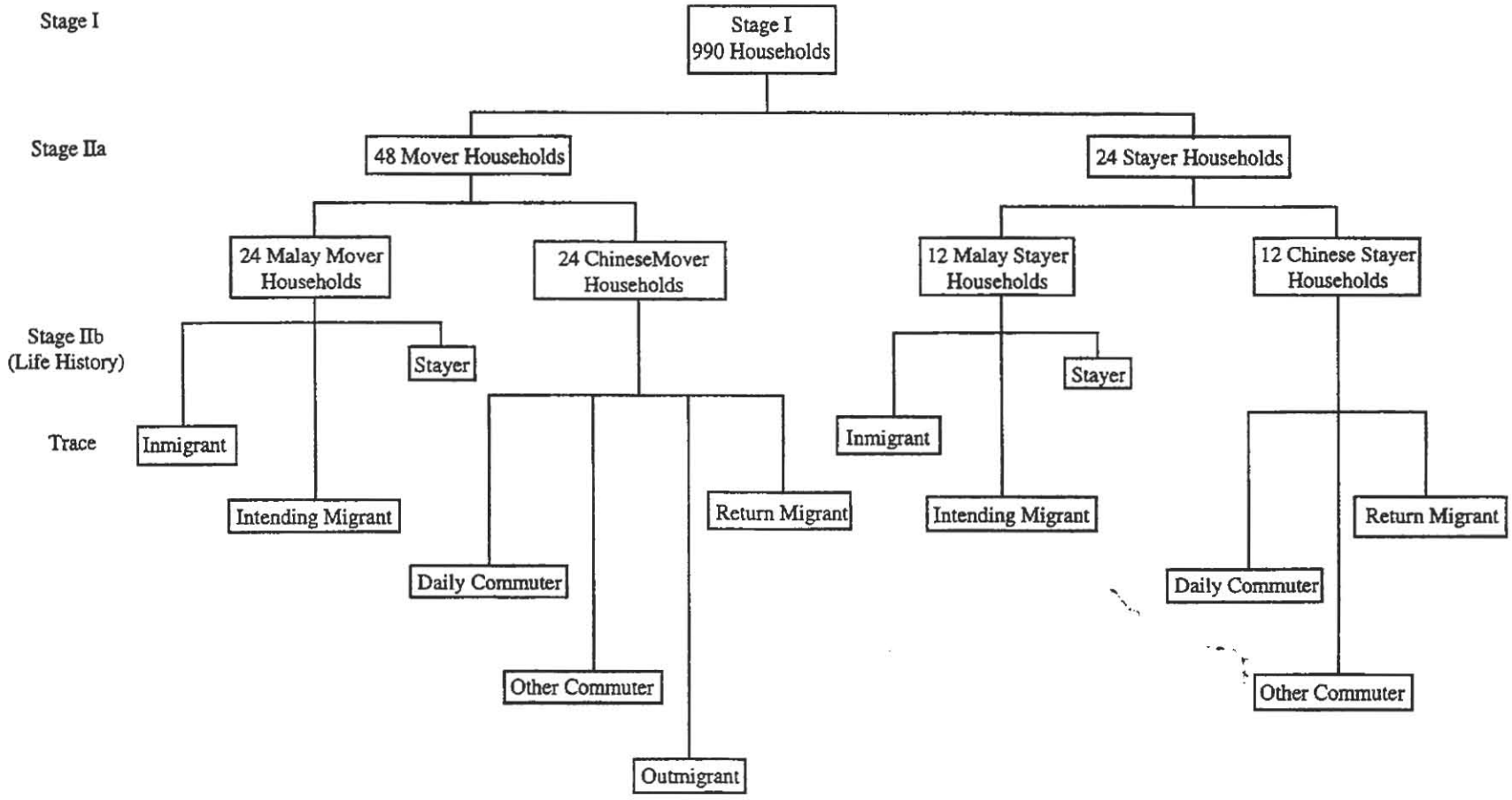
The structure of the surveys and sampling procedures are illustrated in Figure B.2 and Table B.2. A two-stage survey was undertaken. Stage I was a census of the selected *kampungs* covering 990 households. Stage IIa was a disproportionally stratified sample[15] by migrant status within the 72 households. The tracer study consisted of outmigrants from the 48 mover households.

Table B.2
Nature of Stage I and Stage II Surveys

Name of Survey	No. of Households	No. of Individuals	Nature of Selection	Interview Status
Stage I	990	8100	total census	head of household/spouse
Stage IIa	72)) 154	72)) 166	disproportionate sample	head of household
Stage IIb	72)	94)	disproportionate sample	specific type of migrant or non-migrant status

[15] See Moser and Kalton (1974: 85-100) for a discussion on the method of disproportional sampling.

Figure B.2
Sampling Procedure



The Stage I survey aimed at eliciting basic socio-demographic, economic, migration and mobility data from present and former members of the household. The Stage I Questionnaire was designed after a reconnaissance study and increasing familiarity with the region. It was shown to a number of researchers at Universiti Sains Malaysia and MADA before being translated into Bahasa Malaysia and translated back into English as a double-check.[16] It was a fairly straight-forward questionnaire to administer. The nature of the information may be divided into three categories (Table B.3). This provided the basis for classifying the population into stayers and different mobility and migration types (see Table B.4). All households in the Stage I survey were divided into two types. The mover household had at least one member staying permanently[17] away from the household at the time of the interview. The stayer household had no member currently living away from the household on a fairly permanent basis at the time of the survey.

Three major problems existed in this approach. First, it was static. A mover household at the time of the survey may become a stayer household at another time (should its only outmigrant return to live in the household). Conversely, a defined stayer household previously may have become a mover household. Therefore, this type of one-time categorization allows the study of the factors affecting the household only at that period. Moreover, the classification of people into different migrant types during Survey I meant that some persons had changed their migrant status by the time of Survey II. This was expected to be more pronounced among intending migrants, although changes were found in all groups. For example, a person defined as a stayer in Survey I became an intending migrant when reinterviewed during Survey II -- she wanted to follow her daughter who had migrated to Sabah. A man identified as an intending migrant during Stage I decided to remain in the village because of his suddenly thriving carpentry business. Such changes were less frequent than expected. Less than 3 per cent had changed their status by Survey II. Besides, the large size of groups tended to counter-balance changes within different categories. Thus, in some cases, an outmigrant with declared intentions to migrate was also given an intending migrant's schedule. Similarly, immigrants to the survey area were also studied as stayers, if they expressed no intentions of leaving and were not commuting at the time of Survey I. Analyzing the reasons for changes in migrant status provided greater insights into the decision-making processes of migration.

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[16] I am grateful to Suresh Narayanan, Dr. Kamal Salih and Ibrahim Hashim for their help in the translation.

[17] Members of the household who were away temporarily such as visiting relatives etc. were included as current members of the household.

Table B.3
Stage I: Information from Survey Questionnaire

Socio-Demographic		Migration		Economic	
1.	Present household status	1.	Country of birth	1.	Major occupation I[2]
2.	Relationship to head of household	2.	Birthplace[1]	2.	Employment status I
3.	Lineage group	3.	Duration of residence in present location	3.	Industry1
4.	Family type	4.	Last 3 moves outside village with overnight stay	4.	Income per month I
5.	Ethnicity		- location	5.	Secondary occupation II
6.	Chinese dialect		- reasons for move	6.	Employment status II
7.	Sex		- year of move	7.	Industry II
8.	Age		- duration of stay	8.	Income per month II
9.	Marital status	5.	Type of migrant	9.	Cultivated land[3]
10.	Number of wives		- location	10.	Own land
11.	Medium of education		- reasons for migration	11.	Rent-in land
12.	Type of tertiary education		- duration of migration	12.	Rent-out land
13.	Number of years education	6.	Place of work		
14.	Completed education				

1 All information on places (Stage I and Stage II) were classified by **kampung, mukim**, administrative district, state, accessibility (beside a road), rural or urban (strata) in 1970 (rural = ≤9999, urban = ≥10,000), population size of settlement in 1970 (seven groups), distance from present location (km.)

2 The codes for Occupation and Industry were adapted from the International Standard Classifications for Occupations (ISCO) and Industry (ISCI).

3 Land is in *relung* (0.53 hectares).

Table B.4
Types of Migrants and Non-migrants for both Mover and Stayer Households

Type of Migrant/ Non-migrant	Definition of Status	Mover Household	Stayer Household
1. Inmigrant	Person who has migrated into the *kampung*		
2. Intending Migrant	Person who has stated intentions of leaving the *kampung* to live elsewhere in the next six months		
3. Stayer	Person who has no declared intentions of leaving the *kampung*		
4. Daily Commuter	Person who journeys to work outside the *kampung* but returns nightly to sleep in the *kampung*		
5. Other Commuter	Person who works outside the *kampung* but returns to sleep at least three nights per week[1]		
6. Outmigrant	Person who has left the *kampung* to live elsewhere on a fairly permanent basis, returning mainly for social visits[2]		
7. Return Migrant	Person who has been an outmigrant but has returned to the *kampung*		

[1] "Other commuters" is the group between "daily commuters" and outmigrants. He/she may sleep 3 nights or less in the *kampung* and considers his/her home the *kampung*.

[2] One can never be sure that each individual will be in a category for a specified period. However, "fairly permanent basis" means the individual is now living outside the village and is likely to continue doing so to the best of his/her knowledge.

Second, the reconstruction of only the present household tended to ignore potential lineage depth which may be studied through the reconstitution of genealogical histories. However, the study area was recently settled, as were most of the *kampungs* in the southern MADA region (in contrast to the north). The maximum number of generations found among Malay households were four, most were only two or three. The Chinese mainly had two generations as they came after the 1920s.

Third, the information was provided by the head of household and family (if present during the interview).[18] Therefore, it was likely to be less accurate than information from each household member. Thus, the questions relating to the last three moves with at least one overnight stay were likely to be most prone to inaccurate answers.[19] However, as decisions in many kinship-oriented societies are collectively discussed and where the head of household wields more power, this problem would be less acute (see Caldwell, 1969: 209).

Based on insights gained from living in the area and preliminary analysis of the Stage I data, 72 households were considered a reasonable sample for Stage II Survey (Stage IIa). Because stayer households tended to have less variable characteristics, particularly demographic attributes, than mover households, a disproportionally stratified sample (by community and mover-stayer household) of 26 stayer households and 48 mover households was selected (see Figure B.2). Of these 72 households, 36 were Malay and 36 were Chinese. The heads of households were interviewed in all 72 households.

All members of these households above the age of 15 years[20] were grouped into different types of non-migrants and migrants and a disproportionally stratified sample was taken based on migrant types (Stage IIb). Where the selected person could not be interviewed (three cases), he was either replaced by another member of the household of the same category, or else another person of a similar household and ethnic group. A total of 166 respondents were interviewed, the majority within the source areas. Twenty-one outmigrants were either traced and interviewed at their destinations or on their return to the source villages.

The Stage II Questionnaire was not translated into Bahasa Malaysia because the field assistants were fully conversant with the study by that stage. Besides, it was pointless to translate it only to change half of the questionnaires back to Chinese dialects. Instead, more time was spent ensuring comprehension and the selection and standardizing of words into the various languages.

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[18] Thirty per cent of households were interviewed with members of the household present and 69.6 per cent were interviewed alone. The rest had neighbours present.

[19] Where head of household was uncertain about the activities of a household member, the field assistant returned at an appropriate time to obtain the information from the person concerned.

[20] The 15-years age criterion was based on the average school-leaving age.

In order to extract accurate data, a variable questionnaire was adopted for the sections on employment and migrant types. Table B.5 shows the format and data collected for the variable and non-variable sections. To overcome the inadequacies of a static study, the life-history matrix was employed. It had a year-by-year account of a person's life to the present year and aimed at relating socio-demographic, economic and migration attributes to stages of the life-cycle (Table B.6).[21]

Table B .5
Stage II: Non-variable/Variable Parts of Survey Questionnaire

Non-variable		Variable
1. Land 2. Labour 3. Information on outmigrants 4. Income 5. Food 6. Assets 7. Home	) Head of household in both the source and the destination areas	1. Employment Types: A *Padi* farmer B. Pig farmer C. Vegetable farmer D. No specific job/family worker E. Wage and salary earners F. Non-farming self-employed G. Hired labourers
8. Knowledge on village migration 9. Attitude and perception to migration 10. Parent/child attitude to jobs and education 11. Exposure to information 12. Social participation 13. Geographical mobility 14. Perception of places 15. Economic conditions of the village 16. Life-history		2. Migrant Types: A. Stayer B. Intending migrant C. Daily commuter D. Other commuter E. Outmigrant Inmigrant Return migrant[1]

[1] Same questionnaire was used, changing the text accordingly. For example, "Why did you leave this village?" (outmigrant); "Why did you come to this village?" (inmigrant); "Why did you return to this village?" (return migrant).

The major problem encountered during the Stage II Survey was the complexity of the questionnaire. It therefore, entailed a longer training period. Fortunately, the field assistants had at least three months' interviewing and coding experience by the

[21] See Young, 1979, for a fuller discussion of the life-history matrix.

beginning of the Stage II Survey. To prevent boredom and fatigue of both respondent and interviewer, Questionnaire II was administered in a number of visits.

The life-history matrix proved to be very successful. It engendered respondents' interests and recall. However, this technique should be avoided if the field assistants are not well-trained or closely monitored as information may be omitted due to the fairly unstructured interviewing style.

The largely experimental tracer study took an immense amount of time owing to logistic problems. For example, I traced two Malay migrants to Kuala Lumpur. It proved a formidable task as they were living in different suburbs. Poor public

Table B.6
Stage II: Life-History Matrix Information

Socio-Demographic	Migration Information	Economic
1. Birth	1. Birthplace	1. Major occupation I
2. Education	2. Placed lived in - location - duration - reasons for migrating - decision maker - mode of transport - cost of transport - perceived distance - migrate with whom	2. Employment status I
3. Marital formation and dissolution - marriage - divorce - remarriage		3. Industry I
4. Family formation and dissolution - birth of children - children's death - children leaving household		4. Income I
5. Death of parents	3. Type of migrant	5. Job recruitment I
		6. Secondary occupation II
		7. Employment status II
		8. Industry II

transport, my unfamiliarity with the city, and finding them not at home when I got there finally took me six days to succeed in interviewing them. From the preliminary data it was clear that outmigrants did not gravitate mainly to one area within a settlement as was the case in other studies (Perlman, 1974). For example, among the selected outmigrants, their destinations were as far north as Kota Bahru and as far south as Johor Bahru within the peninsula. As the emphasis of the study was on the different types of migrants whose destinations tended to vary accordingly, it was inappropriate to hold one destination constant for the tracer study. Besides the outmigrants were mainly from the sampled 48 households. To circumvent this difficulty, some outmigrants were interviewed when they returned to the villages.

Fortunately, my extended stay in the area and the excellent information network established provided the opportunity of "catching" them when they returned. A few interviews were conducted with outmigrants who did not belong to the sample. Although not representative, these were useful for understanding the processes of migration from both ends and provided an opportunity for cross-checking information. In retrospect, tracing a large number of outmigrants who were scattered in numerous destinations does not warrant the time and effort. And this would have been the pattern in this study – that outmigrants did not end up mostly in one squatter settlement of one city.

7. Coding and Editing of Data

After editing about 100 questionnaires, the range of data gathered permitted the formulation of codes for certain variables. All information was coded in detail to allow flexibility in analysis. Each field assistant specialized in at least one aspect (for example, location or occupation), to ensure consistency. The same codes were used for Questionnaire I and II.

Variables with hierarchical levels of generalization, for example, occupation, industry and reasons for migration used three digit codes (Table B.7). This cut down the amount of recoding. All locational information was coded by the *kampung*, *mukim*, administrative district, state, distance from the source area, accessibility (located by a road), population of the settlement in 1970 and two rural-urban criteria (over 1,000 and over 10,000). To illustrate the detailed coding used in this study, there were nearly 700 settlements, 260 occupations (street vendors alone made up 35 types) and 95 reasons for

migration. For comparability, wherever possible, similar codes (location, occupation and industry) used for the 1970 Census were used for this study.

Table B.7
Hierarchical Coding of Occupation, Industry and Reasons for Migration

	Digit Coding			
I.	Major	Minor	Unit	Occupation
	0-1			Professional, Technical and Related Workers
		01		Physical Scientists and Related Technicians
			011	Chemists
			012	Physicists
			013	Physical Scientists Not Elsewhere Classified
II				Industry
	0			Agriculture, Forestry, Hunting and Fishing
		01		Agriculture and Livestock Production
			011	Rice or Mainly Rice
			012	Miscellaneous Crops
			013	Livestock
III				Reasons for Migration
	1			Family
			01	Marriage Marriage - go to live with husband's family
			02	Marriage - go to live with wife's family

The Stage I data on the individual filled four computer data cards (total 32,400) while the household information occupied one card per household (total 990). These were punched and later put onto tape and edited by the 360 IBM Computer at Universiti Sains Malaysia. The Stage II data occupied another 56 cards per person (including blank cards for inapplicable migrant and employment status). The life-history information used 10 to

75 cards per person. This was edited in the DEC-10 computer at the Australian National University.

The SPSS (Statistical Package for the Social Sciences, 1975) frequency and cross-tabulation runs were used to edit both sets of data. The data were checked for the following: order of cards, blank cells, specified range of variables, unacceptable values for all variables and consistent inter-related variables.

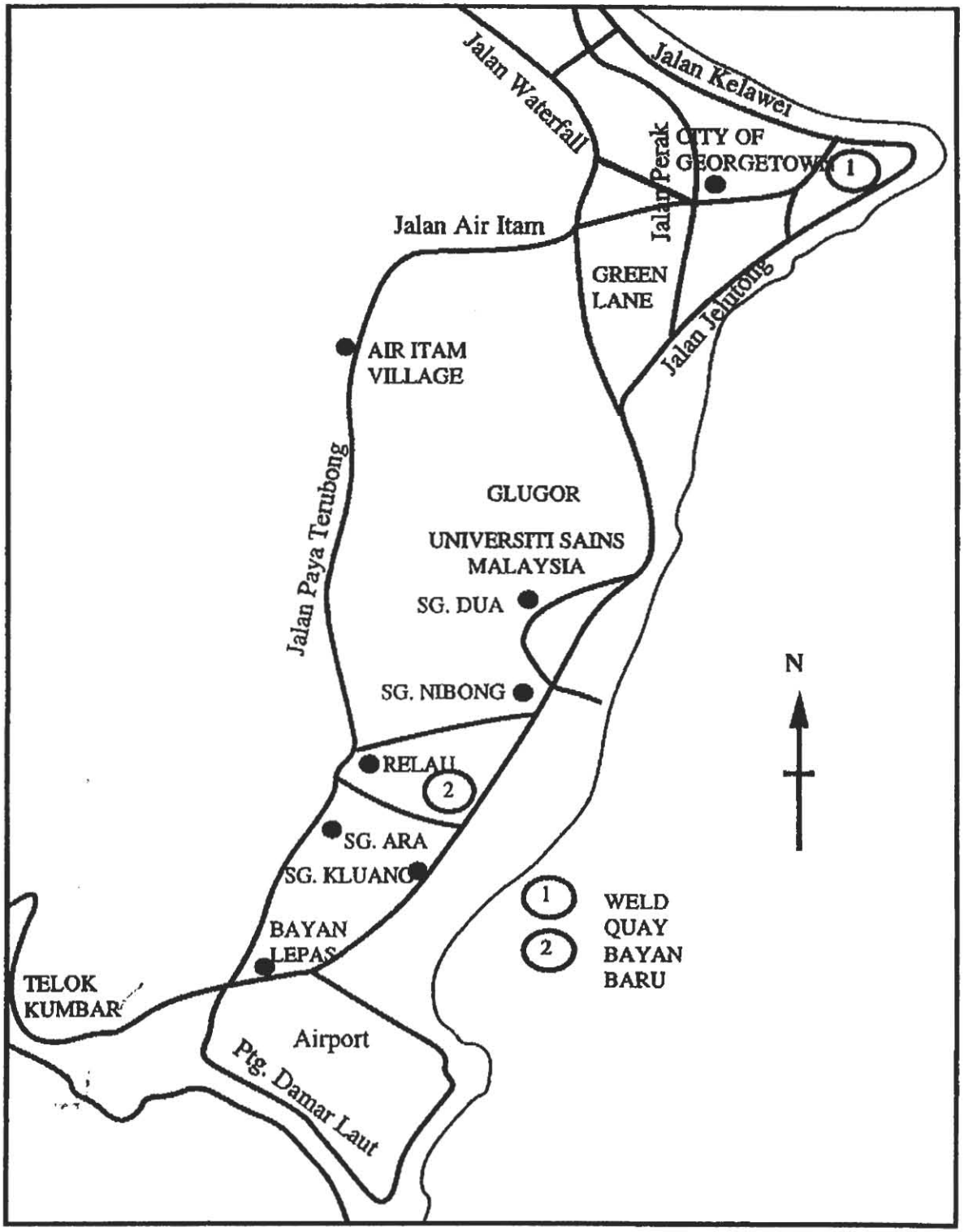
APPENDIX C
THE YOUNG WORKERS SURVEY, PENANG, 1982

The aim of the study was to examine the contrasts in socio-economic background, especially migration and work experience, of young workers in the formal, namely the Free Trade Zone (FTZ) factories of the new town of Bayan Baru, and the informal sectors, namely the Weld Quay jetty population of old Penang (Figure C.1).

The majority of the new youthful labour force, produced by the particular nature of industries in FTZs are Malay, female, and of rural origin and migrated to the surrounding areas of the industrial estates which were established for the purpose of accommodating both the new industries and the new workers. In contrast, the informal tertiary sector was found in the old, established areas. To meet the demands from the expanding urban population, this workforce was drawn from the working class families in traditional communities such as the Chinese clan jetties of Penang (Chan, 1980). While the sustenance of this informal sector workforce is based on direct links within this community, the new workforce in the formal sector is maintained by their links with the rural areas. The formal and informal sectors in this particular context, are not merely metaphors for two distinct patterns of work organization and relations of production (indeed both are inter-related), but represent the basic ethnic and ecological configuration of the two worker groups. The concept of the informal sector is part of a voluminous and controversial literature (see Chapter 1). The dualistic version of the concept sees it variously as a separate labour market within a two-sector framework, and emphasizes the 'stickiness' of wages in the formal sector and other institutional obstacles (such as lack of access to credit, licensing, and other biases of the state) in explaining the persistence of the informal sector. These institutional impediments contrast with the ease of entry, elasticity of job creation and unregulated nature of the markets which characterize the informal sector, distinguishing between individual-based activities (including casual labour) and family-based enterprise.

The reason for selecting Bayan Baru and Weld Quay was to contrast two very different communities. Bayan Baru is a new township, where the population except for those in the peripheral *kampung* areas are recent inmigrants. As recent migrants, these workers face specific problems. Most live away from their own family in rented accommodation within an alien living and work environment. Still single, they retain close ties with their families in their home villages outside Penang. They experience different

Figure C.1
Penang: Location of Study Area



problems and needs from their counterparts in Weld Quay. In contrast, the Weld Quay workers have their home supports as they are still living with their families in an established, densely populated area.

Bayan Baru is located about 18 kilometers from the centre of George Town, the capital of Penang state and the second largest urban conurbation in Malaysia. This new town centre, or Bandar Bayan Baru as it is now known, is the nucleus of the Bayan Lepas Development Complex, which covers an area of approximately 2,023.5 hectares stretching from and including the Universiti Sains Malaysia to the Bayan Lepas International Airport.

Prior to 1970, this area was essentially rural. The population of about 25,000 were mostly engaged in agriculture and fishing, and scattered in villages which constituted the main pattern of settlement. The cultivation of *padi*, coconut, spices and rubber, poultry and hog-rearing, low-yield cattle-rearing, as well as in-shore and off-shore fishing were the main agricultural activities. In line with the state's rural industrialization and urbanization objectives, the plans to develop Bayan Lepas into a secondary urban centre called for some 222.6 hectares to be set aside for industrial development purposes. The industrial development complex, known as the Bayan Lepas Free Trade Zone, was planned to be developed in three phases. When completed, it is envisaged that the new township would be a self-contained growth centre, encompassing some 1,295 hectares with 30,000 residential units and 3,716 sq. km. of commercial space, supporting an optimum population of 150,000-200,000.

In contrast, the Weld Quay area was one of the first parts of Penang Island to be settled, and has since become the traditional, Chinese working class area of Penang. Weld Quay proper (i.e. the long stretch of foreshore along the north-eastern tip of Penang Island) had its origins in the entrepot trade of Penang which developed shortly after the island was colonized by the British in 1786. In its early days, Penang was essentially a lighterage port with ships loading and unloading cargo directly from lighters operating from Weld Quay.

The fortunes of the port fluctuated considerably, and parallel to that, the reliance of the Weld Quay community on port-related activities as a source of livelihood. From the early 1960s onwards, this traditional economic base suffered further erosion as a

consequence of a number of factors -- decline of the entreport trade (due to increasing economic nationalism of neighbouring countries and the period of Confrontation with Indonesia), port modernization involving capital substitution for labour, transfer of port function to the mainland, and finally, loss of free port status in 1969. As a result of these developments, there was diversification into other activities such as fishing, petty trading, and various kinds of service occupations catering to the Weld Quay community itself as well as the surrounding urban areas.

The Weld Quay area as it exists now includes the jetties where Chinese clan communities have established houses on stilts extending a short distance into the sea, the rest of the foreshore (including reclaimed areas) where most of the residents have conditional tenure (temporary occupation licences), blocks of old shophouses further back from the shore-front, which usually house multiple families within a single unit, and low-cost high-rise flats. The occupational profile of the community is far more diverse now, including regular wage workers in the formal sector (industries and services), irregular/contract workers in informal sector industries, petty traders and small proprietors, hawkers, and a host of other self-employed activities.

The formal sector was defined as comprising establishments with 30 or more workers while those in the informal sector had less than 30 workers. This was an arbitrary cut-off point but from reconnaissance work it was felt that too low a cut-off (e.g. 10 workers) would include predominantly family enterprises and consequently family workers. A cut-off higher than 30 workers would result in only establishments with characteristics more formal in nature. Moreover, most of the informal sector establishments in Weld Quay had fewer than 30 workers.

Workers in the sample referred only to operators on the production line, including packers and handlers. It excluded categories such as management staff, supervisory staff, professional/technical/maintenance staff, building maintenance staff (e.g. sweepers, janitors, cleaners, etc.), security staff, clerical/administrative staff, and drivers. For the informal sector, workers were defined as those engaged in production and processing in the manufacturing industries. Thus production meant making things, e.g. boxes, metal tins, noodles, joss-sticks, salted fish, etc., and processing referred to processing of food and household items, e.g. grading onions, peeling prawns, bottling dyes, packaging food, etc. This definition therefore, excluded service-oriented workers, servants, hawkers, washer-women and others. Furthermore, the respondent had to be an

employee and thus excluded those who were concurrently proprietors and/or self-employed. It excluded immediate family members and relatives who were unpaid. Young workers' were defined as those between the ages of 13 and 36.

The survey was conducted in two parts: a factory survey and a worker survey. For the factory survey, an initial questionnaire was prepared and then piloted in five factories. After the questionnaire was modified, the new version was sent out to 100 of the 222 factories in the Penang Development Corporation (PDC) industrial areas. An additional 20 were sent to factories outside of these PDC industrial areas. Of these 120 factories, only 26 returned completed questionnaires after the announced deadline. Consequently we were obliged to conduct interviews in the remaining factories. In this manner, an additional 24 questionnaires were completed giving us a total of 50 respondent factories. Follow-up interviews with some factories were also conducted.

Another questionnaire was prepared for the worker survey. The target group was sampled according to the two study areas. The total work force in the Bayan Lepas FTZ was estimated to be 30,000 while that of the informal sector was thought to be comparable although no figures were available. A total of 422 workers were interviewed in the formal sector with 291 coming from the Bayan Baru area and 141 from the Weld Quay area; and 210 for the informal sector coming entirely from the Weld Quay area. From reconnaissance work it became apparent that we could not get equal numbers of males and females. A female-male ratio of 4:1 was maintained in the overall sample, being a reflection of the sex structure of young workers (13-36 years) in manufacturing industries. The overall breakdown between *Bumiputra* and non-*Bumiputra* workers in the final sample was 53.6 per cent and 46.4 per cent, respectively, in the formal sector, and almost entirely non-*Bumiputra* in the informal sector.

APPENDIX D
HOUSEHOLD RESPONSE TO INDUSTRIAL CHANGE SURVEYS, 1985-87

The Household Response to Industrial Change Surveys were carried out in three phases, between May 1985 to May 1987. Phase I (May 1985 - August 1986) involved gathering data at the macro (national) and meso (Penang state) levels to establish the patterns of economic development as background for the study on the electronics workers in Penang. This period was also devoted to intensive fieldwork establishing initial contacts with electronics workers, identifying the location of workers' households, conducting preliminary village reconnaissance and experimenting with structured and unstructured life-history matrices, and building up rapport through interaction with the girls and their family members in the home villages. The aims were to prepare the ground for the in-depth and time-consuming interviews and to sensitize the researchers to the more important issues involved in the study providing them with some of the vital insights for a meaningful study.

The life-histories and family life-histories took over six months to complete owing to logistic problems (going back to the villages) and the variable shift work schedules of the workers. Information gathered at this stage established the members of the household and those who had left (similar to the Simpang Empat Mobility and Migration Survey, I), gathering basic demographic (age, sex, schooling, migration status, birthplace) and economic data (occupation, industry, employment status, and income). This was followed by life-histories, using the unstructured form, to gather information on changes in income, labour utilization, crucial socio-economic events such as economic crises, extended sickness, deaths, etc.

From these interviews we were able to decide on the important variables which would give us insights into income-pooling, household adaptive strategies and labour allocation, to be incorporated into Phase II.

Phase II covered four villages from Penang, Perak and Kedah, the states which contribute the most girls in the electronics factories of Penang. The villages were:

1. Kampung Permatang Pasir - Penang Island
2. Kampung Permatang Janggus - Province Wellesley, Penang State

3. Sungei Ular Mukim (consisting of three smaller villages of Kampung Tok Betok, Kampung Sera, Kampung Batu Empat Setengah) - Kedah
4. Kampung Sungei Siput – Perak

These villages were selected because there were sufficiently large numbers of households from which the electronic worker selected in Penang had migrated from.

Phase II collected socio-demographic, economic, and mobility and migration data for all households in the villages. It involved a survey of 627 households in four villages from which a selection of the workers had come. It was organized into two data sets. The first set dealt with household information such as the number of persons in the current household and the number who had left, as well as other variables relating to the amount of land owned, land ownership, use of land, and contributions to and from the households. Information designed to establish the economic status of the household, such as: amount and use of land, ownership of consumer durables, the type of cooking fuel used, and the use of amenities such as water, lighting, and toilet facilities, was also gathered.

The second set of data concerned the individual members of the current household and people who have left the household. The type of information collected pertained to the usual baseline socio-demographic variables (age, gender, marital status, race, educational level, etc.), economic variables (primary and secondary jobs, industrial groups, incomes, etc.), and a category of questions relating to migration, mobility, and linkages between workers and their households. These two data sets provided the basic socio-demographic and economic profiles of the villages as well as quite detailed information on current and geographically extended households. They were also used in conjunction with in-depth interviews conducted with village elders and village heads to get a sense of the history of the village and the area in which it was located.

These villages were chosen as representative of the different contemporary Malay villages in the country. Their agricultural bases were mainly *padi*, rubber and mixed cropping with some animal husbandry. All four villages have families with daughters currently working in the electronic factories or daughters who have worked in the electronic factories and have either left voluntarily or been retrenched. The daughters who are currently employed either commute or are migrant workers who have left the villages for the industrial zones.

A complete census was carried out in each village. The total number of households interviewed was 627 (non-responses were less than 0.6 per cent) and household members (both in and out of the household) made up a total population of 4,230.

Phase II was a follow-up of the village survey where in-depth household interviews were carried out in selected households.

Basically, there were four parts to the interview schedule. Part One consisted of life-histories which were conducted with all individuals in the family older than fifteen years of age. Parts Two and Three were directed at the head of the household and spouse to gather information on the changing household economy and income needs. Parts Four and Five contained attitudinal and perception questions.

The aim of this phase of the study was to understand the changing structures and processes within the household as it goes through its family life-cycle. The cycle comprised the individual life-histories of the family members. Against this demographic framework, information was elicited pertaining to life crises – stresses and strains at different times created by factors within the family, the village, and even the national and international levels. How did the factory workers within the rubric of household strategies respond to these changes? To better understand the answers to this question, the interview guides incorporated questions on the individual's attitudes and perceptions at various stages of his or her life.

These in-depth interviews were carried out in 40 households classified into four main groups – ten households with daughters working in the electronics industry, ten households with daughters earning agricultural wages, and ten households with daughters in other industrial sectors, such as textiles. Another ten households were selected because their daughters worked in the government sector which is seen as a stable sector in terms of job security, benefits, etc. The choice of the different households was a means by which to examine and contrast the processes within, and impacts on, the households as a consequence of the rapid industrialization of the female labour force in Malaysia.

These interviews were carried out by the team members including the author and three field assistants, the latter were graduating Social Science students of Universiti Sains Malaysia, Penang. Their training took over two weeks owing to the intensive nature of the interviews and the required ability needed to probe and elicit sensitive information.

The last section of the research concerned retrenched workers (from electronics and other industrial sectors). This section provided important information on the re-absorption of workers into their family life. The work analyzed the retrenched workers and the effects of retrenchment on the women workers and their families, what they are doing about the retrenchment, how they and their families feel about it, what their hopes are, and what steps they are taking for their futures.

Severe retrenchments from the electronics factories were occurring at the time Phase II was in progress. Because the study focused on young women working in electronics factories, the research team felt that it should train retrenched factory workers (with the required amount of schooling) as field assistants. Initially eight persons were selected of whom two had interviewing experience and were not factory workers. Two left after two weeks of work. The remaining interviewers proved very effective at data gathering and tabulation.

The questionnaires including the unstructured life-histories and sets of questions for the household were designed by the author. They were based, and in some cases, identical to those used in the Simpang Empat Mobility and Migration Surveys. The experience gained during the Simpang Empat surveys were very useful at this stage.

There is no doubt that the methodology used here, especially for the life-histories and family life-histories, were further development and refinement of that used in Simpang Empat in the 1976-77 period and that used during the Young Workers Survey.

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