This book was published by ANU Press between 1965–1991. This republication is part of the digitisation project being carried out by Scholarly Information Services/Library and ANU Press. This project aims to make past scholarly works published by The Australian National University available to a global audience under its open-access policy.
Immigrants in Australia 7
A Series sponsored by
The Academy of the Social
Sciences in Australia
Salter, Moira Joan.
Studies in the immigration of highly skilled.

(Immigration in Australia; 7).
Index.
Bibliography.
ISBN 0 7081 0722 2.
ISBN 0 7081 1805 8 (paper)

1. Australia — Emigration and immigration.
2. Skilled labour — Australia. I. Title.
(Series).

301.5240994

North America: Books Australia, Norwalk, Conn., U.S.A.
Southeast Asia: Angus & Robertson (S.E.Asia) Pty Ltd, Singapore
Japan: United Publishers Services Ltd, Tokyo
The Academy of the Social Sciences in Australia is the national body representing the social sciences. One of its objectives is the sponsorship of major research projects in areas of national importance. Two previous projects, sponsored under its earlier name of the Social Science Research Council of Australia, were *The Role of Women in Public and Professional Life* and *Aborigines in Australian Society*. It was hardly surprising that in 1966 the Council, as it then was, decided to sponsor another project designed to examine the contribution of overseas immigrants in Australia's economic, social, and cultural life, for new settlers had not only supplied slightly more than half the nation's growth from 7,579,000 in 1947 to 11,550,000 in 1966, but had brought into our society a great diversity of national groups from the United Kingdom and many parts of Europe.

The major difference between the flow after World War II and all previous immigration was the high proportion of non-British, first from northern and western Europe, primed by the influx of some 200,000 refugees in the immediate postwar years, and thereafter from southern Europe, particularly from Italy and Greece. The mosaic of postwar immigration is seen in the following estimate by Dr C. A. Price of the ethnic origin of persons who came to this country between July 1947 and June 1970 with the intention of settling here.\(^1\)

<table>
<thead>
<tr>
<th>British Isles</th>
<th>1,086,500</th>
<th>Germany</th>
<th>121,300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>337,700</td>
<td>Malta</td>
<td>68,400</td>
</tr>
<tr>
<td>Greece</td>
<td>200,000</td>
<td>Other East Europe</td>
<td>220,600</td>
</tr>
<tr>
<td>Netherlands</td>
<td>140,600</td>
<td>Others</td>
<td>334,100</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>136,800</td>
<td>Total</td>
<td>2,646,000</td>
</tr>
</tbody>
</table>

In the immediate postwar years, marked by high levels of

economic activity associated with rebuilding the nation's capital stock and reopening the channels of overseas trade, immigrants were absorbed into the economy almost without notice and with few structural changes. These were also years when, because of the very low fertility in Australia in the great pre-war depression of the thirties, there was a marked lag in the natural increase of the non-immigrant workforce: immigrants were welcomed if only because they filled that gap. They manned great national projects like the Snowy Mountains Scheme; they provided a great part of the labour force for new mineral enterprises; they helped to build houses, offices, and industrial buildings; they made the nation's steel; and they became the workhorses of the burgeoning motor industry. But, above all, they settled in the major cities, often forming substantial ethnic groups, restructuring national customs in their adopted environment, keeping alive their native languages, yet rubbing shoulders with Australians, being influenced by Australian culture — often through the participation of their children in Australian schools — and at the same time influencing by their presence and activity a remarkably homogeneous and at times slightly suspicious Australian society.

By the sixties few Australians could be unaware of the impact of the immigrants, whose flow continues to the present. As their numbers have grown, as the ethnic origins of the new settlers have become even more diversified, as the size of some of the ethnic communities in major cities has increased, as some schools have emerged in which the majority of children are immigrants brought up in a non-British tongue, and as job competition has grown keener as the swelling Australian cohorts of the postwar 'baby boom' have reached maturity and seek employment in the nation's workforce, the presence of the immigrant has been increasingly apparent. Some call for a reduction of the inflow; many seek to know what the impact has been on the nation's culture, economy and society; none can ignore the immigrants' presence.

So the Academy sponsored a project to try to find at least some of the answers to the questions being asked, both by encouraging and helping workers already known to be engaged in immigrant research, and by organising new studies to fill some of the major gaps. In September 1967 two Honorary Directors were appointed: Dr C. A. Price, Professorial Fellow in the Department of Demography at the Australian National University, to lead studies in the
Note on the Series

cultural, political, and social fields; and Professor R. T. Appleyard, Department of Economics, University of Western Australia, to lead work in economic and industrial studies. An Organising Committee with a wide geographical and disciplinary representation was also appointed and set about costing the enterprise, which proved to be beyond the financial capability of the Academy. It is with gratitude that the Academy acknowledges generous financial support from government, business, and foundation sources. The Academy also records its appreciation of the co-operation of the Department of Demography of the Australian National University, both for its contribution in research and for its assistance in many organisational aspects of the project.

Throughout the project every attempt has been made to keep the research workers in communication with the main objectives of the project and with one another. To this end a major seminar was held in Canberra in May 1970.

The project does not, and indeed could not aim to produce a single definitive volume, but rather to sponsor books and journal articles within areas felt to be significant with regard to the processes of settling the interaction of Australian and immigrant and the impact of immigrants upon the nation. Major areas in which studies are being sponsored are:

- The economic role of immigrants in specific industries.
- Patterns of immigrant consumption and expenditure.
- Mobility and career patterns of immigrants.
- Displaced persons and other refugees.
- Professional and highly skilled immigrants.
- Immigrant communities and problems of integration.
- Studies of selected ethnic groups.
- Immigrant concentrations in metropolitan areas.

In addition to articles in learned journals, it is expected that at least a dozen books will flow from the study. The sponsorship of new research ceased at approximately January 1971; the task now is to bring to publication work begun by that date. So far six books have been published and one is in preparation, and the flow is expected to continue.

The Academy hopes that the project will assist in an understanding of a great national enterprise and the growing complexity of a nation in which almost a quarter of the population is of postwar immigrant stock; for, whatever the future of immigration, there can be no doubt that the introduction of the 2,646,000 new settlers from
Note on the Series

1947 to 1970, of whom about 85 per cent have remained in Australia, has changed the character as well as the economic structure and the size of this young nation.

W. D. Borrie
Chairman, Organising Committee

Canberra
December 1971
It will be seen from the Note on the Series by Professor W. D. Borrie that this book presents the results of one of several research projects in the field of immigration sponsored by the Academy of the Social Sciences in Australia. Professor R. T. Appleyard was given the task of leading the economic and industrial studies. The finance for research on highly skilled immigrants was provided by the then Commonwealth Department of Immigration and it fell to my lot to carry out the research.

The migration gain of high-level manpower by the United States has excited a great deal of attention, but Australia's intake of international human talent since World War II has been largely ignored. This oversight led me to believe that it might be more interesting to take a descriptive approach rather than to attempt to add yet another work to the voluminous number of publications on human capital theory. Even so, the reader will find that much has been omitted, and for this I apologise. The barriers of time are insuperable and the writing of this book has taken too long already. The interval between completion and publication has meant that recent developments in immigration and manpower policies are absent from this book. Updating has been minimal and mostly indicates changes in names of government departments.

I should like to thank the following people and organisations for advice, information and co-operation. Their help was deeply appreciated.

Beyond the provision of finance, the then Commonwealth Department of Immigration responded to requests, no matter how trivial, for assistance. Members of the Secretariat of the Committee on Overseas Professional Qualifications were always accessible and it was only the limitation of time that prevented my exploiting their co-operation even further. Acknowledgments are due, too, to the assistance given by members of the Australian Bureau of Census and Statistics who were employed on the compilation of migration and census statistics. Officials of the Department of Labour and National Service (now Employment and Industrial Relations) answered most readily in those instances when information was sought from them.
Acknowledgments

Officials of professional associations made their time freely available for interview, but without the kindly interest of Mr E. J. Scollay, Director of the Royal Australian Institute of Architects, the survey of immigrant architects described in the final chapters would never have been possible. The cooperation that followed from other people was most gratifying. It extended from help in tracing the immigrant sample from State Registrars, Commonwealth and State government departments and statutory authorities concerned with the employment of architects, to discussions with Australian architects who talked about the immigrants and immigrant architects who talked about themselves, to the hundreds of respondents who answered the questionnaire. Mr Charles McDonald, A.C.T. Divisional Secretary of the Association of Architects, Engineers, Surveyors and Draughtsmen of Australia, permitted access to trade union records. Mr T. C. Colchester of the Commonwealth Association of Architects, and Miss Clare Thomas, Librarian of the Royal Institute of British Architects, suggested source material, and the reference librarians of the National Library of Australia proved invaluable guides to the location of material.

Finally, I am particularly indebted to Professor R. T. Appleyard, Mr D. Bensusan-Butt, Professor J. Niland, and Dr C. A. Price for their kindness in reading a draft of the manuscript and suggesting all manner of improvements.

Sydney

M.S.

January 1977
Contents

Note on the Series v
Acknowledgments ix
1 Introduction 1

Study One
2 Assisted Passage Schemes and the Highly Skilled Worker: History 15
3 Assisted Passage Schemes and the Highly Skilled Worker: Recruitment 33

Study Two
4 Manpower Policy 62

Study Three
5 The Statistics 84

Study Four
6 Immigrants in a Profession: The Architects 104
7 Conditions of Entry to the Australian Architectural Profession 122
8 Immigrant Architects in the Australian Labour Force 145
9 Conclusions 170

Appendix I: Assisted settler arrivals in Australia of workers in professional occupations, by assisted migration program, 1950-60, 1961-70 178

Appendix II: Professions for which statutory requirements exist in the Australian Capital Territory and the Northern Territory 182

Appendix III: A. Migration of professional and semi-professional workers, Australia, 1948-60
B. Migration of professional, technical and related workers, Australia, 1961-70 185

Appendix IV: Labour force in professional occupations, by birthplace and length of residence in Australia, Census 1966 190

Appendix V: Questionnaire used in survey of architectural profession 192

References 195
Index 199
# Tables

2.1 Class of assisted arrivals in Australia, 1 Jan. 1926 to 31 June 1930 23

3.1 Arrivals in Australia of workers in professional occupations under United Kingdom Assisted Passage Schemes, 1950-60 38

3.2 Arrivals in Australia of workers in professional occupations under assisted passage schemes, 1961 and 1970 54

4.1 Movements in male incomes in certain professions in Victoria, 1956-64 76

5.1 Proportion of arrivals of professional workers representing net gain to Australia, 1948-70 91

5.2 Major components of arrivals and net gain to Australia of professional workers, 1961-70 94

5.3 Distribution of Australian and foreign-born workers between professional occupations in Australia (Census, June 1966) 97

5.4 Relative importance of Australian and foreign-born workers in professional occupations in Australia (Census, June 1966) 98

5.5 Countries of birth of foreign-born workers in professional occupations in Australia (Census, June 1966) 99

5.6 Proportions of Australian and foreign-born workers (with 1-18 years residence) in professional occupations and with university education in Australia (Census, June 1966) 101

6.1 Response to questionnaire 107

6.2 Migration flows of respondents 109

6.3 Age distribution of respondents on arrival in Australia 112

6.4 Types of passage and average length of work experience before migration to Australia 113

6.5 Architectural qualifications of respondents on arrival in Australia 115

6.6 Employment status of members of Architects
Tables

Registration Council of the United Kingdom and respondents arriving from the United Kingdom 118

7.1 Examination exemptions granted by one State Registration Board 141-3

8.1 Earnings differentials of respondents as a consequence of migration 147

8.2 Range of earnings differentials among United Kingdom arrivals, 1947-70 148

8.3 Type of employment of respondents on arrival and in 1971 151

8.4 Average annual growth rates of earnings of respondents between arrival and 1971 152

8.5 Type of employment and median earnings of respondents by 'employer/employment status' mobility 157
Figures

2.1 Assisted immigration and unemployment rates, Australia, 1860-1970 19
2.2 Assisted male immigration and reciprocals of male unemployment rates lagged one year, Australia, 1911 to 1969-70 28
3.1 Ratios of dependants and professional workers to all workers in the assisted immigrant intake and unemployment rates lagged one year, Australia, 1952-3 to 1969-70 47
3.2 Arrivals of workers in professional occupations by assisted immigration program, Australia, 1950-70 53
5.1 Arrivals and departures of professional workers, 1948-60 and 1961-70, Australia, showing permanent and long-term movement 89-90
5.2 Characteristics and components of net gain to Australia of professional workers, 1948-60 and 1961-70: permanent and long-term movement 92-3
8.1 Range of 1971 earnings of respondents by year of arrival in Australia 151
8.2 Distribution of architects by earnings groups 154
Possibly the most publicised aspect of migration studies during the 1960s was the revival of the concept of human capital, tagged 'brain drain' or 'gain' to describe movements of professionally qualified workers across international boundaries.

Interest in the economic consequences of this migration was triggered off after World War II by the one-way travel of engineers and scientists out of the United Kingdom and into the United States of America which, it was claimed, jeopardised the growth possibilities of the British economy. The ensuing debate assumed international proportions and extended to exposing the extent to which the highly skilled leave poorer, developing countries in an apparently perverse direction to that of physical capital (Adams, 1968:3). While there was some disagreement about the nature and magnitude of the loss, there was a consensus that a recipient country gains from an intake of human capital.

This was explained in the following way. Investment in human capital, the specialised training embodied in the highly skilled worker, is as necessary to economic growth as is investment in physical capital; the rate at which future consumable income can be increased depends on the relationship between the rate of growth of physical and human capital (Thomas, 1968:39). The training of professional manpower is lengthy and expensive. Costs include not only those of the individual and/or family, but also substantial doses of public moneys to which should be added income forgone by the student during training. These costs are later recouped by the individual from his higher earning capacity and by the state from the higher taxable capacity of the professional worker.
Human capital is internationally mobile, its movement being towards higher real income, towards higher productivity. Its arrival on the doorstep, so to speak, then becomes a gift from the country which incurred costs of training, as, without investment in its education, the recipient country acquires access to its taxable capacity and to an immediate potential for economic growth.

From the debate, the United States of America emerged as the principal beneficiary. Assessments of the value of the 'gift' reached very large figures. One estimate of the total human capital value of scientists and engineers migrating into the United States from 1949 to 1961 placed it at $1 billion (Grubel and Scott, 1966: 268). Another estimate of the net social gain, i.e. social education costs saved by the United States from the intake from developing countries in 1966, judged it to be about $288.7 million (or $453 million, if forgone earnings during the period of school attendance were included), or 56 per cent (88 per cent including lost earnings) of US foreign aid to developing countries through grants under the Foreign Assistance and Predecessor Act and student exchange program (Muir, 1969). Another concluded that the United States would have had to build and operate twelve new medical schools to produce the medical manpower being acquired through immigration (K. M. West cited in Adams, 1968: 1-2), and so on.

Australian migration came under scrutiny, but these flows were used only to illustrate the special position held by Canada, that of a stepping stone to the vast US labour market:

Australia, at the other end of the world, is an independent destination and the outward flow is negligible. She has no need to over-import in order to ensure an adequate input of professional manpower. The relative size of the absorption of human capital by Australia may be regarded as more normal, in that it is independent of the special influences operating in the United States (Thomas, 1968: 37).

The decades during which the United States appeared as the focal point for international flows of human capital were also those, as The Economist said, in which it held a love affair with education. Expenditure on education as a proportion of Gross National Product rose from 3.4 per cent in 1949 to 5.1 per cent in 1959 to 8.0 per cent in 1971. Enrolments in colleges more than doubled between 1960 and 1970. The wheel turned and in the early 1970s a glut of certain kinds of highly educated manpower appeared on the American market.
Predictions that the employment of the over-educated will also become a major labour market problem in Australia, unless the 'lemming-like rush into higher education' is stemmed, have already been made (Niland, 1973:267), but criticisms of both the economic theories surrounding education and the absence of appropriate manpower policies that are topical today arise from a different set of circumstances from the international shortages that pertained earlier (ibid.; see also Blank, 1972, Kilcullen, 1972).

The 1950s were marked in Australia by a crisis in tertiary education and acute shortfalls in the supply of professional manpower; the 1960s by increasing government involvement in tertiary education and increasing government interest in recruiting the highly skilled from overseas; the 1970s by a slackening in demand and an over-supply from Australian universities. The object of this book is to present a collection of studies about the immigrants who moved into Australia from 1947 to 1970 to alleviate acute shortfalls in the Australian supply of professional manpower.

Very little is known about these people. The only attempt generally to analyse the information contained in Australian census statistics was made by a sociologist, J. Zubrzycki, when he examined the occupational distribution of selected ethnic groups within the male labour force as shown by the 1961 census. Given certain criteria of 'over' and 'under' representation and certain definitions of 'upper' and 'lower' professional groups, Zubrzycki's results pointed to an over-representation of those born in the British Isles only among the upper professional group and those born in the British Isles and Netherlands only among the lower professional group. His residual birthplace category, 'other foreign', was also over-represented in his professional hierarchy, but the ethnic groups composing this portmanteau category were not measured separately (Zubrzycki, 1968). In any case, Zubrzycki planned his investigation as the first in a series of comparative statistical analyses and his initial results could only be expanded as further census evidence came to light.

Statistics of occupational skills of male settler arrivals from certain countries in selected years have been published by a demographer, C. A. Price. His highest occupational skill category was broader than the professional — 'Professional and semi-professional' for earlier years and 'Professions, admin. etc.' for later years — but his figures suggested that the proportion of professionally qualified workers in the male
settler stream from the United States, Canada and New Zealand could have been considerably higher than the proportion from the United Kingdom, the traditional source (Price, 1968, 1970).

One other study made by P. J. Kelly and N. M. Nicholls of the Commonwealth Scientific and Industrial Research Organization was a quantitative estimate of the migration of graduates at the Ph.D. or doctorate level in science, applied science, veterinary science, agricultural science, medical science, engineering, mathematics and geography over seven years 1961 to 1967. Their results showed a total net gain of only 351 (Kelly and Nicholls, 1969).

Although a limited amount of factual material has been presented, a great deal of publicity, much of it emotional in content, has been given to the plight of the European whose qualifications have been refused recognition. The attention drawn to this 'invisible brain drain', as one Hungarian writer described it, has arisen from the lobbying activities of refugees as they sought to ease the conditions of entry to the professions and from the desire of the Commonwealth government to increase the number of countries from which highly skilled workers could be drawn. The social history of displaced persons in Australia is presently being written by E. F. Kunz and early articles emanating from the project suggest that a place will be given to examining the international portability of professional training (see also Kunz, 1969, 1973).

Fragmentary though all this may be, the reason for the absence of aggregative calculations of 'capital gain' or marginal savings in expenditure on education could lie in the quality of available material. Such measures for the United States have been the grossest, aiming only to approximate the magnitudes involved. The data available to perform such exercises for Australia are as imprecise.

It should be possible, however, to form an opinion of the Australian gain by examining the annual volume of net migration intake of professional manpower. Such a count would give an impression of the size of the imports and, when related to the total number of highly skilled in the labour force, would indicate the degree to which Australia has relied on overseas sources for its human capital.

To the extent that the inflow has responded to official inducements and controls, its volume would not have been unaffected by the occupational priorities of immigration policy, which, itself, was part of national manpower policy.

In 1965 the United States of America substituted for its immigration
quota system a series of preference categories that favoured the highly skilled worker; in 1966 Australia widened its immigration policy to encourage well qualified non-Europeans to settle here; in 1967 Canada adopted Immigration Regulations whose effect was to increase the proportion of highly skilled immigrants. 'Immigration policy', said Brinley Thomas, 'has come to resemble tariff policy as a flexible instrument for maximising national advantage' (Thomas, 1968:40). Unlike the United States and Canada, however, Australia has offered financial inducements to immigrants through its huge assisted passage schemes. Were some of the millions expended on these schemes viewed as a less expensive alternative to expenditure on higher education? Or was the national advantage conceived of as otherwise, as providing Australian citizens with the economic and social benefits accruing from higher education and directing immigration incentives towards the lesser skilled?

The first study in this book discusses the occupational priorities that were given to professional workers under assisted immigration schemes. It becomes apparent that immigration was seen as a means of quickly filling the most acute shortfalls in the labour market. The second study is about manpower planning as it concerned the provision of new entrants to the professional labour market; the third is a presentation of official statistics that recorded the professional migrant intake.

The first study predicts one of the findings of the third: that the largest numbers and proportions of professionally qualified workers among immigrants would be those from the United Kingdom.

Demarcations in international flows of the highly skilled have been observed by others as being of two kinds: from ex-colonial territories towards their ex-imperial masters, and another more general movement through intermediate stages from lower income to higher income countries (see, e.g., Johnson, 1968:71-2).

The Australian demarcation flowed from the ex-imperial master towards the ex-colonial territory. It is questionable that it was mostly an intermediate movement in a chain of substitutions as highly skilled workers travelled from one country to another in pursuit of higher income earning opportunities. The Australian demarcation moved from the same source as a major inflow into the United States of America, the United Kingdom. The early postwar travails of workers from European countries in attempting to enter the Australian professions suggest that the explanation lay in the policies of the
6 Studies in the Immigration of the Highly Skilled

Australian professional groups towards accepting immigrant qualifications, in the general similarity between Australia and the United Kingdom in the practice and organisation of the professions, and in the preferences of Australian employers for the services of the United Kingdom trained worker.

Once professionally qualified workers cross the national boundary, their appearance in the net migration occupational statistics is implicitly assumed to represent 'gain' and they cease to be of further interest. Socio-economic characteristics, work histories and contributions to the professions in recipient countries have yet to be explored. To take extreme examples, a group of young highly skilled workers holding automatically acceptable qualifications represents a larger 'gain' than does a group of older political refugees whose qualifications are of doubtful acceptability.

The final study in this volume explores these other aspects of 'gain' and examines, in detail, the manner in which the policies of an Australian professional association contributed towards the demarcation of migrant inflows. A survey of immigrants in a single profession is presented here: on arrival; conditions and manner of entry to the profession; employment and contribution to the profession thereafter.

The postwar era of Australian immigration started with a decision to abandon reliance on the United Kingdom for the bulk of immigrants. Official machinery to facilitate entry of 'foreigners' into the professions, similar to that created in consultation with the trade union movement for tradesmen, did not immediately eventuate. Europeans attempting to enter any of the Australian professions in these years were met by a uniform policy: the crown of migratory elite — the immigrant whose qualifications were automatically acceptable — had been awarded to those trained in the United Kingdom. In order that the reader may understand how this pre-existing situation had come about, it may be appropriate to describe in this introduction the historical forces that had given rise to such professional conformity.

Australia was colonised by a single imperial power — Great Britain — and, even after it ceased to hold colonial status, strong political and cultural bonds remained. Until the post-World War II period, the Australian population, unlike that of the United States and Canada,
remained ethnically homogeneous. In 1901 only about 10 per cent of Australians were of non-British origin; by 1947 the proportion had declined to about 9 per cent (Price, 1956).

F. K. Crowley has explained the predominantly British character of Australia as being the result of the extent of past immigration from the United Kingdom (Crowley, 1954). In 1861 more than half the total population had been born in the United Kingdom and the Australian-born children of earlier immigrants accounted for the greater part of the remainder. From there on and until World War II, immigration from the United Kingdom constituted by far the major portion of total immigration. It was with the express intention of keeping Australia white and as a British nation that Australian governments had encouraged this immigration. These continuous additions of British stock had helped maintain the predominantly British origin of both the Australian population and Australian social and political institutions.

Until State universities were founded, the qualifications of the professional groups were acquired overseas, principally in the United Kingdom. As with the population generally, the professions started from immigrants and recorded continuous increments from the United Kingdom thereafter. British influence pervaded the development of Australian professional associations and professional education.

The first professional associations were formed by mining engineers, metallurgists, medical practitioners and architects from the United Kingdom who brought with them a knowledge of the role these bodies play. Other associations followed. A few saw their place as national, most were formed to cater for State practitioners and only proceeded later towards national amalgamation. These early associations were patterned on and oriented towards United Kingdom counterparts; frequently either they were branches of a United Kingdom body, or at some early stage they looked to affiliation with a United Kingdom association and to a reciprocal arrangement for the automatic acceptance of each other's members.

Similar histories can, undoubtedly, be found among Canadian professional associations, but the trend towards independence has been slower in Australia. As examples, the Chartered Institute of Secretaries is still a branch of the United Kingdom body; the Australian Medical Association only cut the umbilical cord with its parent in the early 1960s; the British Institution of Chemical Engineers moved into Victoria as late as 1961 and into New South Wales later, in 1963.
Many of Australia's professional associations have incorporated under Royal Charter. There were several reasons: to imitate United Kingdom professional associations; to acquire not only the status conferred by the Charter, but also monopoly on representation of the profession that accompanied it; and a symbolic disassociation from alignment with the interests of any particular State.

The general conditions under which a Royal Charter will be granted are those determined by the Privy Council and, until the post-World War II period, it was the practice of the Privy Council to submit the articles of association or constitution accompanying an application to the equivalent professional body in the United Kingdom for approval.

Herein lie some of the initial forces pushing towards standardisation of Australian professional associations with those of the United Kingdom: the formation of the earliest, on which the later were patterned, by professionally trained people from the United Kingdom; a similarity in articles of association or constitutions imposed by affiliation conditions and by procedures of the Privy Council; and uniformity in standards of membership necessary as a basis for reciprocity agreements.

If playing its full role, an Australian professional association performs similar functions to those of a United Kingdom association: a study function, an educational function, a qualifying function, a professional conduct function and a protective function.1

There are certain associations whose only aim is to perform the study function; but on occasions when advice about training has been sought, or when employers have requested assessment of qualifications, or when members have required protection, learned societies have not been averse to involvement in the other functions.

The professional association's function as a qualifying body stems from the first decision that must be made about eligibility for membership. In admitting people to membership and to certain grades of membership, a professional association is guaranteeing a certain minimum level of training, a certain level of experience, or acknowledging outstanding achievement in the professional field.

The educational function stems from the study function, the purpose for which the earliest professional associations were founded and on

1 See Carr-Saunders and Wilson, 1933. Although published more than forty years ago, this is still the definitive work on the United Kingdom professions.
which emphasis remains to the present day. It takes the form of co-operation with educational authorities in drawing up syllabuses and courses and of inspecting existing training courses being offered for entry to the profession in order to accredit qualifications for membership.

In some instances, professional associations have provided training for an occupation when this has been lacking in Australia. Examples are the speech therapists, the librarians and the actuaries, but this overlapping aspect of the educational and qualifying functions has almost phased out as educational institutions have moved into the field. Nevertheless, here are pressures forcing conformity of education towards that given in the United Kingdom: the influence on tertiary training of professional associations with affiliations and roots in the United Kingdom and the provision of education by professional associations using United Kingdom curricula.

The earliest State universities founded in Australia were influenced in their development by Scottish universities and were staffed by those trained in the United Kingdom. In 1964, the Report of the Committee on the Future of Tertiary Education in Australia stated:

despite the different times at which they were founded, the differences in the needs of the communities they served and the contrasting personalities of some of their influential chancellors and professors, they were remarkably similar in most things but size (Commonwealth of Australia, 1964: 174).

This early homogeneity was historically perpetuated by the geographical size of Australia which produced early difficulties in communication between State capitals and which inhibited staff and student migration; inadequate finances restricted experimentation and expansion (ibid.). It was inevitable that students, particularly at postgraduate level (the first Australian Ph.D. was awarded in 1948), should look to the United Kingdom. It became necessary that the quality, content and length of undergraduate training should be acceptable in the United Kingdom; that Australian qualifications should be acceptable for registration in the United Kingdom and for membership of the appropriate professional association.

As the professions continued training their own new entrants, there could have been little conflict between universities and professional associations; both had their sights set on the United Kingdom. The
Australian educational system provided entry to United Kingdom training institutions; the reciprocity agreements of the professional associations or registration boards, which the professions controlled, provided entry to the United Kingdom professions.

The implications for immigration were that those trained in the United Kingdom entered automatically into the Australian professions.²

It would be an exaggeration to claim that professional training today in the United Kingdom and Australia are identical, although they are in a large measure; but it would still be unusual, albeit not unknown, to find additional conditions imposed before a United Kingdom qualification was deemed acceptable. It should not have been surprising, although the writer found it so at the time, that many of the professionally trained British immigrants who were interviewed during the course of this volume required the term 'immigrant' to be defined before they were prepared to view themselves as such.

This thumbnail sketch of the development of the Australia-UK professional tie conveys the way in which the qualifying function of professional associations could be used also as a tool of their protective function. The prerequisite for a reciprocity arrangement was similarity in standards of training. Only suitably qualified migrants entered the professions and the poorer trained were excluded; but also excluded were migrants from countries where standards of training might have been adequate, but whose professions were not prepared reciprocally to open labour markets.

Each profession negotiated its own reciprocity arrangements and a qualification acceptable to one partner was acceptable to the other. The list of countries with acceptable qualifications could vary by profession, but essentially the labour market that was being protected was one linked through the United Kingdom professions by a chain of reciprocity arrangements within the Empire and, occasionally, a few countries outside it. For example, under the prewar agreement with the General Council of Medical Education and Registration of the United Kingdom, Australian registration boards were also required to accept medical practitioners who had qualified in Ceylon, New Zealand,

² Because of close political, geographical and educational ties, reciprocity in the recognition of qualifications has always operated between Australia and New Zealand, but the number of New Zealand immigrants is comparatively small and the United Kingdom trained are the largest immigrant group to whom the open-door privilege is extended.
India, Malta, Canadian Provinces in which medical schools had been established, Hong Kong, the Straits Settlement, Burma, South Africa, Italy and Japan. Similarly, Italy and Japan would have been required to accept all of the nominated British qualifications, including the Australian.

Australian pre-World War II immigration policy concerned itself almost solely with migrants from the United Kingdom and the wider liberality offered by the United Kingdom reciprocity agreements remained largely theoretical. During the war, United Kingdom reciprocity agreements with the combatants, Italy and Japan, were revoked so that the broadening of immigrant source countries by Australia saw only, in the first instance, a broadening of the type of British migrant entering the professions. The widening multilateral nature of reciprocity agreements since, the subsequent loosening of ties with the United Kingdom, the impact over more than twenty years of the postwar immigration program and the Commonwealth government's continuing efforts to moderate conditions of entry to the professions have all led to varying degrees of liberalisation. The extent to which qualifications obtained outside the United Kingdom are now automatically recognised would have to be determined by an examination of each profession but the trend has been towards the creation of alternative examination procedures for migrants rather than towards lengthening the list of automatically acceptable non-UK qualifications.

The word 'profession' and its derivatives have been used several times so far, but, other than indicating that one of the characteristics is lengthy training, no definition has been offered.

The United Kingdom Monopolies Commission Report on Professional Services listed several definitions and descriptions, the earliest by Sir Francis Bacon in 1637, and classified these according to the method used by the creator to delimit his subject. An author either formulated a general definition of a profession or described professional characteristics and then established which occupations were encompassed, or listed those occupations generally regarded as a profession and, without attempting to create a definition, set about discovering the common characteristics. Both methods, said the Commission, have their limitations. Authors of the first recognise
exceptions; authors of the second recognise that the common characteristics can be found in occupations not regarded as professional (UK Monopolies Commission, 1970).

The problem of deciding which occupations should be regarded as professions for the purposes of this book was resolved by attempting only to identify those to which professional status had been accorded. 'Status' has been defined by Weber as a specific, positive or negative, social estimation of honour; to achieve 'profession status' an occupation must be recognised as a profession by those using its services and by the general public.

The purpose of the occupational classification used in the Occupation Survey of the Commonwealth of Australia, 1946 was to provide a grouping 'by status, e.g., professional, clerical, skilled, intermediate and unskilled manual workers; and to distinguish these from other types of occupations with special characteristics, e.g., rural, protective services, personal services (not private households) and private domestic services' (Commonwealth of Australia, 1946:6). Order 1 of the occupational classification was entitled 'Professional and semi-professional occupations' but no further distinction by status was made between occupations subsumed thereunder.

In mid-1960, this classification was discarded and replaced by one that was an adaptation of the International Standard Classification of Occupations, 1958 and the new classification was revised and extended in 1966. Occupational groupings were now based on the general similarity of the characteristics of the work they entail. The most important feature of each minor group is that the occupations included are more closely related to each other than to the occupations outside the minor group as regards the functions involved and the skills, knowledge and abilities required for satisfactory performance. Other factors taken into consideration in forming these groups have been material worked on, work place, environment, use of specialized equipment, etc. (Com. Bureau of Census and Statistics, 1966).

Major Group O became 'Professional, Technical and Related Workers'. The selection of occupations for inclusion in this book was made from Major Group O on the grounds that all occupations that have been accorded professional status will be found in it. Selected were the occupations generally regarded as professional, e.g.
the clergy, doctors and lawyers, and occupations that the Commonwealth Statistician had described as also 'professional', e.g. 'Professional Medical Workers not elsewhere classified' which included pharmacists, optometrists, physiotherapists, X-ray operators, chiropodists, etc. Where the status of an occupation was not obvious, then the criteria used by the University of Melbourne Appointments Board in its periodic surveys of professional incomes in Victoria — occupations for entry to which university training is either an essential or alternative requirement — were called into play. As the common factor in all the occupations selected was lengthy preparatory training, the terms 'professional' and 'highly skilled' are used interchangeably in this volume.\(^3\)

It soon became apparent, however, that when information had to be drawn from secondary sources, it was inescapably tied to the particular definition used in the source material; or, frequently, to whichever approximation of a definition was used. An instance of this is the official migration occupation classification in which statistics of occupations of different status have been collapsed into portmanteau categories. Consequently, it has not been possible to use the descriptions 'profession', 'professional' etc. always to encompass the same list of occupations; the best that could be done, in many cases, was to approximate the original list.

The four studies about professionally qualified workers that follow are of unequal length.

Chapters 2 and 3 discuss the assisted passage schemes: Chapter 2 presents them generally; Chapter 3 examines Commonwealth government policy towards recruiting professional workers under these schemes. The then Commonwealth Department of Immigration assisted with a breakdown by occupation of immigrants arriving under assisted schemes and a summary of these statistics is presented at various places in the text.

Chapter 4, the second study, is concerned with manpower policy that has been applied to the provision of professional workers for the labour market and with the linkage between Australian educational policies and immigration policy.

Chapter 5, the third study, is a presentation of the official statistics that reveal net migration gain and stock of immigrants in professional occupations. The then Commonwealth Bureau of Census and Statistics

\(^3\) The occupations are listed in Appendix IV.
permitted me to extract from its records a somewhat more detailed occupational breakdown of migration flows than appears in official publications and provided a cross-classification of the occupational distribution of the 1966 labour force by birthplace, by educational level, by length of residence.

The fourth study narrows down from the general to the particular and is about immigrants in the architectural profession. Chapter 6 discusses them at first stage: arrival in Australia. Chapter 7 is an analysis of the conditions of entry to the profession and describes the methods used by the immigrants to enter the profession. Chapter 8 follows their employment strategy after arrival and looks at the extent to which they have contributed to the architectural profession itself.

The final chapter is a brief and generalised summary of the details contained in the previous studies.

Five appendices have been prepared, three of which expand on the summarised statistical material found in the text of the chapters. Appendix I presents statistics of settler arrivals in professional occupations by assisted immigration programs from 1950 to 1970. These are relevant to Chapter 3. Appendix II is a listing of statutory requirements for entry to some of the professions in the Commonwealth government controlled Australian Capital Territory and Northern Territory and should be read in conjunction with portions of Chapter 3. Appendix III contains the official statistics of migration — arrivals, departures and net gain — of professional and semi-professional workers from 1948 to 1960 and professional, technical and related workers from 1961 to 1970. Appendix IV — statistics of the labour force in professional occupations by birthplace by length of residence as at the 1966 census — is, with Appendix III, the more detailed information relevant to the tables in Chapter 5. Appendix V is a reproduction of the questionnaire used in the survey of the architectural profession.
On 2 August 1945, the Hon. A. A. Calwell, Minister for Immigration and Minister for Information in a Labor government whose party had been opposed traditionally to immigration, announced that it was his government's intention that future immigration should add one per cent annually to the population for reasons of defence, economic growth and population increase. Assisted immigration on an historically unprecedented scale marked Australian immigration thereafter.

From 1947 to 1970, 1.7 million assisted immigrants arrived. From 1960-1, the first year of a revised official occupational classification, to 1969-70, assisted workers were 61 per cent of settler worker arrivals. The skilled (including the highly skilled) averaged about 42 per cent of assisted workers, the semi-skilled 40 per cent and the unskilled about 18 per cent. 'Professional, technical and related workers' averaged about 10 per cent of the assisted, but among all settler workers (assisted and unassisted) in this occupational category, the assisted accounted for approximately two-thirds (Com. Dept of Immigration, 1971).

In the absence of evidence that could prove that these two-thirds would have migrated without passage assistance, it must be assumed that much of the volume of the inflow of all settler 'professional, technical and related workers' has arisen from the official occupational priorities of the assisted immigration schemes.

Decisions about occupations into which assisted workers will be recruited annually are at the final stage of official procedures that start from broad annual estimates of the total number of immigrants likely to arrive in each succeeding year. Before describing the official priorities that have been given to the assisted highly skilled over the postwar
period, it becomes necessary to describe the methods by which the Commonwealth government receives its information about the types of workers needed and to explain the impact that passage assistance has on the volume of immigration.

The Australian postwar assistance schemes were not, however, a sudden invention. The earliest group of assisted 'free' (not convict) immigrants arrived in Sydney in 1793, six years after the first convict fleet was despatched from the United Kingdom. Later, in the nineteenth and twentieth centuries, 63 per cent of total 'free' arrivals between 1829 and 1860 were assisted and, from 1861 to 1940, 56 per cent of net migration was composed of assisted immigrants.

A policy of financial assistance to mitigate transport costs developed from early imperial policy that looked to Australia to provide employment for the surplus labour of the United Kingdom; and, when Australian governments took over control of immigration, they continued to believe that financial inducements were necessary. The major postwar break with the past has been the scale of the schemes and the extension of assisted immigration from the United Kingdom to European countries by agreements or 'arrangements' with the governments concerned.

The account of the assisted passage schemes that follows is presented historically in order to show how this legacy of the past has provided the methods by which the Commonwealth government is able to select from abroad the types of workers for whom job opportunities exist at home.

Several other writers have concerned themselves with recording Australian immigration policy and describing assisted immigration schemes. The most notable are W. D. Borrie who dealt with the assisted and other aspects from the earliest years to well into the post-World War II period (Australian Encyclopaedia, 1965); F. K. Crowley, who was interested in the extent of the British contribution to the Australian population from 1860 to 1919 (Crowley, 1954); and C. A. Price, whose contribution to a collection of essays on Australia in world affairs deftly moved an historical survey from a national to an international context (Price, 1974). It is not the intention to traverse the same ground but only to remind the reader of certain matters that are relevant to an understanding of the next chapter which deals with the intake of the highly skilled.

The history of assisted immigration can be divided into two periods: an earlier or 'colonisation' period in which incentives were offered to
prospective landholders, and a succeeding period in which passage assistance to immigration was paramount and which commenced during the economic crisis in the United Kingdom following the Napoleonic Wars.

The first unified argument in favour of financial assistance to an exodus of British labour was presented in 1826 and 1827 as the 'Reports of the House of Commons Select Committee appointed to inquire into the expediency of encouraging emigration from the United Kingdom' (Great Britain, 1826-7). These reports not only embodied the lessons learnt from the rapid growth in population and prosperity of the British American colonies that had been the precursors of their independence, the declaration of war on the Imperial government in 1812 by these former colonies and their subsequent invasion of Canada, but also drew considerable support from the colonising theories of R. J. Wilmot-Horton (1830), the wages-fund theory, and the law of population increase expounded by T. R. Malthus.

The transference of the unemployed from the United Kingdom to the colonies, where there were abundant areas of unappropriated fertile land, was envisaged by the Select Committee as the kernel of a scheme for Empire development, defence and political stability. This economic-political-strategic doctrine, presented in rosy, if simple terms, was later resuscitated and reached its peak in the more sophisticated recommendations of the Dominions Royal Commission of 1917 and the Imperial Conference of 1921 that preceded the Imperial Empire Settlement Act, 1922.

It was directly as a result of the persuasiveness of the reports and recommendations of the Select Committee and the subsequent scheme for colonisation and emigration of British labour presented by E. G. Wakefield in his A Letter from Sydney in 1829 that assistance to emigration from the United Kingdom to Australia was introduced by the Imperial government and financed largely from the sale of Australian colonial Crown lands. In 1832 the New South Wales Executive Council, in response to a request from the Imperial government, first voted an annual sum of £10,000 from land revenue to enable unemployed agricultural labourers in the south of England and females from workhouses in the United Kingdom to emigrate (HRA:608ff.).

In 1840 the Imperial government appointed the Colonial Land and Emigration Commissioners as a general board to supervise the sale of
18 Studies in the Immigration of the Highly Skilled

colonial Crown lands and emigration and instructed them 'that the
Australian colonies must be the principal field for your operations'
(Great Britain, 1840:6). The Imperial Act for regulating the sale of
Waste Land belonging to the Crown in the Australian Colonies, 1842
followed and included provision for half the proceeds from the sale of
waste lands to be applied to the removal to the Australian colonies from
the United Kingdom only of emigrants who were unable to defray the
expense of their own emigration.

Shortly after their appointment, the Colonial Land and Emigration
Commissioners observed:

of the emigration to Australia, one peculiarity has been, that it entirely
originated with Government. Usually, the part of Government, for obvious
reasons, has been to follow in the course of private enterprise, and supply
any amount of direction or control which circumstances may require. But
no one had ever thought it worthwhile to provide accommodation to
Australia for emigrants of the humblest class. All seemed to feel that even on
the most economical scale, persons of that description were never likely to be
able to pay the expense of their own conveyance to the farthest settlements
on the globe. It was only after the Government had resolved in 1831 to try
the experiment of disposing of its lands in Australia by sale and applying the
proceeds to emigration, that shipowners were induced by communications
from the Government to make the experiment of providing steerage passages
of the cheapest description (Great Britain, 1847:135).

For those who were prepared to travel steerage class the price of the
fare dropped sharply and some of the free or unassisted outflow across
the Atlantic was diverted to the Australian colonies. At the same time
assisted emigration began to contribute in a very modest way to
increasing the total volume of emigration out of the United Kingdom by
reaching the poor, those to whom the costs of transport might otherwise
have been a constraint on international mobility.

Once introduced, assisted immigration into Australia continued,
ceasing only during the years of World War II. Figure 2.1 shows the
incoming numbers for each year. Also plotted on it for comparison are
annual estimates of the Australian unemployment rate. Despite
amplitudes in the inflow of assisted immigrants — the principal
temporal characteristic — extended troughs can be attributed to
economic conditions in Australia (see movements in the unemployment
rate), the political opposition of organised labour at the turn of the
century, and to World Wars.
Fig. 2.1 Assisted immigration and unemployment rates, Australia, 1860-1970

From about 1856 onwards, when the first four Australian colonies received constitutions giving them self-government and control over their own waste lands, each colony continued, if irregularly, to vote finance and offer subsidies towards immigration, each negotiated with
shipping companies for reductions in ordinary rates for second and third class fares, each recruited immigrants through agents in the United Kingdom and arranged employment for these people on their arrival in Australia. By the end of the nineteenth century, each too had curbed the immigration of Asiatics.

Moves to centralise control of assisted immigration could have followed immediately after federation, as power to legislate with regard to migration had been conferred on the Commonwealth government under the Imperial Commonwealth of Australia Constitution Act, 1900 but succeeding legislation showed only that the Commonwealth concurred with the States' views that certain types of immigrants should be excluded and that immigrants from the United Kingdom were the most desired.1

By 1912 the States were seeking Commonwealth participation in the procedures and finances of assisted immigration, but it was not until the Imperial Empire Settlement Act, 1922 began to loom on the horizon that the federal government came to the party.

Under the provisions of the Act, the Imperial government was prepared to enter into partnership with its dominions in the financial support of emigration from the United Kingdom and in land settlement schemes. While, historically, important unifying influences within the Empire had developed from complementary economic relationships including outward flows from Britain of the productive factors, capital and labour, with the enactment of the Empire Settlement Act the Imperial government abandoned its traditional laissez-faire policy towards labour flows. The concept of Empire self-sufficiency that had emerged from the preceding Report of the Dominions Royal Commission in 1917 and the economic climate in the United Kingdom surrounding the enactment of the Act were reminiscent of the concepts and conditions that had first given rise to assisted emigration in the 1830s. The distribution of the surplus population of the United Kingdom was seen as the core of a plan for unified Empire development; emigration was seen as a remedy for the rising unemployment that fol-

1 The Commonwealth Immigration Restriction Act, 1901 and Pacific Island Labourers Act, 1901 superseded and embodied the pre-federation policy of the States towards the exclusion of certain classes of immigrants. The Contract Immigrants Act, 1905 regulated the admission of immigrants under contract to perform manual labour, but the exclusion condition — that permission might be withheld, if there were insufficient evidence of difficulty in obtaining a worker of equal skill within the Commonwealth — was not applicable to immigrants born in the UK or descended from persons born there.
followed the ending of a war; and Australia eventually figured prominently.

The assisted immigration arrangement that came from the Australian Premiers' Conference of 1920 was undoubtedly precipitated by the need to devise measures that would enable Australia to take advantage of the provisions of the forthcoming Imperial Act. The Commonwealth government accepted the responsibility for organising transport and recruiting immigrants, and for contributing £12 towards the passage of an approved settler and loans in special cases. The remainder of the tasks — decisions on numbers and types of immigrants and employment responsibility — remained with the States.

The results of a study of Empire migration between 1910-13 and 1919-29 by an economist, D. Pope, suggest that the influence of labour market conditions in Australia had been some two and a half times greater than the influence of unemployment in the United Kingdom in determining variability in the volume of emigration to Australia during these periods.

Pope's conclusions add to those from the pioneering work on the Atlantic migrations of the nineteenth century by H. Jerome and other succeeding empirical models of the determinants of international migration that conditions in the receiving country are dominant determinants of migration. Adopting Jerome's idea that 'push' and 'pull' forces promote migration, Pope hypothesised that emigration from the United Kingdom was determined, subject to ability constraints (costs), by real wages and labour market conditions in the origin and receiving countries. His interpretation of the results of correlations between the volume of emigration and reciprocals of unemployment rates (lagged by a year) in Canada, Australia, New Zealand and the United Kingdom throw light on the effects of assisted immigration on the determinants of emigration from the United Kingdom to Australia:

Comparing these equations, then, a striking difference is apparent between the influence of the source country on emigration to Australia, on the one hand, and emigration to Canada and New Zealand, on the other. In the instance of Australia, changes in unemployment in the source country were a positive influence on emigration, whereas for New Zealand and Canada the influence of unemployment in the United Kingdom is indeterminate, or, in the case of Canada, even negative. And yet it may be assumed that emigrants were exposed to the same expulsive forces regardless of their destination. In what way, then, was Australia different?
What Australia did more than Canada and New Zealand over the period was to reduce the largest cost in emigrating, transoceanic passages. Australia did this so effectively that shipping costs in real terms did not rise for most emigrants after the war. And for Australia over the period as a whole assisted passages reduced the cost constraint on \textit{push} to the point where that force was a positive influence in determining short-term variance in the volume of emigration. The lesser aid offered emigrants in the instance of Canada until late in the period, it is here suggested, meant higher costs which negated \textit{push}; indeed for the latter Dominion it is possible that cost impediments were the dominant economic influence on prospective emigrants in the source country (Pope, 1968:181).

By 1929 rising unemployment in Australia led to negotiations being opened with the Imperial government to reduce the flow of assisted migration and from 1930 onwards assisted passages were restricted to boy farm labourers, female domestic workers and members of families already resident in Australia. At the same time the Commonwealth government inched towards further control by requiring that nominations and requisitions emanating from State sources should be submitted to the federal government for prior approval, a departure from the previous procedure under which these had been forwarded direct to the Migration and Settlement Office at Australia House in London.

From 1931 onwards assisted immigration was reduced to a trickle. A quickening interest became apparent in 1938, only to slump at the outbreak of World War II and cease altogether during the war years.

When the Commonwealth government first assumed responsibilities for selecting and transporting persons entitled to assisted passages in the 1920s, those who had previously entered under individual State schemes had been divided into two categories: the selected and the nominated. The selected were requisitioned by State governments, the nominated were the friends or relatives of those already resident in Australia for whom the nominee assumed responsibility for after-arrival accommodation and employment. These two types of selection were continued after the Commonwealth/State arrangement of 1920, but the nomination system was extended to include individual and block nominations by employers. It then began to account for the largest proportion of assisted arrivals (see Table 2.1).

These procedures, which placed the onus for employment on nominees in Australia, ensured that the type of worker introduced was
Table 2.1. Class of assisted arrivals in Australia, 1 Jan. 1926 to 31 June 1930

<table>
<thead>
<tr>
<th>Assisted class</th>
<th>Proportion of assisted arrivals</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-selected:</td>
<td></td>
</tr>
<tr>
<td>Domestic workers</td>
<td>6.5</td>
</tr>
<tr>
<td>Land settlement scheme settlers and farm workers</td>
<td>11.5</td>
</tr>
<tr>
<td>Juveniles for training in farm or domestic work</td>
<td>9.2</td>
</tr>
<tr>
<td>Nominated</td>
<td>73.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Source: Development and Migration Commission, Annual Reports, 1927-30, 1928-31.*

one for whom employment opportunities existed. It comes as little surprise that statistical investigations attempting to isolate the underlying economic factors responsible for variations in the volume of migration have found changes in the Australian labour market playing an important role.

The work of Pope was preceded by an analysis by A. C. Kelley of the reasons for changes in Australian annual net migration over the period 1865-1935. Kelley offered his results as ‘another observation . . . in support of the pull hypothesis as appropriate to explaining migration flows’ (Kelley, 1965). Labour market conditions in the United Kingdom, as measured by the unemployment rate, produced statistically insignificant relationships when used as an explanatory variable; nor did variations in real output per capita in the United Kingdom or Australia appear to contribute much towards explanations of annual changes in net migration. Kelley’s preliminary skirmishes with the Australian unemployment rate suggested that this was the promising explanatory variable.

On the assumption that changes in net migration lagged behind changes in the labour market and that the relationship between the two might not be such that the elasticity of response of migration was constant over the total range of unemployment rates, Kelley introduced the reciprocal and logarithm of the unemployment rate as explanatory variables.
The best statistical fit proved to be with the reciprocal of the Australian unemployment rate, lagged one year, the correlation suggesting that 51 per cent of the variation in annual net migration could be explained by the postulated relationship. Kelley moved on to improve his statistical relationships by introducing more than one variable, e.g. using the reciprocal of more than a single year's unemployment rate and using a general distributed lag model; but his results showed, on the whole, that those who were seeking explanations of changes in net migration over the period he had covered would find it more fruitful to concentrate on changes in Australian labour market conditions.

Contemporaneously with the announcement in 1945 that immigration into Australia was to recommence, an Immigration portfolio and Commonwealth Department of Immigration were created and the Re-establishment and Employment Act, 1945 enacted. Under section 47 of this Act, a Commonwealth Employment Service was established within the Department of Labour and National Service (born October 1940) to supersede the State Labour Exchanges that had existed previously and to provide information on the labour market to the Commonwealth government.

Under another agreement reached between Commonwealth and State governments at the Premiers' Conference of August 1946, the Commonwealth government accepted responsibility for placing in employment those Commonwealth selected immigrants brought in under the assisted passage schemes.

Australian postwar immigration policy until the 1960s has been described by R. T. Appleyard (1964:ch.2). Economic and demographic conditions in the United Kingdom were such that it could no longer provide the bulk of immigrants being sought, and the Australian government turned elsewhere to supplement the inflow. A host of migration agreements, arrangements and schemes followed the British Free and Assisted Passage Agreement of 1946. By 1948, agreements with the International Refugee Organization, Malta and the Eire Assisted Passage Scheme were in operation. Treaties with the Netherlands and Italy followed in 1951, with West Germany in 1952. Australia became a founder member of the successor to the International Refugee Organization, the Intergovernmental Committee for European Migration; the Refugee Assisted Passage Scheme was
introduced in 1953; and so on. By 1970 assisted immigration had spread from the United Kingdom to the Netherlands, Italy, West Germany, Turkey, Yugoslavia, Greece, Austria, Denmark, Spain and Belgium. The Refugee Assisted Passage Scheme, usually conducted in conjunction with I.C.E.M., was still continuing and unilateral schemes such as the General Assisted Passage Scheme, the Special Passage Assistance Programme, the United States Passage Assistance Programme, the Returning Australians Assisted Programme and the Second Assistance Scheme, had been devised to cover categories of immigrants not eligible under the other schemes.

Under this wide array of schemes, procedures for deciding the types of workers to be recruited continued to be those first devised by the States whereby the nominator assumed responsibility for initial employment and accommodation. Other than those nominated by the Commonwealth government, workers were nominated by individuals or groups from government, semi-governmental bodies, private employers, community organisations, etc., and usually moved into pre-arranged employment. The selection of workers by the Commonwealth government was made on the basis of information and block requisitions supplied by the then Department of Labour and National Service using the offices of the Commonwealth Employment Service.

Conditions of supply in donor countries were not ignored. In 1960 J. E. Isaac described the manner in which the size of the immigration target in each succeeding year first originated from estimates made about the numbers of immigrants that would be available and from assessments of labour market conditions in Australia. Finally, the target was divided into its non-assisted and assisted components and the assisted component was further broken down by the industries and occupations into which workers would be drawn. These procedures were aimed at dovetailing supply and demand, but, as Isaac said, it had not always proved possible to carry out the final plan forming the basis for the selection of assisted workers (see Isaac, 1960).

The concern of government that employment should be available for the assisted worker was incorporated into formal migration agreements. Under the earlier European schemes, e.g. the Displaced Persons Scheme, the Agreement between Australia and the Netherlands, 22
February 1951 and August 1956, the Agreement between Australia and Italy, March 1951, the Agreement between Australia and the Federal Republic of Germany, August 1952, immigrants were required to remain in employment approved by the Commonwealth government for two years (Com. Dept of External Affairs, 1951, 1952, 1957). Under succeeding agreements with European governments, the Commonwealth government undertook to assist immigrants in finding employment through the medium of the Commonwealth Employment Service, but migrants were no longer directed into employment.

In his study of postwar British emigration to Australia, Appleyard made two observations that are pertinent here (1964:45). He observed a close similarity between the movements of an index of excess demand for labour in Australia and the annual intake of permanent and long-term immigrants over the period 1946-7 to 1958-9. Appleyard’s explanation of the apparent positive relationship between the movement of the two series lay in the Australian government’s system of controlling the intake by setting an immigration target in advance each year relating to both the assisted and non-assisted groups and, by operating in a buyer’s market over the period, the government had been able effectively to manipulate the incoming numbers. The annual addition to the population of one per cent was a long-run objective around which annual targets were varied over shorter periods according to current and expected economic conditions in Australia, particularly the demand for labour.

The other observation was concerned with the impact that passage assistance has on the volume of migration and arose from his attempt to determine the motives for emigration of a sample of assisted emigrants from the United Kingdom to Australia in 1959:

Although the majority of families said that economic factors (poor job opportunities in the United Kingdom and better opportunities in Australia) motivated them, only a few had actually studied economic conditions in other overseas countries and then chosen Australia because it seemed to offer them the highest real income. The fact that 74 per cent of emigrants stated that they had not considered emigrating to other countries suggests that Australia held some intrinsic attraction. The near-free passage scheme was such an attraction and many emigrants, especially those with limited capital, saw little point in studying economic opportunities in other countries simply because they did not have enough capital to cover the cost of passages to these countries (Appleyard, 1964:177).
The observations that had been made first by the Colonial Land and Emigration Commissioners in 1847 were being echoed more than a hundred years later. It is diverting also to note that the present-day conditions of eligibility for passage assistance bear resemblance to those first incorporated into the Imperial Waste Lands Act, 1842. The following is an extract from an address given by Mr G. C. Watson, Assistant Secretary in the Department of Immigration, to the Refugee and Migrant Service Conference of the Australian Council for Overseas Aid in Canberra in February 1966:

if we were to depend upon the spontaneous flow of settlers paying their own fares, our population growth through immigration would be insufficient. Therefore the Government supplements this flow by giving financial and other encouragement to prospective migrants who would not otherwise come here.

In doing this the Government's intention is not to divert into the stream of assisted immigrants those people who are acceptable as settlers and can find their way here on their own initiative, but rather to stimulate the flow of total migration. To do so, it is necessary to supplement the flow of spontaneous migrants by the judicious use of public money to help those who need help — the 'needy not the greedy'.

On the face of the evidence — the availability of passage assistance to those who could not otherwise afford to emigrate, let alone consider alternative countries of destination, the statistical relationships measured and observed between changes in migration flows and changes in Australian labour market conditions — it would seem that a 'buyer's market' would be even more characteristic of recruitment under assisted immigration schemes, where there is official cognisance of the availability of job opportunities.

Taking Kelley's tip that, statistically, the reciprocal of the unemployment rate (1/X) provides the best fit when lagged by a year, a lag that seems appropriate for assisted immigration because Commonwealth financial appropriations are made in advance and requisitions are lodged some time before workers are recruited and arrive, Fig. 2.2 illustrates the nature of the relationship between proportionate changes in the annual numbers of male assisted immigrants and the male unemployment rate (the reciprocal is a proxy variable representing changes in labour market conditions) over the period 1911 to 1969-70. Since the reciprocal is being used, high
Fig. 2.2 Assisted male immigration and reciprocals of male unemployment rates lagged one year, Australia, 1911 to 1969-70

Note: 1911 to 1937 are calendar years; 1952 to 1970 the year ends in June. The following years have been excluded: 1914-21 (World War I, shipping bottlenecks); 1938-51 (post-depression, World War II, shipping bottlenecks). 
unemployment rates lie to the left of the chart, and low unemployment rates to the right.

Figures of the annual intake of assisted male immigrants have been selected because unemployment rates during the pre-World War II period were calculated from trade union returns and were more a reflection of male than male and female unemployment. The assisted figures in the chart also include male dependants, but these could not be excluded over the entire period as the earlier assisted immigration official figures, which differentiated between the sexes, did not do so between workers and dependants.

From the figure it is obvious that, when unemployment rates reached 12 per cent or over (or a reciprocal of .0833 or less, to the left of the chart), assistance to male immigrants dropped sharply. This low intake — about one hundred or less each year — occurred during the depression years 1931-7 when assisted males were juveniles.

The curve fitted to the figure excludes the depression years. From the remainder of the observations in the figure, it appears that when the unemployment rate dropped below 12 per cent the importation of male workers commenced, increasing sharply until an unemployment rate of 9.3 per cent (or a reciprocal of .1075) had been reached. Between unemployment rates of 9.3 per cent and 5.6 per cent (or reciprocals of .1075 and .1786) male assisted immigrants were introduced at a decreasing rate. When unemployment dropped below 5.6 per cent (or the reciprocal increased beyond .1786), the rate of increase in male assisted immigrants began to level out and fall within a range, with indications that a ceiling existed to the upper level of the range caused probably in large measure by governmental budgetary restraints on the maximum number of assisted passages that could be financed in any one year.

The statistical measurements that resulted from the process of fitting the curve shown on the figure suggested that over the period 1911 to 1969-70, 80 per cent of the proportionate change in the introduction of male assisted immigrants could be explained by the postulated relationship with the male unemployment rate.3

3 The curve on the figure was fitted by Dr P. J. Lloyd of the Australian National University in the following way:

An inspection of the scatter diagram suggested that a curve with two asymptotes would be needed, one the unemployment rate where assisted male worker immigration dropped
The content of the variables would need to be more precise before this could be taken as a definitive statement about the extent of the influence of changes in Australian labour market conditions on changes in the volume of assisted workers; but it can be said that these statistical measurements are supportive evidence that changes in Australian labour market conditions appear to have a large influence in determining variance in the assisted stream, larger than they do on the total volume of immigration.

It is saying nothing new to assert that financial assistance is accorded to immigrants in order to increase the total volume of immigration and that the Commonwealth government attempts to ensure that the numbers and types of assisted workers recruited abroad are related to shortfalls in the Australian supply.

The first observation constitutes the justification for the continuance of assistance and the second ensures continued community acceptance of these immigrants. The information assembled in this chapter suggests that the first observation has been and still is correct in fact and

to zero, the other the estimated ceiling above which the numbers of assisted males did not rise. The equation became:

\[ \log Y_t = b - c \left( \frac{1}{1/U_{t-1} - \bar{\alpha}} \right) \]

where

- \( Y_t \) = assisted male immigration in any one year
- \( 1/U_{t-1} \) = reciprocal of male unemployment rate of the previous year
- \( \bar{\alpha} = .0833 \), the reciprocal of the male unemployment rate of 12 per cent.

This equation fits a curve with two asymptotes: \( \bar{\alpha} \), the reciprocal of a male unemployment rate of 12 per cent, becomes the vertical asymptote, and \( b \), the estimated ceiling above which assisted male immigration did not rise over the period, becomes the horizontal asymptote.

The period 1911 to 1969-70 includes the depression, two world wars and their aftermath, all of which disrupted assisted immigration. Consequently several years have had to be omitted: 1914-21, World War I, shipping bottlenecks, followed by takeover by Commonwealth government; 1931 to 1950-1, depression, World War II, shipping bottlenecks.

The parameters of the equation were estimated by the method of least squares:

\[ \log Y_t = 10.4638 - .0212 \left( \frac{1}{1/U_{t-1} - \bar{\alpha}} \right) \]

\( r^2 = .80 \)

The coefficient of correlation was statistically highly significant, \( p < .01 \).

Estimated values of \( Y_t \) and reciprocal of male unemployment rate of the previous year were used to fit the curve shown in the figure.
that, in the aggregate, changes in numbers of assisted workers do occur in response to changes in the state of the Australian labour market.

Financial assistance to immigrants became so much a part of Australian immigration policy, however, that it is necessary now, nearly three decades after the first assisted immigrants of the postwar era arrived, to remind the reader that the Commonwealth government was inexperienced in certain areas when it first embarked on its comparatively immense plans.

Past experience had lain principally with State governments; for a few years, from the 1920s to the onset of the depression, the Commonwealth government had co-operated by providing a measure of finance and by undertaking certain tasks only. Most of the workers under this co-operative arrangement had been drawn from the British Isles, the traditional source, and were readily assimilated into the Australian workforce. The Commonwealth government’s new responsibilities after World War II may not have appeared so formidable at the outset.

The pitfalls that emerged manifested themselves as various problems of finding, recruiting, matching and timing the arrival of workers, and most were also the consequence of ignorance of another area in which none of the Australian governments, whether Commonwealth or State, could claim to be particularly knowledgable. Some time before the Empire Settlement Act, 1922 some State governments had made provision for a small proportion of assisted passages to be conferred on immigrants from Europe and North America who were prepared to move into the rural sector; but the post-World War II situation was vastly different. Now thousands of workers spread across a spectrum of skills were to be recruited outside the United Kingdom.

The theme of learning by trial and error that pervades the next chapter is understandable, but from the tribulations of the assisted passage schemes also came knowledge of the special circumstances surrounding the international movement of the professionally qualified worker.

The general opinion about the intake under assisted schemes is that government can and does control the volume of supply. Its effectiveness, by and large, in performing this function is probably why such statistical relationships are discovered existing between variations in the volume of immigration and the Australian demand for labour, as measured by some proxy variable. As assisted workers are recruited
from several countries and the limits on any particular work skill sought are not so tightly drawn that substitution of others is impossible, the statistical relationships are revealing a state of affairs that is probably largely correct about the aggregate number of workers.

The demand-determined characteristic of the assisted worker inflow is one that is generally believed to be true and the evidence supporting this belief would, in itself, be sufficient justification for limiting a study of the priorities given to the assisted highly skilled to the numbers, types and proportions arriving in Australia. However, when only this one type of worker was singled out for further study, conditions in countries of supply and other restraints surrounding their availability began to move into the picture.

Consequently, the next chapter, which is concerned with policy and recruitment of these people from abroad, takes a broader approach than *prima facie* one might have believed was necessary.
Assisted Passage Schemes and the Highly Skilled Worker: Recruitment

The Imperial Empire Settlement Act, 1922 was renewed in 1937 for fifteen years and in 1952 for a further five. After World War II, only one government, Australia, entered into an agreement for assistance and, apart from small grants to voluntary and child migration societies, the operation of the Australian assisted passage scheme accounted for nearly all the United Kingdom’s expenditure under the Act.

The economic and demographic conditions in the United Kingdom that had first given rise to the Act had materially altered and, although the concept of unified Empire development was abandoned, the political advantages of peopling the Empire with British stock remained. This narrower policy was stated in perhaps its simplest form by Mr John Foster, Under-Secretary of State for Commonwealth Relations, during the first reading in 1952 of the Empire Settlement Bill to extend the period over which contributions might be made to agreed schemes under section 1 of the Act.

The government regard migration as a valuable means of maintaining and strengthening the bonds between the members of the Commonwealth and, with this object in view, are anxious to foster such migration. Our only stipulation is that a fair cross-section of the population should go — not always the youngest and most skilled (Great Britain, 1951-2: c.140).

In the absence of direct restraints, the Imperial Act was seen as an instrument that could be used to control the composition of emigration:

In the case of Australia however — and here is the first concrete example of
the advantages which flow from the powers under these Acts — under an arrangement dated 1946 and renewed thereafter, it has been possible, by cooperation . . . to persuade them to take a cross-section (Sir Walter Monckton, Minister for Labour, ibid.: c.140).

In return, Australia's Minister for Immigration, A. A. Calwell, reassured the United Kingdom authorities:

We have no wish to embarrass the British Government by seeking large numbers of specialists who are in short supply. Australia's manpower requirements cover such a wide range in every field of primary, secondary and tertiary industry that we are not obliged to seek workers for only a few particular occupations. We can, therefore, readily absorb a cross-section of British people without detriment to Britain's economic structure, but with material advantages to both countries. We have always been prepared to accept this fair cross-section (Calwell, 1949:45-6).

Outside the scope of the Act, however, the New Zealand government and, for a short period, the Rhodesian government financed assisted passages from the United Kingdom out of their own funds. The search for immigrants was joined by Canada, newly independent Commonwealth countries and the United States of America whose manpower needs were quite specific. In a brief space of time, the United Kingdom government's concern about the detrimental effects of uncontrolled emigration on the demographic structure of the population and on the skill composition of the labour force turned into alarm about the loss of its highly skilled.

At the same time as the Australians were recruiting in the United Kingdom within a developing atmosphere of concern about the brain drain, they were drawing thousands of workers annually from Europe. What had been lost on the swings was probably being gained on the roundabout, but, in 1960, the United Kingdom Oversea Migration Board claimed that Australia was looking primarily to the United Kingdom for immigrants in skilled and professional occupations. Not only had the problem of 'acceptance' of non-British qualifications reared its head, but European governments, in actively discouraging the emigration of their skilled and professional manpower under assisted schemes, were proving as possessive as the United Kingdom.

Consequently, the material in this chapter is presented by sources of
immigrants: the United Kingdom and Europe up to 1960, and then generally.

The Australian government’s economic policy at the end of World War II was, in broad terms, postwar reconstruction to be replaced by economic growth as the major objective. An unprecedented volume of demand for labour was exacerbated by a declining rate of growth in the labour force caused by the low birth rates of the thirties and, as an outcome of the manpower demands of the war, deficits in the stock of skilled workers trained by the normal apprenticeship methods.

Calwell’s statement that Australia was not obliged to seek workers for a few occupations only was made principally to pacify the fears of the United Kingdom government, but the co-operation of the Australian authorities in recruiting a ‘fair cross-section’ of the British population was not hidden under a bushel. In 1946 Calwell told the House of Representatives that a survey at Australia House, London, on 15 June 1946 had revealed ninety-five ‘different avocations’ among applicants ranging from doctors of medicine to unskilled labourers (CPD, Vol.188:3620). His successor, Harold Holt, reported in 1951 that the Australian government had in mind a proposal to induce apprentices to complete their courses of training in Australia, but the British government did not want apprentices to be drawn from the United Kingdom. A scheme for bringing in coalminers had met opposition; the British government did not wish inducements to be offered to coalminers. A further proposal to import farm labourers had caused concern in the ranks of the National Farmers’ Union (Holt, 1951:12).

At the United Kingdom end, Sir Walter Monckton, Minister for Labour, informed the House of Commons that from 16 May 1951 to 29 February 1952, 13,900 wage earners drawn from 163 different trades and ‘none in excessive numbers’ had sailed under the assisted passage scheme and that the Australians were continuing to co-operate by refraining from recruiting skills that were in short supply either in certain areas or in the United Kingdom generally (Great Britain, 1951-2: c.62, c.144). The Oversea Migration Board, appointed in 1953 to consider and advise the United Kingdom Secretary of State on migration, annually exonerated the Australian authorities, describing them as taking, with marked consistency, a reasonable cross-section; although, because of the inadequacies of statistical material on which judgments of cross-sections could be based, the Board’s criteria of
balanced emigration after 1956 became one that related it to the past composition of the outflow.

Appleyard, in his discussion of United Kingdom postwar emigration policy, points to flaws in the belief that the agreement on assisted immigration under the Imperial Act could have been used to control emigration. Under the terms of the agreement, the Australian government exercised the right to select immigrants, but people with certain qualifications or those who were needed for work of national importance were required to apply to the United Kingdom Ministry of Labour for permission to seek assisted passages. Appleyard adds nurses to the coalminers, apprentices and farm labourers whom the Australian government had agreed not to recruit, but adds that, otherwise, it would have been extremely unlikely that a cross-section of the population would have desired to emigrate or that they could have been persuaded to do so. His examination of assisted migration led to the conclusion that the Australian government had given priority in its selection during the early postwar years to young skilled workers and their families (Appleyard, 1964:42).

Various pieces of evidence support this contention: the excess of applicants over the number of assisted passages available, particularly during the 1940s, the Korean War and Suez crisis; the creation of a reserve list by the Australian authorities comprised mainly of semi-skilled and unskilled applicants who were prepared to wait; the immediate offer of nominations to skilled workers once processing of their applications had been completed and the minority of these people found on the reserve list; the occupational statistics of British assisted arrivals in Australia from January 1949 to December 1957, which gave preponderant proportions to the skilled and semi-skilled (Appleyard, 1964: 40, 97).

In 1952, the Acting Minister for Immigration, H. Beale, informed the House of Representatives that, of the three categories within the British assisted scheme — personal nominations, group nominations and Commonwealth nominations — Commonwealth nominee workers until that date had been virtually all skilled workers in short supply in Australia (CPD, Vol.218:131). In 1957, in its third annual report, the Oversea Migration Board observed that, while a high proportion of male adults receiving passage assistance to Australia were in skilled and semi-skilled categories, there had been no disproportionate changes in
the occupation pattern over the past years (Great Britain, 1957-8: Cmd 336). From a sample of 20 per cent of assisted emigrants drawn randomly from those leaving the United Kingdom for Australia between April and October 1959, Appleyard provided the following distribution, the classification derived from the social class occupational grouping used in the 1951 United Kingdom census: professional, 2.9 per cent; intermediate, 9.1 per cent; skilled, 68.2 per cent; semi-skilled, 13.7 per cent; unskilled, 6.1 per cent (Appleyard, 1964:126).

The types of professional workers being introduced between 1950 and 1960 are shown in Table 3.1, which is the closest approximation to a solely professional classification that can be made from the official statistics.

The numbers in any year were not particularly large. The proportions show an increasing trend, that of 1960 being more than double that of 1950, but the difference was only 210. The numbers dropped sharply in 1953 in accordance with a general reduction in immigration during the economic recession of that time, but the proportion of professional workers was nearly double that of the preceding year. The reasons will be presented later.

The occupational sub-groupings are approximate. The third, 'other professional occupations' includes people whose numbers in particular occupations are unknown and who cannot be distributed between the other two; but, even making the assumption that this sub-group is composed entirely of scientists and technologists, which it is not, the general impression given by the other two sub-groups is still correct. The larger number were those whose skills were needed to provide community services, people for whose services one would expect the demand to expand directly as a result of population increase.

The conclusion that not much attention was being directed via the assisted passage scheme to the highly skilled of the United Kingdom stems from an absence of official measures being devised specially to attract them. The obvious explanations of deliberate restraints by the Australian authorities to avoid protests from the Oversea Migration Board and/or a sufficiency of domestic professional manpower would have to be rejected by later observations.

During the 1950s, the inadequate financing of tertiary education in Australia proceeded towards crisis proportions and was inevitably accompanied by shortfalls in the domestic supply of professional manpower. Once obvious, the imperative need to increase the volume of
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Community services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers, medical practitioners, dentists, physiotherapists, pharmacists, legal profession, social workers, clergy</td>
<td>249</td>
<td>225</td>
<td>259</td>
<td>201</td>
<td>167</td>
<td>212</td>
<td>234</td>
<td>362</td>
<td>368</td>
<td>489</td>
<td>447</td>
</tr>
<tr>
<td>Scientists and technologists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architects, surveyors, civil engineers, metallurgists, veterinary scientists</td>
<td>108</td>
<td>60</td>
<td>51</td>
<td>29</td>
<td>21</td>
<td>33</td>
<td>36</td>
<td>34</td>
<td>36</td>
<td>44</td>
<td>57</td>
</tr>
<tr>
<td>Other professional occupations a</td>
<td>105</td>
<td>89</td>
<td>104</td>
<td>44</td>
<td>62</td>
<td>102</td>
<td>88</td>
<td>126</td>
<td>139</td>
<td>176</td>
<td>168</td>
</tr>
<tr>
<td>Total (no.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional workers as proportion of all workers under United Kingdom Assisted Passage Schemes (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                             | 2.1  | 1.9  | 2.4  | 4.7  | 3.4  | 3.2  | 3.5  | 5.0  | 4.2  | 4.8  | 5.2  |

a Included in this portmanteau statistical classification are professional workers concerned with health services other than those identified under 'Community services', research workers and all scientists, other than veterinary scientists, and possibly all engineers other than 'civil engineers'.

Source: Appendix I.
the overseas inflow immediately led to a streamlining in the 1960s of official 'assisted' procedures, the creation of employment services specifically for the highly skilled worker and a stepping up of publicity about employment opportunities.

Apart from the difficulties that the Oversea Migration Board would have experienced in policing the outflow, anyway, these later overt measures were not met by protests from United Kingdom authorities.

The reasons for the apparent early lack of official interest in attracting the highly skilled from the United Kingdom lay elsewhere. Firstly, as subsequent events were to show, the newly created Commonwealth Employment Service required time before it could penetrate the professional labour market. Secondly from as early as 1947 Australian employers had been conducting recruiting campaigns outside the assisted agreement under the Imperial Act with the offer of fully paid fares as a larger inducement. Australian authorities would have assumed that the more urgent needs for highly skilled manpower were being met by private recruitment that was not accountable to the United Kingdom government under the Imperial Act.

It was not until 1960 that the Oversea Migration Board began to sound alarm signals about the loss of professional manpower due, it claimed, to the needs for technical assistance in developing countries and to a situation in which the four main receiving countries of emigrants within the Commonwealth — Canada, Australia, New Zealand and the Federation of Rhodesia and Nyasaland — were looking primarily to the United Kingdom for immigrants in skilled and professional occupations (Great Britain, 1961-2: Cmd. 1586). Three years later, a Report of the Royal Society, under the Chairmanship of Sir Gordon Sutherland, coined the term 'brain drain' to describe estimates of an annual rate of emigration of scientists with Ph.D.s during 1951-61 as representing a loss of about 17 per cent of the current output of universities, the majority of whom were destined for North America (Royal Society, 1963). The almost simultaneous publication in 1966 of two reports from the Committee on Manpower Resources for Science and Technology — the Interim Report of the Working Group on Manpower Parameters for Scientific Growth and the Report on the

1 This is the year in which the first respondent in the survey of architects described in Chapters 6, 7 and 8 who stated he received a fully paid fare arrived in Australia. Others followed in succeeding years.
1965 Triennial Manpower Survey of Engineers, Technologists, Scientists and Technical Supporting Staff (Great Britain, 1966: Cmds. 3102, 3103) — foreshadowed a considerable shortage of scientists and technologists by 1968 and added to the impression that most of those emigrating were being lost to North America. 'The Brain Drain' Report of the Working Group on Migration of this Committee stated emphatically in 1967: 'We find that there is a brain drain of qualified manpower from the United Kingdom and it is harmful to the interests of our economy.'

The picture presented by the Working Group was one of an annual net loss by 1966 that was equivalent to 19 per cent of the 1963 output of newly qualified engineers and technologists and 9 per cent of scientists. The increasing numbers emigrating reflected the recruiting activities of the Ministry of Overseas Development, the Crown Agents and the British Council in recruiting for developing countries, but from 1961 to 1966 the numbers of engineers and technologists emigrating to North America had quadrupled, while the proportion leaving for this destination in the total flow of emigrants in this occupational category had increased from a little more than a quarter to almost half. Most emigrating scientists were also destined for North America, but increases in these numbers had been moderate by comparison. The Working Group estimated the value of the productive career in the United Kingdom of an engineer in the top quartile (at graduation, future income at 1966 rates discounted by 8 per cent) to be just under £30,000; a comparable estimate at 1964 rates of the top quartile of American science and engineering Ph.D.s in industry was approximately £78,000. 'The significant point is that for every young high-quality engineer who emigrates to the United States, the British economy in effect presents the American economy with a gift of the magnitude indicated in these figures' (Great Britain, 1967: Cmd.3417).

The concern with the 'brain drain' from the United Kingdom was concern over the loss of scientists, engineers and technologists, although it extended later to other kinds of personnel. The 'brain drain' to Australia had not been the cause of much comment, except when this country was lumped together with others within the British Commonwealth. This lack of concern was due to the magnitude of the return flow from countries within the British Commonwealth. 'The situation is not without its ironies', commented Walter Adams in 1968.
France takes pride in her aid to former colonies, yet the new state of Togo has sent more physicians and professors to France than France has sent to Togo. Great Britain, alarmed by the exodus of its talent to the United States, is relying increasingly on foreign doctors, mainly Indians and Pakistanis, to man its National Health Service; according to official statistics, 43.9 per cent of its junior medical staff is foreign. There are more specialists of all kinds from other Commonwealth countries working in Britain than there are British specialists working elsewhere in the Commonwealth (Adams, 1968:2).

Nevertheless, as the Oversea Migration Board had pointed out, Australia, by 1960, was looking to the United Kingdom for a net gain of professionally qualified immigrants.

In order to understand why, we must turn to the early tumultuous years of European migration. The account that follows largely embraces the problems of entry to the Australian labour market. Those concerning the professions proved least amenable to solution, but they belonged to a general pattern that extended into the skilled trades which emerged, paradoxically, when the Commonwealth government turned to Europe to recruit Displaced Persons for unskilled and semi-skilled labour. Also, paradoxically, the sudden rise in the proportion of professional workers introduced from the United Kingdom in 1953, noticeable in Table 3.1, and part of the fluctuations in proportions in succeeding years were due to a realignment of occupational priorities concerned not so much with increasing the comparative intake of the highly skilled but more with reducing the overall intake of the unskilled in order to avoid adding immigrants to Australian unemployed labour.

The Tradesmen's Rights Regulation Act, 1946 was passed in order to protect prewar tradesmen and others who had trained by the usual apprenticeship method against 'dilutee' tradesmen whose training had been shortened to meet the manpower needs of World War II in the engineering, electrical, boilermaking, sheet metal, blacksmithing and boot trades. Central and local committees, established to administer the Act, were composed of representatives of trade unions, employer organisations and the Commonwealth government. Local committees assessed applications for tradesmen's certificates; central committees were responsible for policy, including conditions under which migrant tradesmen's qualifications would be recognised.

In July 1947 Calwell inaugurated the Displaced Persons Scheme,
which, until 1951, was the major source of immigrants from Europe. Eligibility for passages was subject to the condition, among others, of direction of workers into employment for two years. Bearing in mind the truism that unskilled labour is much the same the world over and can be performed by any healthy worker, it is not surprising that Appleyard (1964:50) should observe 'While displaced persons were available under such favourable conditions the Australian government was concerned more with their health than with their skills.' He also saw the two main schemes of the early years as being

In one sense . . . complementary. The pressing need for skilled workers in Australia was partly met by arrivals under the United Kingdom Assisted Passage Scheme; displaced persons, irrespective of their technical and professional skills, were allocated to unskilled employment, generally in areas remote from the capital cities (Appleyard, 1964:48-9).

Viewing retrospectively from the early 1950s, the Australian government could congratulate itself on the efficacy with which it had used the displaced persons to break bottlenecks in the distribution of labour but, in 1952, a report of a survey made by the Department of Labour and National Service estimated that of the 105,000 displaced persons in the labour force, about 57 per cent had left their jobs at the expiry of contract (Sydney Morning Herald, 6 April 1952:2).

With the cessation of the Displaced Persons Scheme and the winding up of the International Refugee Organization due in January 1952, assisted migration agreements were signed with the governments of the Netherlands in February 1951, Italy in March 1951, and the Federal Republic of Germany in August 1952. Into the first, the Agreement between Australia and the Netherlands for Assisted Migration, 22 February 1951, the following clauses were inserted:

10. The Commonwealth government shall, in respect of migrants selected under the scheme, accept full responsibility for their reception at approved ports of disembarkation in Australia and thereafter for their onward movement, temporary accommodation, placement in employment and after-care.

11. . . . migrants selected under the scheme shall enter into an undertaking with the Commonwealth Government to remain for a period of two years after arrival in Australia in the employment for which they were selected or in such other employment as may be deemed economically equivalent.
Clause 13 of the Schedule defined the Commonwealth government's responsibility with regard to employment:

The Commonwealth Government shall . . . 13 (e) render every assistance through the medium of the Commonwealth Employment Service in placing migrants in employment.

Substantially similar clauses were written into the agreements with Italy and the Federal Republic of Germany.

Briefly, this was the background to problems of European entry to Australian occupations: a Tradesmen's Rights Regulation Act restrictive in character and intended to ensure that the training of those entering the skilled trades was equivalent to normal Australian standards, but administered by committees that included Commonwealth government representation; the introduction of thousands of workers directed into employment for two years, more than half of whom were leaving their employment at the expiry of contract; the success of displaced person industrial conscription leading to the insertion into the first major migration agreements with European countries of clauses giving the Commonwealth government the right to direct labour for a similar period, with the difference that people with appropriate skills should be selected for the occupations they were to enter.

The problem of recognition of qualifications of European tradesmen became apparent first and stretched not only over the displaced persons but also over the selection of workers under the migration agreements with the Netherlands, Italy and the Federal Republic of Germany.

Large numbers of displaced persons had either lost or had inadequate documentation of their qualifications. European 'dilutee' tradesmen whose training had been shortened to meet immediate postwar reconstruction needs of Europe were unacceptable in Australia, where standards were based on an indentured apprenticeship system. Technical advisers were appointed to the Australian Migration Missions in the Netherlands, Italy and Germany to screen skilled workers but, by 1951, the problem had snowballed and 70 per cent of European skilled tradesmen presenting themselves for selection for the metal and electrical trades were being rejected (Commonwealth of Australia, 1970).

In late 1951, an Australian delegation, the Eltham Mission was
Studies in the Immigration of the Highly Skilled

despatched to Holland, the Federal Republic of Germany and Italy to investigate and report on the standard of training in the metal and electrical trades. The Mission discovered a uniformity in systems of apprenticeship in the Netherlands and Federal Republic of Germany and was able to specify qualification and employment experience criteria, but was unable to establish general criteria for Italy. Decentralisation of educational responsibility in order to produce skilled tradesmen to cater for local needs in this country had resulted in such a diversity of standards that the Mission recommended that the only means of determining whether training and employment experience equated that produced by the apprenticeship method was the time-consuming individual examination of each tradesman seeking to emigrate (Com. Dept of Labour and National Service, 1952).

The findings of the Eltham Report were accepted by Central Trades Committees operating under the Tradesmen's Rights Regulation Act, 1946 but the inferences were clear: tradesmen with training, employment experience and skills equivalent to the Australian were available in the Netherlands and the Federal Republic of Germany; no such guarantee could be proffered for Italy.

Australian immigration selection moved, at the outbreak of the Korean War, from an emphasis on manpower requirements of national development towards providing labour to increase the output of industries considered vital to defence, particularly food production in the rural sector. Instructions were issued to immigration officers in Europe in 1951 to concentrate on rural workers when making their selections under the migration agreements that had been signed with the governments of the Netherlands and Italy and the agreement that was currently being negotiated with the Federal Republic of Germany (Holt, 1952). In view of the difficulties that were being experienced by European tradesmen in having their skills recognised and seeing that Italy was soon to be pinpointed as the country with the least acceptable standards, rural and unskilled workers were obviously likely to be largely recruited from Italy.

However, the buoyant economic conditions that had existed in Australia during 1950-1 were reversed within a year. Wool prices, reaching a record of 144d per pound in 1950-1, halved in the following season. The value of exports dropped by a third in twelve months, but the value of imports leaped by an increase of 42 per cent. Overseas reserves were sharply reduced, while cost inflation aggravated
conditions. The annual target of 200,000 permanent and long-term arrivals had already been reduced as an anti-inflationary measure to 133,000 at the beginning of 1951, but Australian male unemployment rates, estimated at 1.5 per cent in 1950-1, rose to an estimated 3.9 per cent in 1952-3.

The first shiploads of Italian unskilled and rural workers arrived in March and May 1952, when unemployment rates were about to reach a peak and, because of inevitable time lags in immigration, more were yet to come.

In July 2000 unemployed Italian men housed in Bonegilla Migrant Hostel in Victoria threatened to riot, fire the camp and march on Albury and Wodonga in protest against the Commonwealth government's inability to find them employment. Police were moved in, troops backed by armoured cars in nearby Bandiana Camp were ordered to stand by in case of violence. Ten days later, police were called into Maribyrnong Migrant Hostel in Victoria where protesting unemployed Italians later marched on Footscray Employment Office demanding work or repatriation.

Other demonstrations followed in quick succession in Sydney and Brisbane — 'wild melees' said the Press when Italians clashed with police during a march on the Italian Consulate in Sydney. The protests culminated in threats to sue the Commonwealth government in the High Court for breach of the employment contract.

These disturbances produced a quick reaction from the Italian government whose nationals had been transported to Australia under formal treaty. The Italian Foreign Office in Rome issued a statement at the end of October which read:

The Italian government which had already succeeded in obtaining the employment of all workers previously unemployed in Australia and of those who arrived afterwards, intervened energetically again today with the Australian government in order to obtain the rapid employment of the groups now again without jobs as a result of the Australian economic situation (Sydney Morning Herald, 31 Oct. 1952:1).

An analysis of the occupational content of the registered unemployed by the Department of Labour and National Service produced the expected pattern: the majority on unemployment benefit were unskilled workers; registered vacancies indicated a continuing shortage
of skilled workers, particularly in the trades that were controlled by the *Tradesmen's Rights Regulation Act*, 1946.

In July 1952 immigration targets for the remainder of the year were lowered and 1953's reduced to 80,000, about half the average annual intake of the preceding four years. In August the Commonwealth government presented its counter-cyclical immigration policy, applicable when unemployment accompanied a comparatively high rate of inflation. This extended from a reduction in numbers to a variation in the composition of the inflow:

(i) The introduction of workers who would not compete with the Australian unemployed, i.e. unrestricted entry to the full fare-paying and personally nominated worker from the United Kingdom; otherwise a reduction in the unskilled content. 'It is well established in industry', said the Acting Minister for Immigration, H. E. Beale, 'that skilled workers enable consequential employment to be provided for semi-skilled and unskilled workers'.

(ii) Giving priorities among desired types of workers to those with families and continuing, under the Landing Permit System, the introduction of dependants from Europe of workers already resident in Australia (*CPD*, Vol.218:133).

Variations in the unemployment rate (lagged by one year) and the ratios of dependants and professional workers to all workers introduced under assisted immigration schemes from 1952-3 to 1969-70 are shown in Fig.3.1. Movements in both ratios are similar to movements in the lagged unemployment rate from 1952-3 to 1957-8 and from 1960-1 to 1962-3.

In January 1950, less than three years after the arrival of the first group of displaced persons, the problem of entry into the professions was raised at the first Australian Citizenship Convention held in Canberra. The recommendation that emerged was concerned with the 'registrable' professions and indicated an understanding that differences in training between Europe and Australia were reason for exclusion, and that disparities in acceptance of Europeans between States were due to the federal system of government, whereby each State, exercising its legislative prerogative, had created entry conditions that were applicable to certain professions within its own political boundaries only:

Representations should be made to the State governments, registration
boards and other competent authorities that migrants holding professional qualifications of repute should be admitted to registration for their respective callings, after passing the appropriate examinations and following a reasonable period of training or readjustment sufficient to secure their competence in accordance with Australian standards. The States should be asked to make this period in each case the minimum possible to secure this result and also that the period be uniform throughout Australia (quoted in CPD, Oct.-Nov. 1950, Vol. 210:2025).

The Immigration Planning Council which subsequently considered the recommendation suggested that the first approach should be made to professional associations. In July 1950 the Minister for Immigration opened the question of legislative amendments with the appropriate professional associations; the need for revision of State legislation was raised at the Premiers' Conference of September 1950.
In making its initial approaches to State governments and professional associations, the Commonwealth government was recognising a divided responsibility for controlling entry to the professions. The reasons why changes were slow to come were already present in these early tentative inquiries.

The Commonwealth government was advocating individual examination of qualifications of those who were not automatically acceptable, a procedure appropriate not only to the displaced persons but also to the immigration program generally. Few State Registration Boards were empowered to examine and, had this solution been immediately acceptable, legislative changes would have required the approbation of governments and professional associations in six States and two Commonwealth territories, a Herculean task.

It would be impossible to generalise about the extent to which all State legislation excluded alternative procedures for applicants whose qualifications were not automatically acceptable, e.g. at one extreme would lie the architectural profession in which State Registration Boards had been constituted as qualifying bodies, some already applying the principle of individual examination; at the other, the legal profession, where differences in European legal systems would have made individual examination pointless. In the prolonged debate that followed, however, arguments concerned with protectionism arose from a fear that State professions, small in numbers, would be swamped if opened to foreigners. As acute shortfalls began to develop in the supply of professional manpower, State governments found that it was the allaying of this fear that determined the form amending legislation could take. The NSW government found itself forced to take extreme measures in the case of the Veterinary Surgeons' Board:

The Hon. H. E. Graham, Minister for Agriculture, in reply to a question: 'As to the shortage of veterinarians, I remind hon. members that under an Act brought down by a former Government a body was appointed known as the Veterinary Surgeons' Board, over which the Minister for Agriculture had little control. I did everything humanly possible to persuade the members of that board to examine the position of qualified foreign veterinarians who may be able to practise and assist the stock industries in this State, but they flatly refused to do anything about it. I then asked what amendments the board considered would be necessary to enable foreign veterinarians to be registered, but I received no assistance. When the term of that board...
expired at the end of last year, I exercised my prerogative as Minister and sacked every member of it. I appointed an entirely new board of qualified men who have since examined the Act and supplied me with the information that will enable me to bring down amending legislation for the registration of foreign veterinary surgeons' (NSW PD, Vol. 196, 1950-2:3193).

The plea that special measures should be devised for the displaced persons was one that most professions were prepared to heed, provided professional standards remained intact. The following extract from a letter to the Medical Board of New South Wales from Dr Bruce Mayer illustrates the kind of alternative solution that was seen as more appropriate:

We have been asked as a Committee of Examiners recently of a number of Foreign Practitioners to furnish you with a statement of our opinion of this particular type of examination and of the candidates.

In the first place we would repeat that we reported following a similar examination in 1955 and which applied in every detail to the recent (1956) examination.

All the examiners are agreed that the standard of the majority of candidates was far below that expected from our own average student.

Apart from a poor knowledge of English, Dr Mayer saw the reason why many appeared to be ignorant of most advances in medicine in the preceding 20-25 years 'not only as regards their vocabulary but as regards their method of treatment' as lying largely in the special circumstances surrounding the displaced persons:

In the interests of both the public and the practitioners themselves, the great need is for the Foreign Doctors, several of whom are advanced in years or have had no medical contact for several years, to receive further medical teaching and to be provided with the opportunity for medical study before submitting themselves for examination. It is asking the impossible of the majority of these gentlemen to require them to come up to anything approaching the standard of a pass at our final degree examination or even a standard competent examiners would consider to be that of a 'safe practitioner'. To put such men through the ordeal of an examination like this is sheer cruelty and is as embarrassing to the examiners as it is distressing to the examinees.

With regard to the suggestion that the present Act ought to be repealed, it is necessary to bear in mind that there might be some of the Foreign
Practitioners who do not require any further instruction and who really come up to our university standards. However, the number of such men is very small (NSW PD, 1956-7, Vol. 19:4287-8).

Tailoring alternative registration procedures to the needs of the group who were spearheading the challenge was inappropriate to the needs of the immigration program. The sharp contraction in numbers of professional workers recruited from Europe after the cessation of the Displaced Persons Scheme can be observed in Fig. 3.2.

Changes in legislative requirements were, in many instances, only to arrive in piecemeal fashion. In 1953, Calwell reported that only 'slight' progress had been made (Calwell, 1953:17). In 1956, Holt, while admitting that the Commonwealth government had no power over the conditions of entry outside its own territories, claimed success in achieving a 'number of modifications' (Holt, 1956: 17-18) but in 1969, thirteen years later, the Minister for Immigration, B. M. Snedden, said: 'Two decades after the present program of immigration began, we have not resolved this problem . . . The invisible loss from professionally qualified workers who do not come here because their qualifications will not be recognised must be reduced.' The conclusion had been reached that the main obstacle was ignorance:

The doubts — and the rejections — have been many because there has not been a readily accessible source of authentic information about the comparability of overseas qualifications to our own Australian standards or to those of British countries with which we are familiar . . . After studying and discussing the problem over a period of twelve months State Ministers for Immigration and I agreed on 12th February to establish a committee of eminent men . . . (CPD, 1969: Vol. H of R 62:965).

In March 1969 Snedden announced the creation of the professional equivalent of the skilled trades Eltham Mission of 1951 and its successor the 'Tregillis Mission' of 1968, a Committee on Overseas Professional Qualifications whose role was to be that of an authoritative source of information on the standing of overseas professional qualifications for government statutory bodies, professional associations and other responsible inquirers, but, unlike the skilled trades missions, the Committee was not restricted in its terms of reference to European qualifications only.

Appendix II contains lists of overseas qualifications and procedures
that entitled applicants to registration in architecture, dentistry, law, medicine, optometry, pharmacy, land surveying, veterinary science and certain forms of accountancy in Commonwealth government controlled territories of the Australian Capital Territory and Northern Territory in the early 1970s. The first impression is one of bewildering diversity representing in an embryonic form the problem that exists on an Australia-wide scale caused not only by the distinctive development of each profession, but also by the fragmentation imposed on a single registrable profession by the various pieces of Commonwealth and State legislation controlling it.

International differences in the knowledge required to practise certain professions would exclude certain immigrants from certain professions, e.g. law, taxation accounting, but otherwise, given the condition that the basic requirement for entry should be a standard of training at least equivalent to the Australian, the following observations about the Commonwealth registration requirements are in order:

(i) Lack of uniformity in the same profession

Only in the cases of taxation accounting, company auditing and liquidating, land surveying and veterinary science were the registration requirements for a single profession similar in both Commonwealth territories. For the remainder of the registrable professions, they varied.

(ii) Differences in accrediting agencies

Registration authorities for company auditing and liquidating in the Australian Capital Territory and Northern Territory and architecture in the Northern Territory used professional associations as accrediting agencies. Law in the Northern Territory used other registration boards in Australia.

(iii) Differences in geographical and political boundaries

Any overseas qualification, providing it met Australian standards, was acceptable to architecture only in the Australian Capital Territory and to dentistry and medicine only in the Northern Territory. Registration authorities for pharmacy had been given this discretionary power, subject to the applicant being a British subject. The restrictions to source country for the remainder ranged from very narrow — New Zealand for land surveying — to gradually widening — United Kingdom, Great Britain, British Commonwealth — to the widest — qualifications obtained in educational institutions recognised by the Royal College of Veterinary Surgeons or accredited by the American Veterinary Medical Association.
(iv) Conditions unrelated to qualifications

Dentistry and optometry in the Australian Capital Territory and optometry in the Northern Territory required that reciprocity in recognition of qualifications should exist with the country in which an overseas qualification was acquired; pharmacy in both Commonwealth Territories required that the applicant must be a British subject; law in the Australian Capital Territory not only required that the applicant be a British subject but also stipulated a residential condition of six months.

Had the Commonwealth government been given Australia-wide powers to legislate over the professions, it is unlikely that the universal application of the principle of individual examination would have immediately followed.

The official opinion that the irresistible force had met the immovable body was held about the registrable professions, those in which the self-employed were sufficiently large in number to require statutory control. For the other largely employee group, which embraces scientists, engineers and technologists, such influence as professional associations have over immigrant entry arises from the status and guarantee of adequate training that acceptance for membership accords; from direct negotiations about acceptable qualifications with major employers, e.g. government; and from the industrial activity of members seeking to tie membership of ‘professional’ trade unions and the application of industrial awards to those who are eligible for membership of the appropriate professional association, e.g. engineers, scientists. The actual extent of control of an employee professional association can vary widely. At one end would lie the almost purely learned society, such as the Geological Society of Australia which generally abstains from such matters; at the other, the association that has almost complete control, such as the Institution of Engineers, Australia. Inevitably, employers faced by qualifications whose standing is unknown turn to the professional association, but the final decision lies, even in the case of the engineers, with the employer.2 The 1966

2 In 1961 the Commonwealth Conciliation and Arbitration Commission defined a professional engineer as one who either held the status of 'graduate' or 'member' of the Institution of Engineers, Australia, or was eligible to do so. The Institution uses the principle of individual examination to assess qualifications that are not automatically acceptable, but its approval only makes it mandatory for an employer to pay the minimum award salary.
Fig. 3.2 Arrivals of workers in professional occupations by assisted immigration program, Australia, 1950-70

*Irish Scheme, Empire and Allied Ex-Servicemen Programme, General Assisted Passage Scheme, Special Passage Assistance Programme, United States Passage Assistance Programme. Source: Appendix I.

A national census of Australia showed that, among the professions, the scientists and technologists held the largest proportion of European born postwar immigrant arrivals; some of the reason must lie in the comparatively easy access to most of the professions subsumed under this occupational grouping.3

The decade beginning 1961 was marked by an increasing interest by the Australian authorities in recruiting the highly skilled from abroad. Not only did the intake from the United Kingdom begin to increase, but schemes outside those conducted in this country and Europe began to assume a greater importance in contributing towards the total assisted intake of these people (see Fig. 3.2.).

3 See Table 5.4.
Table 3.2. Arrivals in Australia of workers in professional occupations under assisted passage schemes 1961 and 1970

<table>
<thead>
<tr>
<th>Occupational classification</th>
<th>1961</th>
<th>1970</th>
<th>Proportionate increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Community services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical practitioners, dentists, other professional medical workers, teachers, clergy, professional law, and all other professional workers not elsewhere classified</td>
<td>814</td>
<td>2306</td>
<td>183</td>
</tr>
<tr>
<td>Scientists and technologists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architects, surveyors, professional engineers, chemists (not pharmaceutical) and scientists</td>
<td>367</td>
<td>1532</td>
<td>317</td>
</tr>
<tr>
<td>Professional workers as proportion of all assisted workers</td>
<td>1181</td>
<td>3838</td>
<td>225</td>
</tr>
<tr>
<td>Source: Appendix I.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By 1970 the category 'Other Schemes' included only the United States Passage Assistance Programme and the Special Passage Assistance Programme. The Special Passage Assistance Programme commenced in July 1966 to provide unilateral passage assistance to immigrants from Britain, Ireland and European countries who were ineligible for passage assistance under existing bilateral or international migration agreements. In March 1970 it replaced the General Assisted Passage Scheme, which had been introduced in December 1954 to provide unilateral passage assistance to immigrants from Scandinavian countries and which, two years later, incorporated the Empire and Allied Ex-Servicemen Programme (mostly Dutch from Indonesia) and, in 1959, the Irish Scheme and, in 1961, the Danish Scheme. By 1970-1 the Special Passage Assistance Programme had spread from Europe, Britain and Ireland to South America and South Africa and, today, has an extremely wide geographical coverage. In 1970 65 per cent of workers in professional occupations entering under 'Other Schemes' had done so under the Special Passage Assistance Programme.

In addition to increases in numbers and proportions among all assisted workers, the numbers of scientists and technologists had increased at a faster rate than had the numbers of workers subsumed under 'Community Services' (Table 3.2).
Interest in recruiting professional manpower from abroad began to show signs of quickening in 1959 when the Department of Immigration started stepping up publicity about employment opportunities in the United Kingdom and instituted the procedure of sending curricula vitae directly from London to the Department of Labour and National Service in Melbourne to speed the processing of inquiries.

Behind the scenes lay shortfalls in the domestic supply of professional manpower that had been exacerbated by the stringent financial conditions under which Australian universities had been expected to operate until the late 1950s. Only then did government attention begin to focus on the need for planning longer-term development of tertiary education.4

The most important outcome of the report of Major-General Sir Kingsley Norris, former Director-General of Army Medical Services, who was sent to the United Kingdom and Europe in 1961 to promote the migration of the professionally qualified, was the creation of an international employment service.

An Adviser on Professions was appointed in London in 1963 to promote emigration, supported by specialist machinery within the two Commonwealth government departments directly concerned with immigration: a professional migrant sub-section within the Department of Immigration and machinery within the Higher Appointments Office of the Department of Labour and National Service that would be concerned exclusively with the overseas professionally qualified worker.

The employment service, originally intended for any emigrant from the United Kingdom who had not already arranged employment, has extended since to other countries and revolves around the completion of Form E.S. 35A — a dossier of personal details, qualifications and employment history — which enables the government departments concerned to inform an emigrant whether his qualifications are acceptable and to place him in contact with a prospective employer.

Although by 1960 the source had contracted to the United Kingdom and was only to widen thereafter, a small specialised change occurred in the 'white Australia' policy in 1956. The impetus appears to have come from the needs of universities for specialised staff. While the relaxation in immigration policy was only one of several measures designed to ease restrictions on Asiatics, particularly those already resident in Australia,

4 See Ch. 4 for an account of the University crisis.
and the numbers introduced from the East remained small, it was also
the harbinger of a wider relaxation that followed in 1966.

Reviewing the modification in 1959, the Minister for Immigration,
A. R. Downer said:

For the last three years the Government desiring to bring about a better
understanding of Asian culture and ideas, has provided specially for the
entry of distinguished and highly qualified Asians to the Australian
community. Thus, for example, an Indian philosopher, a Pakistani
professor, a Ceylonese diplomat, a Malayan statesman, an Indian jurist, a
Thai doctor of specialised knowledge, a Chinese internationalist, all would
be freely accepted by my Department and would, I know, be acclaimed in
any Australian capital city. Nor do I speak in hypothetical terms. People in
these categories are already here and we are delighted to have them in our

In 1965 the United States of America abandoned the immigration
quota system and substituted a series of preference categories under the
US Immigration and Nationality Act, 1965 in order to enable greater
selectivity to be introduced into its immigration policy. The third
preference category placed a ceiling of 17,000 on ‘qualified immigrants
who are members of the professions or who because of their exceptional
ability in the sciences or in the arts will substantially benefit the national
economy, the cultural interests, or the welfare of the United States’ (US
Dept of State, 1966:95) and their families to immigrate to the United
States annually. An upper limit of 20,000 immigrants per annum from
any one country was set, but unused quotas were to be pooled with
priorities given to over-subscribed quotas in order of dates in which
applications were filed. The immediate consequences for African and
Asian countries, where applicants had been on the waiting list for many
years, was a substantial increase in the ‘brain drain’ to the United
States. Almost at once, by 1966-7, two-thirds of the third category
immigrants were from the Far East (Bernard, 1970).

A year later, the Australian government, following in the wake of the
United States of America, began to widen its recruiting policy in the
East. In the absence of reciprocity agreements, the European
professional could not be induced to emigrate, but, outside the United
Kingdom, the British Commonwealth remained untapped. Countries
within it whose nationals would not have been excluded by the ‘white
Australia’ policy were seeking immigrants themselves, but there
remained the Eastern members whose British tradition of education had produced qualifications that were likely to be acceptable via reciprocity agreements with the United Kingdom. ‘Well qualified’ non-Europeans would in future be acceptable on the basis of their suitability as settlers, their ability to integrate and their possession of qualifications that were positively useful:

Examples of those who will be admitted in numbers greater than previously are persons with specialised technical skills for appointments for which local residents are not available; persons of high attainment in the arts and sciences, or of prominent achievement in other ways; persons nominated by responsible authorities or institutions for specific important professional appointments which otherwise would remain unfilled; executives, technicians and other specialists who have spent substantial periods in Australia — for example with branches of large Asian companies — and who have qualifications and experience in positive demand here; businessmen who in their own countries have been engaged in substantial international trading and would be able to carry on such trade from Australia; persons who have been of particular and lasting help to Australia's interests abroad in trade or in other ways; and persons who by former residence in Australia or by association with us have demonstrated an interest in or identification with Australia that should make their future residence here feasible (CPD, 1966, Vol. H of R 50:69).

No annual quota was contemplated.

In the succeeding year, Canada adopted new Immigration Regulations that were to be applied universally (Order in Council [P.C. 1967/1616]). These regulations identified nine factors that were to be assessed on a point system, one of which was education and training and another occupational skill. To qualify for admission an immigrant must have obtained 50 out of the 100 assessment points available. The immediate effect was to reduce the unskilled content and to increase the proportion emigrating into Canada from the West Indies and Asia.

Between March 1966 and 31 December 1970 over 2700 applications from 'well qualified' non-Europeans had been approved by the Australians. With a weather eye cocked to avoid repercussions from governments sensitive to the loss of their highly qualified manpower, a matter in which the Australian government's experience under the Imperial Empire Settlement Act stands it in good stead, the following statistical information was provided:
80 were businessmen who intended to engage in international trading; among the professional occupations, over 22 per cent were medical practitioners, 16 per cent engineers, 5 per cent university lecturers, 5 per cent nurses and 13 per cent teachers. The remainder were spread over 65 'other vocations'.

As to ethnic and national origin about 3160 were Indian (these and the following figures include families), 2230 were Chinese, 340 Ceylonese, 380 Filipino, 180 Indonesian, 170 Malay; the rest were spread over twelve other ethnic and national groups.

As to countries of last residence, a third of the approved Indians were living outside India when they applied; the approved Chinese were living principally in Hong Kong, Malaysia and Singapore; but 27 per cent of the Chinese were living in 27 other countries (summarised from Lynch, 1971:10-11).

Figure 3.2, a bar chart of arrivals of professional manpower under assisted migration schemes from 1950 to 1970, shows the total dropping sharply after 1950 to 1953 and a rising trend thereafter, but not until 1964 does the intake bypass 1950. The rising trend itself shows two cutbacks, one in 1958 and the other in 1966 and 1967.

The early peak in 1950 was due to the displaced persons, whose arrivals outnumbered those from the United Kingdom. The petering out of arrivals of these people sharply accentuates the decline until 1954. As displaced persons were not being introduced for professional work, their disappearance, or, for that matter, their appearance in the statistics was incidental to official recruitment of the highly skilled under assisted passage schemes. The trough in 1953 and 1954 and the cutbacks in 1958, 1967 and 1968 were related to upward movements in the Australian general unemployment rate, but, had the annual volume of the assisted professional intake been responsive to changes in the general unemployment rate over the whole period, it would have shown a larger number of oscillations. The sustained rising trend, particularly during the 1960s, reflects the outcome of official action that was concerned with increasing the total inflow — assisted and unassisted — of professional manpower.

Figure 3.1, which deals with the composition of the total assisted intake, gives further evidence of changes in the professional assisted inflow occurring in response to more general official manipulations of immigration. In two periods, from the early to late fifties and in the early sixties, changes in the proportions of the assisted highly skilled
occurred as changes were made in assisted immigration generally to compensate for movements in the unemployment rate of each preceding year.

Figure 3.2 illustrates changes in the demarcation of the professional assisted inflow that also had a wider applicability. Except for 1950, which was dominated by the displaced persons, the United Kingdom continued as the major source country, but the 1960s begin to show the results of official action directed towards increasing the volume of the input from countries other than the United Kingdom and Europe. Parallel action can be found outside the assisted passage schemes in the conditions for applying relaxations of the ‘white Australia’ policy.

The arrivals of displaced persons were many more than indicated by Fig. 3.2, which begins in 1950. Calwell inaugurated the scheme earlier in 1947, but the numbers who were professionally qualified remain a matter of conjecture. E. F. Kunz gives the tendency among displaced persons to emphasise manual trades which they believed would be most acceptable for selection or for placement purposes during their forthcoming two year contract as one reason why their occupational records were an understatement of their professional skills (Kunz, 1969:23). The subsequent experiences of these Europeans, the first major non-UK group to attempt to enter skilled and professional occupations, threw into relief factors creating demarcations in international flows that the previous traditional dependence on the United Kingdom had masked.

The official protests of donor countries about the loss of skilled and professional manpower were an ineffectual restraint on the volume of overseas recruitment that contributed little to demarcations. The Australians may have been more vulnerable than other countries through the opportunities for supervision which the selection procedures of formal assisted migration agreements offered, but, in the absence of direct controls over emigration, the outflow of officially 'unassisted' professional manpower could not have been stemmed anyway. The United Kingdom, the principal donor country, was concerned about the United States of America, not about labour flows within the Commonwealth in which it appears to have been a net recipient of professional skills.

It was the domestic unfolding of events that led the Australians to contract the source of supply from Europe to the United Kingdom and to broaden it thereafter. From the experiences first of the displaced
persons and then other Europeans, an international pattern of labour flows emerged that related skills of workers to countries of training. Factors leading to demarcations — international differences in training, conditions of entry to occupations in recipient countries — applied to both the skilled and highly skilled, but, for the former the lines were not so rigidly drawn.

Within the common labour market of the Empire, the Australians had historically drawn their own lines of demarcation with the United Kingdom. The postwar immigration program opened under a Labor government that sought and received, through the consultative machinery of the *Tradesmen’s Rights Regulation Act*, the co-operation of the trade union movement in facilitating entry of suitably trained non-British skilled workers into the trades.

The resolution of problems of entry to the professions was never so simple. It is doubtful that the Commonwealth government could have assembled a consultative body whose decisions would have been binding on the several State legislatures and professional associations. The federal division of legislative authority over the professions had a corresponding impact on the professions’ concept of their own unity. Even by the end of World War II, few registrable professions saw themselves as a single Australian entity; rather, each was composed of several State entities. In instances where alternative registration procedures had been or were later created to admit suitable immigrants with qualifications that were not automatically acceptable, the absence of general reciprocity agreements between State registration boards restricted immigrant labour to State boundaries.

During the 1950s, much of the official action concerned with recruiting the highly skilled from overseas took place internally as action directed towards attempting to widen entry to the professions. Emanating as these official overtures did from the government that was also conducting a massive immigration campaign, they were interpreted as a *volte-face* of government’s role of protecting domestic labour. However, the accompanying increase in shortfalls in the domestic supply of professional labour and the lobbying activities of the displaced persons themselves also contributed towards achieving moderation in the conditions of entry. While the Commonwealth government’s ideal of individual examination of qualifications of those who are not automatically acceptable has not been generally met yet, knowledge gained about factors creating demarcations in international flows led
the Australian government to the realisation that its areas of supply were limited to countries with acceptable educational systems and that, in these sources, it would have to compete with the United States and Canada. Advertising to break down ignorance of Australian employment opportunities was stepped up in the United Kingdom, accelerated procedures for processing assisted applicants were introduced, and an international employment service established. Recruiting activities then spread from the United Kingdom to the Americas, to Commonwealth and ex-Commonwealth countries in Africa and the Far East. With a greater knowledge of the kind of European qualifications that were acceptable, the numbers introduced from Europe began to creep up. By the end of the 1960s the competitors — the United States, Canada and Australia — were beginning to intrude on each other's territories. The appointment of the Committee on Overseas Professional Qualifications augured an even greater diversification in the Australian inflow.

Other than a scant sentence or two, little else has been said in this chapter about shortfalls in the supply of professional domestic manpower that underlay the accentuated overseas demand. However, a description of labour market conditions that gave birth to the official activities belongs to a discussion of policy generally towards the recruitment of the highly skilled from abroad. This discussion is in the next study, 'Manpower policy'.
With the existence, on the one hand, of an immigration program underwritten by public funds and, on the other, of indigenous universities also drawing on the public purse, it might be assumed that manpower planning is used to ensure some form of optimum distribution of professional workers in the labour force and that inputs into the labour market from home and overseas are related in a complementary fashion.

On the immigration front, special machinery whose effective functioning rested on the closest collaboration between the Departments of Immigration and of Labour and National Service had come into being during the 1960s for the attraction and placement of the professionally qualified migrant. The intention to recruit the highly skilled from the East had been one reason for a relaxation of the white Australia policy. Finally, a Committee on Overseas Professional Qualifications had been appointed to dispel ignorance of foreign training courses and institutions. Professional workers are a small proportion of the labour force and the need for such a drive could only have been because of expected shortfalls in the domestic supply. Consequently, this study concerns itself with the role assigned to immigration vis-à-vis manpower policy applied to universities.

Under the Australian constitutional division of powers between Commonwealth and State governments, the latter are primarily responsible for education. Except for the Australian National University which lies within Commonwealth territory, other universities have been founded by legislation of State governments. The problems of
integrating policies of seven governments that this division of responsibility implies can be largely eliminated by the creation of national advisory machinery. Constraints on national control can be loosened by the provision of Commonwealth finance.

The States have limited avenues for taxation and under Section 96 of its constitution the Commonwealth government is empowered to make financial grants to States to compensate for deficiencies in State revenue. While the States, traditionally, resist grants with tags on them, the Commonwealth government can and does earmark grants to be used for certain purposes falling within State jurisdiction.

In 1939 universities were barely equipped with the essentials of staff, buildings and equipment (Aust. Vice-Chancellors' Committee, 1952). To mitigate the lack of research facilities, the Commonwealth government assisted with grants. Then and until 1974, when students' fees were abolished, there were four main sources of university revenue: endowments, students' fees and government grants, State and Commonwealth. In 1939, endowments constituted about 17 per cent of revenue, fees 26 per cent and State grants, negotiated annually, 45 per cent, leaving a marginal contribution from the Commonwealth towards research (ibid.).

In 1943, during World War II, a Universities Commission was established as a Commonwealth instrumentality under National Security (University Commission) Regulations to act as an advisory body on manpower problems and Commonwealth financial assistance to students was inaugurated in order to attract scholars into certain areas of study. The Universities Commission was also charged with the preparation, in co-operation with University administrators, of a post-war scheme for ex-service personnel under which the Commonwealth government later made payments for fees and contributed sums for extra buildings and equipment to cater for increases over 1939 enrolments represented by these trainees.

These measures were the forerunners of subsequent Commonwealth grants towards university recurrent and capital costs and of a permanent national co-ordinating body that allowed forward planning over a longer period than the annual basis of prewar years; but the timing of changes was related to an extended period of crisis in university affairs.

The progression of the crisis has been recorded in reports of Commonwealth Committees appointed to inquire into the affairs of
universities, in *Parliamentary Debates* and in publications by universities themselves in which they drew attention to their own sorry state. Heavily dependent on government finance and with histories characterised by State neglect, Australian universities saw financial salvation lying in being able to tap the additional source of revenue represented by the Commonwealth government. The provision of capital finance by the Commonwealth government in 1958 and the creation of the Australian Universities Commission in 1959 represented the culmination of a campaign in which universities had sought not only money but also national machinery that would permit forward planning. The highlights of the campaign show that, without question, the impetus for national forward planning had come from the universities and not from the Commonwealth government.

Planning machinery of a kind had preceded the Australian Universities Commission. The wartime Universities Commission was set up on a permanent basis at the end of the war by the *Education Act*, 1945. A Commonwealth University Scholarship Scheme was inaugurated in 1951 and the role of the Commission became principally that of caretaker of Commonwealth financial assistance to students attending universities and other approved tertiary training institutions. The Commission continued functioning under its title until the arrival of the Australian Universities Commission in 1959 when it quite logically became the Scholarships Board.

Under the same founding legislation as the Commission's, the Commonwealth Office of Education was created with functions that included advice on education generally, liaison with the States, consultation with other Commonwealth authorities concerned with education, the provision of information and statistics on education, advice concerning the grant of financial assistance to the States and to other authorities for educational purposes, and any other functions in relation to education that might be assigned to it.

A further source of information lay in the Commonwealth Bureau of Census and Statistics publication *University Statistics* and, covering the labour market, was the Higher Appointments Office within the Commonwealth Employment Service of the Department of Labour and National Service. An infrastructure to support manpower planning had been created very early in the postwar period, but at a time when university concerns were still considered to be State government concerns.
With the loss looming on the horizon of the Commonwealth subsidy accompanying the diminishing numbers of ex-service trainees in 1949 and 1950, representations by universities to the Commonwealth government resulted in the appointment of a Committee (the Mills Committee) to inquire into the needs of universities. Terms of reference covered finance, present and future, and the Committee was required to make recommendations as to action, if any, that should be taken by the Commonwealth government.

It was later to be remarked that in its 1951 interim report the Mills Committee had directed its main considerations towards difficulties being experienced by universities in meeting current expenses and that longer-term planning needs had been neglected (CPD, Vol. H of R 2, 1953:828). As a result of its recommendations, a special Commonwealth grant towards recurrent expenditure in 1950 was made retrospectively and, from 1951 onwards, annual Commonwealth grants towards recurrent expenditure were instituted that aimed to match revenue from Commonwealth sources to the development of revenue from State sources and students' fees. Legislation was enacted in 1951 that laid down the amount of assistance that would be given in 1951, 1952 and 1953; in 1953 legislation amended the amount available in 1953 and nominated assistance for 1954; in 1955 and 1956 legislation in each year stipulated the amounts available in that year; in 1957 new legislation covered 1957 and 1958.

The Commonwealth government had accepted a measure of responsibility for university finances, but only as the junior in a Commonwealth/State partnership — the Commonwealth 'considered it of great importance that the universities should retain their individuality and their local character and quality' (Com. Office of Education, 1954:5). The erratic fashion in which universities were being informed of Commonwealth money that could be made available would have made forward planning difficult and, however well intentioned the aim, it was immediately apparent that the formula being used to calculate the Commonwealth grants was producing inadequate answers. The 1951 legislation provoked an outcry from the Australian Vice-Chancellors' Committee who, in an unprecedented appeal to the public, warned that 'the finances of the Australian Universities are in such a parlous condition that the Universities can barely maintain their activities at the present minimum level and unless something is done they will be in no position to plan adequate
developments to cater for Australia's university needs in the next few years' (AVCC, 1952:1). Projections of student population to 1965 showed the need for facilities to cater for numbers three or four times the prewar figure. Looking to the labour market, the Vice-Chancellors pointed to trends already in evidence indicating that the number of graduates demanded would grow and yet universities were limited by an incapacity to plan ahead imposed by the annual allocation of inadequate funds. The Vice-Chancellors called for an inquiry into the longer-term needs of universities.

The oration to mark the centenary of the University of Sydney in 1952 delivered by Sir Ian Clunies Ross threw further light on the consequences:

action must be taken now. We have not yet experienced the full effects of the scientific age, the age of specialisation; indeed, it may be said that we have scarcely felt its impact if we consider what it will involve ten or twenty years hence. We are living on borrowed capital which is rapidly running out, the capital of an older generation, educated in the tradition of a broader and more liberal scholarship which still exerts a marked influence on the thoughts and attitudes of our day (Clunies Ross, 1952).

Clunies Ross called for the setting up by the Commonwealth government of a Commission to examine and define the functions, responsibilities and needs of universities.

The Commonwealth government took some cognisance of this state of affairs by increasing the originally intended grants for 1953 and 1954. The University of Sydney responded by preparing a detailed estimate of its needs for the next decade. 'Department by department, the survey revealed appalling deficiencies' (Co-ordinating Committee, 1954 and CPD, 1957, Vol. H of R 14:718).

The Commonwealth government next instituted a review of the basis on which its grants were calculated. Projections of the number of annual enrolments in State universities from 1956 to 1962 were prepared by the Commonwealth Office of Education (1956) and the variable factors that were considered from 1956 were these projections and differences in faculty needs of each university. While the Commonwealth government had moved towards making an independent assessment of 'needs' it still continued to regard universities as primarily State responsibilities and its own funds as playing a supplementary role only. It still had some distance to travel before universities were prepared to abate the campaign.
The Federal Council of University Staff Associations and the National Union of Australian University Students next entered the arena claiming that the difficulties of universities could only be resolved by greater Commonwealth participation in university finances (CPD, 1957, Vol. H of R 14:717-18). Considerable supportive artillery came from professional associations, education and other government and statutory bodies, private enterprise, State politicians and university Appointments Boards suggesting that unfilled vacancies lay in the professional labour market and that these were due to increase.

While the Department of Labour and National Service held to the view, and in this the Commonwealth Office of Education concurred, that the bases on which claims of current shortages of certain kinds of manpower in the labour market were being made had led to a distorted picture, in November 1956 the Australian Academy of Science called a conference to consider whether Australia's resources of scientists, applied scientists and engineers were sufficient for its needs.

Statements made to the conference by the Department of Labour and National Service admitted to an unsatisfied demand for engineers, chemists and physicists, biologists and metallurgists (Aust. Academy of Science, 1957:13), but the major impact of the conference lay in the publicity given to possible future conditions.

The proceedings of the conference pointed to (i) declining proportions of students enrolling in science and engineering faculties; (ii) difficulties in meeting the demand for research scientists; (iii) expected shortages among teachers of science and mathematics at secondary and tertiary level; (iv) adverse comparisons between Australia and the United Kingdom, Canada, the United States of America and the USSR of scientific and technological manpower as a percentage of population. The Academy considered the long-term outlook for both economic growth and defence to be grave unless drastic remedial measures were adopted and called for an official Committee of Inquiry into Science and Technology (ibid.:1-3).

In the succeeding year a second series of statistical projections of university enrolments to 1970 was presented by the demographers W. D. Borrie and R. M. Dedman. Their calculations pointed to the conclusion that a reasonable basis for future planning of student enrolments would be to expect an increase between 1955 and 1970 of at least 84 per cent without allowing for immigration, and an increase of 106 per cent allowing for annual immigration at the current rate.
We are about to witness an increase in the teenage population of this country which has certainly not been excelled in the past in quantitative terms, and indeed probably seldom excelled as a rate of growth. This wave is about to press in on universities that are already suffering severe overpopulation, whether the unit of measurement be staff-student ratios, buildings, laboratory equipment or library facilities. The existing overpopulation in Australian universities is not the product of increases in the population of university age. It has arisen almost wholly from the increased ratio of young people attending our universities. Soon, however, numerical increase alone, without any further increase in ratios, will create a crisis of considerably greater magnitude than that already experienced by universities over the past decade (Borrie and Dedman, 1957:3).

Running through these years was an additional theme of unrest among university staff and academic controversy in several universities. For both political and financial reasons, the time had arrived to attend to the needs of the universities. With the agreement of the States, a Commonwealth Committee of Inquiry under the chairmanship of Sir Keith Murray of the United Kingdom University Grants Committee was appointed to inquire particularly into the role of the university in the Australian community, the extension and co-ordination of university facilities, technological education at university level, the financial needs of universities and appropriate means of providing for these needs. Completing its report in a very brief space of time, the Murray Committee sounded the final alarm signals: 'we have been so impressed by the need for immediate action, in 1958, 1959 and 1960, if the position is not to become catastrophic' (Commonwealth of Australia, 1957).

The immediate outcome of the Report was embodied in the States Grant (Universities) Act, 1958 which provided assistance over the triennium 1958-60 including 1:1 matched capital grants to States, i.e. grants to a certain maximum value to be matched equally by State grants, and an unmatched emergency grant towards recurrent expenditure that raised the ratio of Commonwealth to State grants from 1:3 to 1:1.85 (a ratio that was maintained into the 1970s). With the acquiescence of State governments, a permanent Australian Universities Commission was established which continued making recommendations in forward trienniums and whose functions under the Commonwealth Australian Universities Commission Act, 1959 were:
13. (1) . . . to furnish information and advice to the Minister on matters in connexion with the grant by the Commonwealth of financial assistance to universities established by the Commonwealth and of financial assistance to the States in relation to universities, including information and advice relevant to . . .

(a) the necessity for financial assistance and the conditions upon which any financial assistance should be granted; and

(b) the amount and allocation of financial assistance.

14. (1) The Commission shall perform its functions with a view to promoting the balanced development of universities so that their resources can be used to the greatest possible advantage of Australia.

This brief outline of the 1950s crisis has ignored actions taken by State governments themselves. State grants had risen, new universities had been established, but as the events of the period unfolded they led to a recognition by Commonwealth and State governments that State resources, inadequate for the existing situation, could not cater for the changes and expansion predicted for the future.

It was not until the late 1950s, therefore, that the stage was set for the appearance of an integrated national policy towards universities. The Commonwealth government had, at last, emerged as a dominant financial power. While the larger portion of revenue was still expected to come from State sources (in 1970 State universities received about $88 million from State governments, $80 million from the Commonwealth) the principle of matched grants for both recurrent and capital expenditure acted as an inducement to State governments to meet levels deemed appropriate by the Commonwealth.

The requirement that the recommendations of the Australian Universities Commission should be reported directly to the Commonwealth government indicated that the central government, with the concurrence of the States, had accepted a large measure of responsibility for controlling the destiny of Australian universities. The requirement that the Australian Universities Commission should perform its functions with a view to promoting the balanced development of universities so that their resources could be used to the greatest possible advantage of Australia marked an alteration in policy regarding the community universities were expected to serve. Universities were no longer to operate solely within the educational system of a single State, but were to be developed to serve the Australian community as a whole.
Beyond the creation of the Australian Universities Commission, there have been other changes extending and widening the official bodies concerned with tertiary education. These changes reflect increasing government involvement in the educational field in order to ensure that the system adapts to changes in demands made by the oncoming student body and by the labour market.

The Commonwealth Office of Education was absorbed into a new Commonwealth Department of Education and Science in 1966 and this Department, in turn, was abolished in 1972 and its functions transferred to two newly constituted Departments, the Department of Education and the Department of Science.

The report of a Committee of the Australian Universities Commission appointed in 1961 to inquire into the future of tertiary education in Australia gave birth to Colleges of Advanced Education whose training is oriented towards technological and vocational aspects, and to a Commonwealth Advisory Committee on Advanced Education to advise the Commonwealth government on the development of these colleges.

At State level, committees to inquire into higher education have been appointed\(^1\) and advisory bodies, outside State education departments, have been established to keep their sights set on the tertiary educational needs of the State concerned, e.g. the Advanced Education Board covering Colleges of Advanced Education and the Universities Board in New South Wales. The N.S.W. *Higher Education Act*, 1969 provides for the creation of a Higher Education Authority to co-ordinate the recommendations of these two Boards to ensure the balanced development of education in New South Wales.

Statements made by government, universities and other interested and influential parties describing the functions of Australian universities are unanimous in the opinion that the provision of graduates for the labour market is a responsibility of universities, even though it may not be their primary one. The arguments used to involve the Commonwealth government in university affairs in the 1950s centred principally on the need for forward planning to cater for the huge demand for tertiary education that lay on the not too distant horizon. Arguments concerning shortages of supply of graduates and the need to adapt training to changes in types of skills being demanded

had not been wanting but these, as with the main argument, appeared to have been concerned largely with future conditions. It is quite possible that, despite the overcrowding of students, poor facilities and inadequate staff-student ratios of the earlier period, the inputs into the labour market from universities were adequately fulfilling the requirements of manpower policy, whatever that may have been.

The report in 1964 of the Committee on the Future of Tertiary Education in Australia under the chairmanship of Sir Leslie Martin provided the clearest exposition. In support of education, the Martin Committee presented arguments that were currently being used in the United States, United Kingdom and elsewhere: the social benefits — 'the very stuff of a free, democratic and cultured society' — and the economic benefits which attributed to education higher monetary returns to the individual, increasing skill of the labour force and accelerated technological progress (Commonwealth of Australia, 1964:1).

The Martin Committee's recommended manpower policy is summarised in the following extracts:

The Committee agrees with the view (widespread in Australia) that higher education should be available to all citizens according to their inclination and capacity.

The Committee believes that, in general, conflicts between students' aspirations and community needs should be allowed to be resolved by the operation of supply and demand in the market . . . The Committee believes that research into future labour requirements is useful both for aiding the decisions of students and educational institutions and for guiding business and government; it does not subscribe, however, to the view that the entry of students into the various courses of higher education should be restricted by forecasts of future needs. Such a policy would not only run a risk of grave error, but it would also restrict educational opportunity to an undesirable degree (Commonwealth of Australia, 1964:1, 8).

These recommendations were not a milestone, but were in accordance with the general policy of non-intervention in market forces of the Liberal and Country Party coalition that had held office in the federal sphere from 1949 to 1972. Lacking until the late 1950s had been national co-ordination and finances to meet the demand for university training; lacking until the 1960s had been clarification of policy.

The social aim, that education should be made available to all who
sought it, had been implicit in the university arguments soliciting Commonwealth finance during the 1950s; the rapidly expanding demand for tertiary education that was expected and the consequent need to avert pressure on universities were among reasons given for appointing the Martin Committee in the 1960s.²

The fundamental element in the *laissez-faire* ideal of manpower policy is that students must be free to choose their courses of instruction. In so far as students consider their choice relevant to future employment, the decision to enter a particular course should be the outcome of a free play of market forces. While the Martin Committee pointed out that 'Students' aspirations are not insensitive to the scale of remuneration and job opportunities for different callings. Consequ­ently, shortages and surpluses tend to produce corrective forces', it also conceded that 'In fields involving higher education, there is a lag of some years between entry and graduation so that this year's output of graduates tends to be related to the state of the market four or five years ago' (Commonwealth of Australia, 1964:8). The alternative, direct control over enrolments to meet forecasts of future needs, was viewed by the Committee as also being liable to error and restrictive of the wider social benefits accruing from education. Research into future labour requirements was useful, but only as a source of information, aiding students in their decisions and educational institutions in the provision of appropriate courses of instruction (ibid.).

This policy does not preclude the use of indirect means to sway students towards official estimates of future needs of the labour market: vocational guidance, provision of information on employment oppor­tunities, publicity about new courses or courses in which larger enrol­ments are sought, provision of scholarships tenable for certain types of training or at certain institutions. Education is not, however, solely a tool of economic policy; it is an instrument also of political and social policy. Equalisation of opportunity schemes also provide direct Commonwealth financial assistance to a proportion of students.

The outcome is a system in which the educational institution is expected to play a pivotal role. The number of places and types of training offered are in response, on the one hand, to the demand for tertiary education from the oncoming student body and, on the other, to the demands of the labour market. The twain are not expected to

---

² Press release issued by the Prime Minister on 27 August 1961.
meet — 'some maladjustments in the supply and demand for highly trained labour' will occur (Commonwealth of Australia, 1964).

An obvious limitation on the functioning of the educational system is imposed by the availability of government money. Where the costs of meeting the demand from all the oncoming student body are deemed too high, numbers are regulated by quotas. In practice, the system is one which attempts to meet the demand for university education and the ideal of free choice within financial constraints. The results range from education, say, in the humanities where student demand is paramount, to careful planning of student numbers in terms of future needs or requirements where a more expensive type of training is concerned, e.g. medical training.

Political priorities in the allocation of public funds are the most important factor determining the extent to which universities can meet the dual demand from students and from the labour market, but these priorities themselves are not unaffected by either the social demand for tertiary education or the state of the labour market. There is another constraint on the numbers graduating that is independent: academic standards that winnow the numbers completing courses and extend the period over which a student cohort enters the labour market from three to about ten years (Com. Dept of Education and Science and AVCC, 1971; also Commonwealth of Australia, 1964:66ff.).

The maladjustments between supply and demand in the labour market that are the expected outcome of the ideal of *laissez-faire* may be either exacerbated or lessened by the impact of financial constraints and academic standards. Shortages of newly qualified entrants to the labour market occurring during periods of economic growth would probably be intensified, surpluses during periods of economic recession would be smaller. But universities have not been the only source of supply. We turn now to the circumstances that have shaped the role that immigration plays.

With the exception of short recessions during 1951-2 and 1961, the annual reports of the University of Sydney Appointments Board, covering the placement of graduates in Arts, Science, Economics/Commerce and Engineering, recorded a 'heavy' demand for university trained staff until 1971. For the most part, the widest gap between vacancies being registered and available graduates lay in teaching, science and engineering. As seen by the Board, developments within Australia
causing the upsurge in demand for scientists and technologists during the 1950s were the guided missile work at Salisbury, South Australia, the advent of television, the increasing interest in automation, the search for and exploitation of oil and uranium deposits and developments in the field of nuclear energy (University of Sydney Appointments Board, 1955:3).

The widely publicised and influential conference called by the Academy of Science in 1956 to consider whether resources of scientists, applied scientists and engineers were sufficient for Australia's needs applied to these types of manpower only. While, at the conference, the Department of Labour and National Service had agreed that there was an unsatisfied demand for engineers, chemists and physicists, biologists and metallurgists, it added that this demand appeared to be less urgent for chemists and biologists than for the others (Australian Academy of Science, 1957:13).

A survey of major employers of scientists and engineers conducted by the Department in 1956 had disclosed that the reasons for vacancies were somewhat more complex than a simple shortfall in the output of graduates. Some employers were apparently substituting the services of professionally qualified workers for the less skilled, suggesting a comparatively greater shortage of supporting technicians. The unfilled vacancies of about half the employers were largely caused by turnover. But some vacancies were nominal rather than real, as no serious efforts had been made to fill the posts. For the engineers, the survey disclosed about 14 vacancies for every 100 employed, but an allowance for the foregoing factors reduced the percentage to a hard core of 6-7 per cent. However, the survey did highlight the very real difficulties that employers were experiencing in recruiting scientists and engineers with specialised qualifications and experience (see Ministry of Labour Advisory Council, 1957 and Dept of Labour and National Service, 1959).

The Department of Labour and National Service was later to be proved more right than wrong in its assessment that a comparatively larger shortage lay in the availability of supporting technicians. In 1962 a slackening of demand for engineering graduates was recorded, due, inter alia, to the introduction of the Professional Engineers Award, 1961 which stipulated a salary of £2,200 for an 'experienced engineer' defined as one who had four years' experience in professional engineering duties since graduation. The University of Sydney...
Manpower Policy

Appointments Board noted that the effect was to lead employers to review their requirements for engineers and to become more selective in order to recruit only those graduates who would be worth £2,200 in four years (University of Sydney Appointments Board, 1963:16 ff).

While the extent of shortages of scientists and technologists was being exaggerated, the attention these people were soliciting was part of an international concern to increase stocks of scientific and technological manpower apparent in the United Kingdom, the United States, Canada, the USSR, Western Germany and other industrialised countries. But beyond the scientists and technologists, evidence of shortages in Australia of other kinds of professional workers was mounting. Again, it would be difficult to gauge the extent, as much of the evidence was presented as hearsay, but much was also presented in orders of magnitude sufficiently large to suggest more than a grain of truth, e.g.

1954: The heavy demand for university trained men and women reached quite embarrassing proportions. . .The figure for direct inquiries, includes . . .819 positions in the academic field, both in Australia and overseas (Report of the Senate of Univ. of Sydney, 1954:577).

1956: This demand in Melbourne exceeded by nine to fifteen times the supply of graduates not already bonded as cadets or trainees to private firms, Commonwealth Departments including State Education Departments (Commonwealth of Australia, 1957:16).

1957: So grave has been the need for teachers, that in some States, traineeships are offered to secondary school students. . .In one State, bursaries are even offered to children at the tender age of eleven plus if their parents express an inclination for them to become school teachers (ibid.: 16-17).

1957: We have been assured that shortages exist of graduates in arts, of economists, lawyers, doctors, dentists, agriculturalists, veterinary scientists no less than of scientists and industrial technologists (ibid.: 16).

Beyond the scientists and technologists, the graduates in arts, the teachers, economists, lawyers, doctors, dentists, agriculturalists and veterinary scientists, claims of shortages had, by the early 1960s, extended to other professions.\(^3\) Movements in incomes of certain

\(^3\) See Commonwealth of Australia, 1964. Statements of shortages in this report include the paramedical professions.
Table 4.1 Movements in male incomes in certain professions in Victoria, 1956-64

<table>
<thead>
<tr>
<th>Profession</th>
<th>Increase in median income 1956 to 1964 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountancy</td>
<td>59.2</td>
</tr>
<tr>
<td>Agricultural Science</td>
<td>56.4</td>
</tr>
<tr>
<td>Architecture</td>
<td>57.4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>63.7</td>
</tr>
<tr>
<td>Dentistry</td>
<td>93.4</td>
</tr>
<tr>
<td>Engineering</td>
<td>56.1</td>
</tr>
<tr>
<td>Law</td>
<td>51.5</td>
</tr>
<tr>
<td>Medicine</td>
<td>52.2</td>
</tr>
<tr>
<td>Surveying</td>
<td>22.2</td>
</tr>
<tr>
<td>Average male earnings, Victoria</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Source: Gravell, 1970.

professional groups in Victoria between 1956 and 1964 give substantive support to these claims (see Table 4.1).

Admittedly, the levels of professional incomes are not determined solely by the interplay of supply and demand. Other influences enter, fee-fixing by self-employed groups and, relevant to the period covered by the table, the application of the first professional engineers industrial award from 1961. However, the movements in median incomes from 1956 to 1964 in the professions included in Table 4.1 exhibit a consistency that could be attributed to the operation of market forces. Median male professional incomes had all increased substantially more than average male earnings during the same period, but out to the front were dentistry, in which earnings had nearly doubled in eight years, and chemistry, in which earnings had increased by slightly less than two-thirds.

The extent of employer recruitment overseas is illustrated by the figures quoted for the Commonwealth Scientific and Industrial Research Organization, one of the largest employers of scientists in Australia. In 1955-6, one-third of all CSIRO research officer recruits came from abroad, but many of its vacancies were said to be still unfilled. CSIRO was also said to be solely dependent on overseas sources, sometimes with singularly little success, for skills in fuel technology, chemical engineering, geomorphology, meteorological physics, plant biochemistry, veterinary bacteriology and protozoology.
By 1964 CSIRO had recruited two-thirds of its scientists from other countries, particularly Britain (Dept of Immigration, 1962, 1965). Turning to another example, during the period 1958-62, 35 per cent of accessions to Australian medical registers were from overseas sources (Commonwealth of Australia, 1964: Vol. 2, p.97).

While the professional inflow from overseas appeared to have been significant, it was insufficient to alleviate all the shortages; although, without it, improvements in the relative positions of the incomes of professional groups illustrated in Table 4.1 would have been larger.

The university crisis of the 1950s had taken place against this situation in the labour market during a period of rising demand for highly skilled manpower and shortfalls in the Australian supply. The evidence of an inability to fill vacancies from the output of universities, present and predicted future, and the extent of overseas recruitment were used as arguments to support demands for the expansion of Australian tertiary training.

The progression of the immigration intake, had, however, thrown into relief a situation in which international sources of supply were limited by international differences in training. The most acceptable source was the United Kingdom, but the United Kingdom government was pursuing a policy directed towards enlarging its own stock of scientific and technological manpower and was protesting against the recruitment activities of the United States of America. Australian employers recruiting in the United Kingdom were having to do so in competition not only with the United States but also with other British Commonwealth countries. Against this background, it was unlikely that immigration would have been regarded as a significant source of supply.

It would be incorrect to conclude the opposite, however: that implicit in the debate surrounding the university crisis of the 1950s was the assumption that the provision of graduates for the labour market was the sole responsibility of the Australian educational system and that immigrants should be excluded. Evidence given by University Appointments Boards and by employers of an inability to fill vacancies from Australian sources suggested only a preference of employers for the Australian trained. While the Committee on the Future of Tertiary Education was given the task of considering 'the pattern of tertiary education in relation to the needs and resources of Australia', the
nearest it came to advocating an exclusive policy was to point out that the safer bet for expanding the supply of professional services lay in national rather than international measures (Commonwealth of Australia, 1964: Vol. 1, pp. 114-15; Vol. 2, p. 97; Vol. 3, p. 22).

The university crisis of the 1950s did, however, hold implications for immigration policy. The surrounding publicity being given to shortages in the domestic labour market and to the problems of overseas recruitment led to greater attention being given to the possibilities of stepping up the overseas supply. Publicity in the United Kingdom about Australian vacancies was increased and new arrangements to speed the processing of inquiries by professional workers were instituted. Major-General Sir Kingsley Norris was sent to the United Kingdom and Europe in 1961 to promote the migration of the professionally qualified. His subsequent report offered several suggestions for stimulating the inflow:

The creation of an advisory council to suggest means of expanding the immigration of the highly skilled.

The appointment of a liaison officer in London to advise intending immigrants and to maintain contacts with universities and other bodies.

A scheme for flying undergraduates to Australia during the Northern summer vacation.

An inquiry into ways of achieving reciprocity in the recognition of professional qualifications.

Publicity to generate knowledge of employment vacancies and to dispel ignorance of Australia (Shaw, 1967).

Most of these suggestions have been implemented since in one form or another, but, as described in Chapter 3 of this book, the most important outcome was the Australian international employment service. The other measures also described in Chapter 3 followed: a larger proportion of assisted passages were allocated to the highly skilled; a wider relaxation of the white Australia policy was implemented; the Committee on Overseas Professional Qualifications was finally appointed.

Between October 1962 and January 1963 an average of thirty inquiries a month from potential migrants in the United Kingdom were being processed; by 1966 the monthly average had rocketed to 676 (Shaw, 1967: 70). In 1961 total arrivals from all sources of professional, technical and related workers within the Permanent and Long Term
Movement Classification numbered 8.5 thousand; in 1970, 22.5 thousand (see Appendix III).

The outcome of the university crisis of the 1950s was not the formulation of a new policy towards immigration, but, rather, a recognition that existing policy would have to be more adequately implemented in future. The role of immigration, hopefully conceived during a period of acute shortages of professional manpower, was that of a corrective device to reduce maladjustments between supply and demand in the labour market comparatively quickly. The difficulties and constraints on overseas recruitment that became apparent during the 1950s led to the creation of new measures and additional machinery that could be used as levers to manipulate the inflow, to increase the volume when a larger intake was desired. Undoubtedly, these levers could also be used to depress the inflow should the occasion arise.

Useful though all this may have been in increasing the overseas intake, the role that immigration is now expected to play in the professional labour market is one that has been modified by experience. The difficulties of recruiting sufficient people from abroad had become apparent very early in the piece. By the mid-1960s, with nearly two decades behind it from which observations of the international movement of the highly skilled could be drawn, the Report of the Committee on the Future of Tertiary Education in Australia contained scattered warnings that all pointed to the conclusion that migration flows were unreliable and could not be trusted to expand in response to increases in demand in a national market alone. This unease was apparent not only in regard to inability to swell the international volume sufficiently, bearing in mind that the Australian professional groups were also sources of international supply, but also in regard to the variability of the net inflow. By the 1970s, official expectancies of gain from migration had relegated the net intake to a marginal role (Commonwealth of Australia, 1973:99; also Dept of Labour, 1973:Ch. 7).

In 1960, J. E. Isaac published an article in the International Labour Review on postwar manpower planning in Australia. Starting from the 1945 official White Paper 'Full Employment in Australia' in which the Commonwealth government had pledged itself to a future policy of full employment, stable prices and efficient use of resources, Isaac proceeded to examine the financial aspects, the organisation of the
labour market and the sources of economic intelligence. He concluded that an adequate apparatus for effective manpower planning in a private enterprise economy existed and that, notwithstanding restricted powers of direct control and a limited voice in the formulation of wage policy, the Commonwealth government had been able to ensure a financial environment conducive to a high level of employment and price stability.

The general opinion at the end of World War II was that, except for the immediate postwar years, the avoidance of unemployment would be the main concern of government. The course of events by 1960 was to prove otherwise. Except for a short-lived recession during 1952-3, the period had been one of economic growth accompanied by inflationary pressures, with serious inflation between 1950 and 1952. Conditions of labour scarcity had been prevalent rather than unemployment.

There was, as Isaac pointed out, no accepted forecasting index in use in Australia. Trends in individual statistical series were studied and general impressions were combined with historical precedents in order to assess the imminence of downward tendencies. By 1960 this basis of policy-making included assessments of inflationary developments. Forecasting techniques were applied in connection with public capital expenditure, but input-output analysis as an aid to manpower planning was not used. Future labour requirements of different industries were estimated in a piecemeal fashion and, although a continuous review of the labour market helped to correct maladjustments, Isaac suggested that it would be desirable to anticipate, even in the broadest terms, the structure of labour market demand, say, three to five years ahead (Isaac, 1960).

The attentions of Commonwealth and State government were directed during the early postwar years towards fulfilling labour needs of industries suffering the greatest shortages — the rural industries, transportation, iron and steel, the building industry. This was followed by a settling down period while governments faced up to the realities of economic growth and inflation rather than to expectancies of depression. Until the early 1970s, when redeployment and retraining policies began to solicit attention, the means of achieving the highest level of employment consistent with reasonable price stability and an adequate level of international reserves had been concerned with aggregate demand and supply forces in the market — monetary and fiscal policies to control aggregate demand and the use of the
immigration program to supply workers to areas of critical shortage (Dept of Labour, 1974:96).

It is unlikely that the policy adopted in the late 1950s towards the provision of university-trained manpower — domestic and immigrant — could have been otherwise than as outlined in this chapter. In the absence of appropriate forecasting methodology, the alternative, control over future supply to meet forecasts of future needs would have been impossible, let alone practicable or politically feasible. Until the 1960s, when statistical techniques attempting to establish quantifiable relationships between education, occupational structure of the labour force and economic level began to proliferate, the methods used by manpower planners were based on rules of thumb that either related the rate of growth of manpower of various broad educational or skill levels to the expected rate of growth of Gross Domestic Product only, or drew on comparisons with one or two other countries. The more sophisticated techniques that are available today have arisen from the planning needs of developing countries, but these rely on comparative material and lie in the debatable area of whether there are, in fact, unique occupational or educational patterns of a labour force that can be related to output per capita or output or capital per worker (see Netherlands Economic Institute, 1966; Layard and Saigal, 1966; Horowitz, Zymelman, and Herrnstadt, 1966; Scoville, 1966; and OECD, 1970). The other approach, forecasting of future supply and demand in individual occupations, has proved to involve a sufficiently wide margin of error to make it a cautious exercise, even in the short term.

The recommendations of the Committee on the Future of Tertiary Education in Australia that higher education should be made available to all citizens according to their inclinations and capacity was not a leap forward in economic, social or political theory. Concern about the individual’s right to the full development of his talents can be traced back to the nineteenth-century liberals, but the recommendation was made at a period of internationally widespread beliefs that saw in education a dominant determinant of economic growth and ascribed to it roles in equalisation of opportunity and social mobility. While the

---

4 See, for instance, Rado and Jolly, 1965, for a brief survey of the application of Harbison's rule in African and South East Asian manpower studies that if Gross Domestic Product is to grow by x per cent per annum, the stock of 'top level' manpower should grow by 2x, 'second level' by 3x and total employment by \( \frac{3}{2} x \) per cent per annum.
Commonwealth government's entry into the financing of tertiary education was made during a similar period of current and projected shortages of professional manpower, the educational policy it enunciated was also in line with international practice.

The accompanying international policy of financially servicing universities on the basis of expected demand for university places witnessed an upsurge in expenditure on tertiary education, in university enrolments and graduate output. The international economic downturn that commenced in the late 1960s saw first an over-supply of university graduates in the major source countries from which Australia drew its immigrants, followed by similar conditions in the Australian labour market. By mid-1971, the domestic demand for Australian graduates began to show noticeable signs of slackening and deteriorated rapidly thereafter. While short-term cyclical factors and government anti-inflationary policy could be pointed to as causes of the slump in demand, the increasing output from Australian universities was seen as the beginning of a longer-term over-supply. Swelling the numbers of highly educated job-seekers was an inflow of graduates from countries also experiencing similar surpluses: Europe, the Americas, Middle East and Asian countries.

In December 1972 the Australian Labor Party was voted into federal office, replacing the coalition of the Liberal and Country parties that had ruled since 1949. In December 1973 the social aims of educational policy moved ahead when, in accordance with its intention of assuming full financial responsibility for tertiary training, the Labor government abolished students' fees and altered the grounds on which financial assistance to students would be given from competitive scholarships to tertiary allowances based largely on means tests. This may lead to an increase in the rate of growth of university places being demanded, or the numbers of places may contract as the oncoming student body responds to the over-supply of graduates in the labour market. The current generally high unemployment rates of the Australian labour force engendered largely by government anti-inflationary policy have already led to a changed emphasis in manpower planning. Attention is being given to remedial measures directed towards encouraging a greater degree of geographic and occupational mobility of the domestic labour force, rather than to introducing new workers via the immigration program into areas of shortages. Economic forecasting measures, including the setting up of manpower projection facilities
within the Department of Labour and Immigration, have been foreshadowed and immigration policy itself has been realigned. Family reunion, personal sponsorship and national need have become the basis on which immigrants will be introduced and the short-term entry of foreign workers has become subject to certain conditions aimed at protecting domestic labour and achieving eventual self-sufficiency in specialised skills.

That these actions are considered insufficient to check continuing surpluses of the highly educated are apparent in the calls being made for a re-examination of the arguments on which increasing expenditure on education has been justified and for improved labour market information on which decisions of students, educational institutions and policy makers can be based (see Niland, 1973; Kilcullen, 1972). The possibility that the international over-supply of the highly skilled will continue into the 1980s, at least, can mean only that the bonanza days for professionally qualified immigrants are over for the foreseeable future.
Questions about the extent of gain of human capital from abroad can be answered only from statistics. Migration occupational statistics throw light on components of international flows and provide annual net gain figures. While not informative about emigration, census occupational statistics cross-classified with birthplace present the cumulation of immigrants up to a certain date, excluding withdrawals from the labour force for any reason.

Summarised versions of both types of statistics are presented in this study. Appendices III and IV contain the details.

Errors in annual estimates of migration gain of human capital arise from three sources: the official occupational classification; self-descriptions of occupations by migrants which may lead to misrepresentation in the official statistics and which may not refer to occupations subsequently followed in the Australian labour force; and the statistical division of migrant flows into categories concerned with a traveller's actual or intended length of residence in Australia or abroad.

As with all official classifications, the migration occupational classification has improved over time, the major breakthrough occurring in 1960, when it altered from a largely national to an adaptation of an internationally comparable classification.

The earlier classification was derived from an occupation survey of Australian civilians aged 14 years and over in 1945. An attempt to introduce international comparability into the code into which answers were fed was made by basing it partly on the one used in the Sixteenth Census of the United States of America, but it remained largely
national and became the basis of the occupational classification used in the official statistics until mid-1960. In July 1960 the occupational classification was changed to an adaptation of the 1958 *International Standard Classification of Occupations* and it has been revised and extended since. Under the earlier national classification, professional workers were included in Order 1 'Professional and Semi-Professional Workers' and under the international classification in Major Group O 'Professional, Technical and Related Workers'. It would have been impractical for either classification to have identified each occupation. Portmanteau categories became necessary and these give rise to error.

Occupations that were broadly similar in functions and skills, but not status, were sometimes collapsed into single categories. In some instances, portmanteau categories were similar in both classifications, e.g. 'Teachers' were a single category, irrespective of the level at which they taught; clergy and all other religious workers were grouped together.

New portmanteau categories appeared in the later classification which included occupations that had previously been presented separately, e.g. architects, draftsmen and surveyors became a single category in the later classification; 'Veterinary surgeons' disappeared into 'Scientists' in the later classification, which, anyway, drew largely on the scientific occupations that had been included in the earlier portmanteau category 'Other professional and semi-professional occupations'.

Residual categories concluded Order 1 and Major Group O. Here, one assumes, lay occupations in which numbers were of less interest or were very small, but here, as with several portmanteau categories, were occupations of both professional and non-professional status.

In the figures and tables that follow the best that could be done to minimise error arising from the occupational classification was to deduct from the totals of Order 1 and Major Group O the numbers of people who could be identified as practising non-professional occupations. Over the period 1948-60, nurses, draftsmen, artists, photographers, journalists, musicians, actors and dancers were deducted; over the period 1961-70, nurses, technicians and technical assistants, artists, writers and entertainers, were deducted. The occupational inclusions and exclusions over the two periods are not similar; the totals are simply the closest approximation to a professional content that the statistics permit.
Imprecise self-descriptions of occupations by travellers can lead to classification in an incorrect occupational category and/or exclusions from professional occupations altogether. The trickiest problem is the identification of a 'professional' engineer, best illustrated from the migration statistics themselves.

Before 1961, 'civil engineer' was the only engineering occupation separately identified in Order 1, as, at the time this description was created, it was fashionable to describe professional engineers as such. The outcome in the permanent and long-term travellers statistics, derived from self-descriptions, was as follows: 1948, none arrived or departed; 1949-53, a net gain of 308 was recorded; 1954-60, none arrived or departed. Professional engineers had ceased describing themselves as 'civil engineers' after 1953 and were being classified somewhere else until the category 'Professional Engineers' was introduced in 1961.

Another source of understatement in the earlier statistics lies in the intake of Displaced Persons until 1954. Kunz (1969) gives several reasons why misrepresentation of occupation occurred. From documentary evidence and data collected from a sample of 13,000 he suggests that about 10 per cent of males were either professionally qualified or were university students whose courses had been interrupted, and that only 20 per cent of former students and just over 20 per cent of former graduates were found in professional or executive occupational status twenty years after arrival in Australia (Kunz, 1973). Kunz's statistics do not lend themselves to retrospective estimates of the annual intake, but his estimate that only slightly more than a fifth of former graduates were in professional or executive status occupations twenty years after arrival indicates that migration statistics may, on the other hand, overstate the gain of 'human capital', particularly with regard to political refugees.

Travellers crossing the Australian border are requested to provide information concerning purpose of travel. Statistical definitions referring to actual or intended residence in Australia or abroad determine the category into which a traveller is placed.

Before 1959 'temporary' travellers were separated from 'permanent' migrants according to whether they stayed or intended to stay in or away from Australia for less or more than a year. From 1959 onwards the subdivision became 'permanent', 'long term' and 'short term'. The permanent movement is now composed of those arriving with the
intention of settling permanently (settlers) and of residents departing who intend to remain abroad permanently (former settlers and other residents). The long-term movement encompasses visitors who intend to or who do stay for at least a year before leaving and Australian residents who intend to or who do stay abroad for at least a year before returning. The short-term movement is similarly broken down into visitors and residents and, basically, covers movements of less than a year. It includes former settlers who stayed less than a year and Australian troop movements. The extent of overlap between these various 'purpose of travel' categories can be considerable (Price, 1966).

If transits are ignored, over half the travel in the short-term movement is for periods of less than three months (Price, 1965:21). Since an occupational classification of this category was not commenced until late 1966, its omission from the occupational statistics in this chapter might not be serious, except that it is the largest in volume and the number of professional workers whose arrival was recorded in the other categories and who subsequently departed via the short-term category, or the number who arrived intending to stay less than a year and then remained longer or settled permanently is unknown. There is only some sparse evidence that suggests that net gain or loss might vary by occupation.

The sociologist, A. H. Richmond, carried out a sample survey of migrants returning from Canada to Britain in 1962-3 (Richmond, 1968). He identified three kinds of returnee: the quasi-migrant who originally intended to return to Britain (39 per cent of the sample); permanent repatriates who originally intended to settle in Canada, but now expected to remain in Britain (26 per cent of the sample); and the transilient who exhibited a high propensity to move backwards and forwards between two or more countries without becoming rooted in any one (35 per cent of the sample). Both the transilient and permanent repatriate modal types had been in Canada for more than three years; only the quasi-migrant was likely to have been in Canada for a shorter period and was generally a single female whose occupation was secretary, teacher or nurse.

In attempting to determine the relative importance of sources of doctors over the period 1962-72, the Australian Committee on Medical Schools scrutinised migration movements and concluded: 'Net short-term movement of doctors which involves a stay of less than one year
Studies in the Immigration of the Highly Skilled

[i.e. doctors appearing in the short-term statistics] has been found in recent years' (Committee on Medical Schools, 1973:59).

Despite the inaccuracies that the exclusion of the short-term movement must create, the permanent and long-term movement can still contribute information of a generally useful kind: trend, growth rates, dominant occupations and, one hopes, reasonable approximations of net gain.

In his study of return migration from Canada to Britain, Richmond observed that some return takes place after a comparatively brief sojourn, while the remainder is spread over a longer period. Immigrants returning to a former country do so for various reasons, but the volume is influenced by a number of different factors: the size of the pool of immigrants from which returnees will be drawn; the size of immigration flows in the immediately preceding years which generate shorter-term return flows; and the composition of the immigrant population. If certain types of people exhibit a higher propensity to international mobility than others, then the rate of return will reflect the proportion of these people in the immigrant population (Richmond, 1968).

The permanent and long-term immigration movement generally is dominated by settlers arriving with the intention of remaining permanently. From 1959-60 to 1970-1, these comprised 74 per cent; the long-term inflow accounted for only 26 per cent. Within 'Professional, Technical and Related Workers' the settlers were not so prevalent. From July 1960 to June 1970 settlers numbered about 65,000; from January 1961 to December 1970, permanent and long-term arrivals about 143,000. Give or take a difference of six months, settler arrivals were less than half of permanent and long-term arrivals. Within permanent and long-term emigration generally, long-term departures were 72 per cent of the outflow from 1959-60 to 1970-1. The emigration of the medical profession from 1967 to 1970 was composed of 86 per cent long-term and 14 per cent permanent departures. Former settlers and foreign-born residents accounted for three-quarters of the latter (Committee on Medical Schools Report, 1973: Tables 3.32 and 3.33).

Professional workers appear to meet conditions for a comparatively high rate of return migration: the immigration pool within the Australian labour force has been increasing over the postwar period, the inflow has shown a rising trend from the early 1950s, and they appear to exhibit a comparatively high propensity for international movement.
Fig. 5.1 Arrivals and departures of professional workers,* 1948-60, 1961-70, Australia, showing permanent and long-term movement (continued page 90)

*1948-60: 'Professional and Semi-Professional Workers' minus nurses, draftsmen, artists, photographers, journalists, musicians, actors, dancers.


Some non-professional workers are still included, but these cannot be identified separately and therefore cannot be excluded.

†Including architects, draftsmen (these are not identified separately), surveyors, professional engineers, chemists (not pharmaceutical), scientists.

Source: Appendix III.
Figure 5.1 shows close similarities in movements between arrivals and departures for the group as a whole and for individual occupations. Below the main chart, additional charts break down the totals into occupational content for the period 1961-70. Where appropriate information was available, migration flows for some occupations have been taken back to 1948.

The actual length and height of the early oscillation in arrivals would depend on the validity of the Displaced Persons statistics. The upward trend started from a trough in 1953. From 1953 to 1960, the average annual growth rate was 9.9 per cent; from 1961 to 1970, it accelerated to 12.1 per cent.

Arrival curves for the various occupations were generally similar in movement. Early information is limited, but from 1961 onwards all showed a rising trend of varying steepness. Scientific and technical personnel and teachers were the largest components in the second period; the third large category, 'Other Professional, Technical and Related Workers', was the residual portmanteau category including several occupations, and the numbers in any one would have been small.
Table 5.1. Proportion of arrivals of professional workers* representing net gain to Australia, 1948-70: permanent and long-term movement

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion of arrivals representing net gain %</th>
<th>Year</th>
<th>Proportion of arrivals representing net gain %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>35.9</td>
<td>1961</td>
<td>23.3</td>
</tr>
<tr>
<td>1949</td>
<td>56.3</td>
<td>1962</td>
<td>20.4</td>
</tr>
<tr>
<td>1950</td>
<td>46.9</td>
<td>1963</td>
<td>21.4</td>
</tr>
<tr>
<td>1951</td>
<td>32.9</td>
<td>1964</td>
<td>25.2</td>
</tr>
<tr>
<td>1952</td>
<td>11.7</td>
<td>1965</td>
<td>21.1</td>
</tr>
<tr>
<td>1953</td>
<td>5.0</td>
<td>1966</td>
<td>15.0</td>
</tr>
<tr>
<td>1954</td>
<td>-14.5</td>
<td>1967</td>
<td>12.7</td>
</tr>
<tr>
<td>1955</td>
<td>-9.0</td>
<td>1968</td>
<td>24.4</td>
</tr>
<tr>
<td>1956</td>
<td>2.2</td>
<td>1969</td>
<td>29.7</td>
</tr>
<tr>
<td>1957</td>
<td>8.5</td>
<td>1970</td>
<td>28.6</td>
</tr>
<tr>
<td>1958</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1959</td>
<td>23.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>31.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aSee Appendix III and footnote * to Fig. 5.1 for composition of 'professional workers'.

Source: Appendix III

The rising trend of departures was unmarked by the early sharp oscillation of arrivals. During the first period it increased by an annual average of 6.4 per cent; in the second, it followed suit with arrivals and accelerated to an annual average of 11.4 per cent. Departure curves for the various occupations were roughly similar; all showed a rising trend from 1961 onwards, some sharper than others. As with arrivals, scientific and technical personnel and teachers were the principal components of departures.

The net gain from migration is relegated to the considerably smaller area between the arrival and departure curves. Table 5.1 shows the proportionate gain for each year.

The proportion of arrivals that could be regarded as net gain fluctuated widely, from a high of 56.3 per cent in 1949 to lows of negative 14.5 per cent in 1954 and negative 9.0 per cent in 1955. Even in the later period, when arrivals and departures both showed a steadier pattern, fluctuations in gain still occurred, from 12.7 per cent in 1967 to 29.7 per cent in 1960. After 1950, net gain was never as much as a third, although it came close in 1951 and 1960.
Figure 5.2, presented in a similar fashion to Fig. 5.1, depicts numbers gained from migration. The curve of net gain is characterised by deeper and more frequent fluctuations than the curve of arrivals. Arrivals showed an early peak in 1949 that was bypassed ten years later; net gain showed a similar peak, but it was not until eighteen years later that this was bypassed. Upward trend in arrivals started from 1953, but a net loss followed in two succeeding years and an upward trend in net gain only became discernible after 1958.

Among the components, an upward trend in net gain was apparent only for scientific and technical personnel from 1961 to 1970. Teachers, one of the most important occupations among arrivals, showed a net loss in several years when arrivals were recording increases. The prin-
The principal characteristic of net gain of this and the other occupations is one of oscillation, not trend.

The relative importance of components change when arrivals are compared with net gain (see Table 5.2). Teachers, running to nearly a third of arrivals from 1961 to 1970, sank to minimal importance and scientific and technical personnel became the occupational group providing major net gain from migration.

The main country of origin for the Australian inflow of professional workers is the United Kingdom. Richmond's work on the factors causing a return movement suggests that the volume of returnees might be substantial, but two other overlapping types of movement also lead to contractions in net gain.
Table 5.2 Major components of arrivals and net gain to Australia of professional workers,\(^{a}\) 1961-70: permanent and long-term movement

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Arrivals</th>
<th>Net gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional occupations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific and technical personnel(^{b})</td>
<td>34.6</td>
<td>63.2</td>
</tr>
<tr>
<td>Teachers</td>
<td>30.5</td>
<td>5.6</td>
</tr>
<tr>
<td>All others</td>
<td>34.9</td>
<td>31.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^{a}\) and \(^{b}\) See footnotes * and † to Fig. 5.1.

Source: Appendix III.

The 'chain of substitutions' movement (Johnson, 1968) — former immigrants and indigenous workers moving on and outwards to other countries in pursuit of higher real income — is one that has particularly afflicted Canada. During the period 1950 to 1963, Canadian statistics recorded an average annual inflow of 7,790 immigrants in the Professional and Technical Worker category and an average annual emigration figure of 5,476 of whom 4,681 were destined for the United States of America (see Parai, 1965:33). The demographer C. A. Price observed that the loss to Australia of former settlers is more than a return movement by nostalgic, disgruntled or other persons preferring the familiar conditions of their old home to those of their new. The considerable movement of former English and Scottish settlers to New Zealand, America and elsewhere in 1962-63 (more than a quarter of the total) suggests that though many find a particular country uncongenial they are still sufficiently keen on emigration to experiment in another country of settlement (Price, 1965:25).

Statistics of countries of intended residence of the Australian outflow cross-classified by occupation are only available from the late 1960s onwards. From 1967 to 1970 something more than a third of Professional, Technical and Related Workers in the permanent and long-term movement were destined for the United Kingdom and here, one assumes, will lie most of the return movement. About a fifth were destined for the North American continent and here again, one assumes, is an example of few returnees, but mostly workers moving on towards higher real incomes.
One type of international movement recorded in the Australian long-term statistics — temporary residence abroad and then return to country of origin undertaken by travellers who are similar to Richmond's quasi-migrant — has been described by Price as 'circular' and by H. G. Grubel as 'yo yo'. An example of its prevalence comes from two surveys made by the Association of Professional Engineers, Australia. In its 1955 survey, the Association found that one-third of respondent engineers had changed country at least once during their careers. In its 1967 survey it still found that only a third had worked abroad, but this was a conservative proportion, as respondents were instructed to exclude travel to New Zealand and immigrants were asked to count only travel undertaken since first arrival in Australia (Assoc. of Professional Engineers, Australia, 1959, 1968). Other evidence is found in the 1968 survey of physicists made by the Commonwealth Department of Labour. Twenty-two per cent of physicists had returned to Australia after residence abroad, 2 per cent were still abroad with intent to return and a further 3 per cent were in Australia on limited assignments (Dept of Labour, 1973:30).

The 'circular' or 'yo yo' movement embraces the effect on recorded emigration in the Professional, Technical and Related Worker category of Australia's growing role as a training centre for Southeast Asia. Students from the East, whose numbers have been increasing over the postwar years, enter Australia for training and on departure are likely to be recorded in the occupations in which they had been trained in Australia.

However much error may have arisen from the occupational classification, the misrepresentation of occupations and the exclusion of the short-term movement, the outcome of the different types of international movement was to swell emigration to the extent that the statistics of the permanent and long-term movement portrayed one characteristic of annual net gain with impressive consistency: that it was only a minor proportion of arrivals.

The 1966 Australian population census classification of Major Group O identified fifty occupational categories as compared with the fourteen of the migration statistics. A greater precision was also introduced into the professional classification from the information that was collected about education. The identification of engineers, one of the problems in the migration classification, could be performed with accuracy as a cross-
check with qualifications was possible. However, portmanteau categories inevitably recurred that included occupations of differing status.

The occupational categories summarised in the following tables are presented in detail in Appendix IV. Four portmanteau categories incorporate the non-professional: 'School teachers', 'teachers not elsewhere classified', 'Medical workers not elsewhere classified', and 'Other Professional, Technical and Related Workers'. The largest group of non-professional workers included here would probably be the primary school teachers.

The principal sources of statistics in this section are tabulations made by the Commonwealth Bureau of Census and Statistics of occupations cross-classified with education and selected birthplaces by broad periods of residence (1-18 years/other/total). Australian-born were excluded and immigrants could then be subdivided into '1-18 years' residence which included most of the immigrants who had arrived from July 1947 to June 1965; the residual 'other' residence period included postwar immigrants who had arrived from July 1965 to June 1966, prewar immigrants who were still in the labour force and immigrants whose dates of arrival were unknown. The 'total' residence period gave the number who had arrived in Australia at any previous time and who were still in the labour force by the end of June 1966.

These figures are not the gain of 'human capital' as the number of Australian-trained professional workers who were abroad at the time of the census is unknown. They are approximations only of the stock of overseas trained immigrants, as country of birth is not necessarily synonymous with country of qualification. By 1968, for example, about one in three foreign-born physicists had initially arrived in Australia without overseas qualifications (Dept of Labour, 1973). A survey of scientists in the United States based on data from the 1966 National Register of Scientific and Technical Personnel showed that 9.5 per cent were foreign-born. A subsidiary classification by country of training whittled the percentage down to only 3.5 per cent who had received their highest tertiary training abroad (Grubel, 1968:13).

Table 5.3 compares the distribution of Australian and foreign-born workers between the broad occupational groups that appeared most significant in migration flows. 'Teachers' are similar in content in census and migration statistics, but 'Scientific and Technical Personnel' of the migration statistics now become the professional 'Scientists and Technologists'. The third group, 'Other Professional Occupations',
### Table 5.3
Distribution of Australian and foreign-born workers between professional occupations in Australia (Census, June 1966)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>All workers</th>
<th>Australian-born</th>
<th>Postwar arrivals up to June 1965</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>column per cent</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Scientists and technologists⁶</td>
<td>18.5</td>
<td>13.4</td>
<td>27.8</td>
</tr>
<tr>
<td>Teachers⁵</td>
<td>48.5</td>
<td>54.0</td>
<td>37.5</td>
</tr>
<tr>
<td>Other professional occupations⁷</td>
<td>33.0</td>
<td>32.6</td>
<td>34.7</td>
</tr>
<tr>
<td>All professional occupations</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

⁶ Architects, engineers, surveyors, chemists, physicists, geologists and other physical scientists, biologists, veterinarians, agronomists and related scientists.

⁵ University, secondary and primary school teachers, and teachers not elsewhere classified.

⁷ Medical practitioners, dentists, pharmacists, optometrists, physiotherapists, medical workers not elsewhere classified, clergy, law professionals, accountants, auditors, social workers, librarians and archivists, economists, economic consultants, actuaries and statisticians, personnel specialists and other professional, technical and related workers not elsewhere classified.

**Source:** Appendix IV.

contains a larger portion of non-professional occupations in the migration statistics than it does in the census figures.

Among professional occupations in the labour force, the teaching profession was largest. Slightly less than half of all professional workers were employed in it, more than half the Australian-born, more than a third the foreign-born.

Migration gain proportions of scientific and technical personnel in Table 5.2 suggested that most immigrants would be scientists and technologists. The census figures say otherwise. Migration gain of teachers from July 1947 to December 1965 was 2,900, the 1966 June census gave a total of 13,100 foreign-born teachers who had arrived from July 1947 to June 1965. Even allowing for adjustments to census figures for retirements, transfers of foreign-born in and out of the teaching profession, and numbers of foreign-born teachers trained in Australia, the discrepancy is sufficiently wide to suggest a considerable outflow of Australian-born and, one assumes, Australian-trained teachers overseas by June 1965.
Scientists and technologists accounted for less than a fifth of all professional workers. The Australian birthplace group, markedly skewed towards the teaching profession, recorded only 13 per cent engaged in it. The foreign-born were more evenly distributed, the proportion employed as scientists and technologists being more than double the Australian proportion, but still less than the proportion employed as teachers.

Despite differences in birthplace distribution, the Australians are the largest number in each occupational group (see Table 5.4). No more than a fifth of all professional workers were foreign-born, and only about two-thirds of these were immigrants who had arrived during the postwar period up to June 1965.

The occupation group with the largest proportion of immigrants was the scientists and technologists. Within it lay the occupation that held the largest proportionate inflow of foreign-born — the geoscientists. Immigrants made up 47.3 per cent, 32.6 per cent, at least, being postwar arrivals. Knowledge of this heavy overseas influx into this occupation emerged from a survey made under the auspices of the Geological Society of Australia. By 1967 private industry had recruited 34 per cent of its existing staff directly from overseas, government 23 per cent (Townley, 1968:21). These percentages would have been higher had they related to immigrants generally and included those recruited from within Australia.

Outside the scientists and technologists, only three occupational
Table 5.5  Countries of birth of foreign-born workers in professional occupations in Australia (Census, June 1966)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total</th>
<th>United Kingdom</th>
<th>Europe</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>row per cent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientists and technologists(^a)</td>
<td>100.0</td>
<td>41.3</td>
<td>35.0</td>
<td>23.7</td>
</tr>
<tr>
<td>Teachers(^b)</td>
<td>100.0</td>
<td>52.3</td>
<td>28.7</td>
<td>19.0</td>
</tr>
<tr>
<td>Other professional occupations(^c)</td>
<td>100.0</td>
<td>48.2</td>
<td>30.1</td>
<td>21.7</td>
</tr>
</tbody>
</table>

| All professional occupations        | 100.0 | 47.7           | 30.9   | 21.4  |

\(^a\), \(^b\), \(^c\) See notes to Table 5.3.
\(^d\) Including Malta.
\(^e\) Including British Commonwealth countries other than the United Kingdom and Malta, and all other countries outside Europe.

Source: Calculated from data supplied by Commonwealth Bureau of Census and Statistics.

categories recorded a fifth or more of postwar immigrants: university teachers, all foreign-born 40.1 per cent, postwar arrivals 29.4 per cent; ‘Medical Workers, not elsewhere classified’, 32.3 per cent and 24.1 per cent respectively; ‘Other Professional, Technical and Related Workers’, 38.9 per cent and 21.4 per cent respectively.

The profession with the smallest proportion of immigrants was the legal profession. Only about a tenth of law professionals were foreign-born, and only half of these were postwar arrivals. Figure 5.1, which records international arrivals and departures, shows that there is comparatively little international mobility in this profession anyway.

Table 5.5 presents foreign-born arrivals up to June 1965 by three categories of birthplace in order to convey a general impression of the magnitude of the inflow from certain sources. Excluding the unknown numbers trained in Australia, country of birth and country of qualification are more likely to be identical for immigrants born in the United Kingdom than for the others. The establishment of tertiary training institutions in several of the less developed countries of the British Commonwealth has occurred only over the postwar years and many immigrants born in these countries would have undertaken tertiary training in the United Kingdom. Among the European-born,
the Polish contingent would hold sizeable numbers who trained in the United Kingdom at the end of World War II, and so on.

The birthplace statistics point to the dominance of a single source country, the United Kingdom. These immigrants contributed the largest numbers to each occupational group and, were the foreign-born classified by country of qualification, it is probable that the debt to the United Kingdom would be heavier. The teaching profession contained the largest proportion of United Kingdom born, the scientists and technologists the smallest. The ordering is reversed for the other two birthplace groups — the teaching profession held the smallest proportion, the scientists and technologists the largest.

Table 5.6 attempts a qualitative comparison of the Australian and postwar immigrant labour forces by presenting the proportions in professional occupations and with university education. The foreign-born proportions include not only migrants trained in Australia, but others who arrived with overseas non-university tertiary training and who later acquired higher Australian university qualifications which upgraded them to university classification in the census.

Table 5.4 showed that 80 per cent of professional workers were Australian-born, and a minimum of about 14 per cent were postwar immigrants. Among all the university-educated in the labour force, 70 per cent were Australian-born and 20 per cent were foreign-born postwar arrivals.

The United Kingdom proportions in professional occupations and with university education were generally similar to the Australian, with only slightly fewer in professional occupations and slightly more with university education. The European-born recorded comparatively low proportions.

With close to double the proportions in professional occupations of the Australian and United Kingdom groups and more than three times their proportions of university educated, the ‘Other’ birthplace group mirrors the switch from the United Kingdom and Europe to alternative sources of supply of highly skilled workers during the 1960s. Among this residual birthplace category, three countries appear to have contributed small migrant labour forces of outstandingly high quality: Canada, 11.3 per cent in professional occupations and 11.3 per cent with university education; South Africa, 17.8 per cent and 15.1 per cent respectively; United States of America, 17.4 per cent and 25.9 per cent respectively.
Table 5.6  Proportions of Australian and foreign-born workers (with 1-18 years residence) in professional occupations and with university education in Australia (Census, June 1966)

<table>
<thead>
<tr>
<th>Occupation and education</th>
<th>Australian-born</th>
<th>Total</th>
<th>United Kingdom</th>
<th>Europe&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Other&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number ('000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total in professional occupations</td>
<td>200.9</td>
<td>34.4</td>
<td>16.4</td>
<td>10.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Total with university education (all occupations)</td>
<td>73.4</td>
<td>20.3</td>
<td>7.1</td>
<td>7.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Total in labour force (all occupations)</td>
<td>3,628.8</td>
<td>939.9</td>
<td>305.4</td>
<td>557.0</td>
<td>77.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Proportion in professional occupations</th>
<th>Proportion with university education (all occupations)</th>
<th>Total in labour force (all occupations)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Column per cent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.5</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>3.7</td>
<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>5.4</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>9.5</td>
<td>7.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<sup>a, b</sup> See notes d and e to Table 5.5.

Source: Calculated from data supplied by Commonwealth Bureau of Census and Statistics and from Appendix IV.

Since neither migration nor census occupation statistics lend themselves to precise calculations of gain or stock of overseas 'human capital', both kinds have been presented in this chapter in summary, in order to convey a general impression.

The several types of movement that compose international flows are present to a lesser or larger degree in both immigration and emigration and lead to the conclusion that an increasing volume of arrivals will be accompanied or followed by an increasing volume of departures. Despite the upward trend in arrivals from the mid-1950s onwards, the proportionate annual net gain of professional workers has been small, being never so much as a third of arrivals after the early 1950s. The other characteristic of net gain, oscillation in both numbers and proportions, probably owes its causes largely to short-term responses of international labour flows to changing conditions in donor and
receiving countries. For instance, the net losses of professional workers during the mid-1950s can be related to a downturn in Australian economic conditions at that time; the contraction in net gain in 1962 can be related to the Australian recession of the early 1960s, the cutbacks in 1958 and 1967 to upward movements in the Australian unemployment rate.

An occupational breakdown showed that Australian gain had been largely of scientific and technical personnel. For the other occupations, annual oscillations were the characteristic over the postwar period rather than a fluctuating upward trend. The overall impression of annual net gain was its instability and, hence, its unpredictability as a source of annual increments to the indigenous work force.

The detailed occupational classification of the census is less inclusive of the non-professional worker than the migration statistics, but the cross-classification used to identify the immigrant — occupation by birthplace — incorporates the foreign-born workers trained in Australia. It is possible that by 1966 the numbers of immigrants trained in Australia had become quite substantial.

According to the June 1966 census, immigrants, irrespective of country of training, made up a fifth of people in professional occupations; about two-thirds of this fifth were immigrants who had arrived during the postwar period up to June 1965.

As with the Australians, so with the immigrants: the largest group was the teaching profession, but, as the migration statistics recorded a considerable outflow of these workers, the net gain to this profession was far less substantial than the figures suggested.

The principal difference in the occupational distribution of the two professional labour forces — Australian and foreign-born — lay in the doubling of proportions of scientists and technologists found among immigrants. The scientists and technologists were also the occupational group with the highest proportion of foreign-born. Lying within this group was the occupation with the highest proportion of immigrants. Otherwise, there were only three occupational categories outside the scientists and technologists that recorded a fifth or more of postwar immigrants. Two of these were portmanteau categories that also included non-professional occupations and this left only the university teachers as the solely professional.

The United Kingdom was the major donor country. An attempt to measure the qualitative composition of the postwar immigrant labour
force against its Australian counterpart gave two different answers. Using the proportion in professional occupations as a yardstick, the immigrant labour force was found to be slightly inferior. Using the proportion of university educated, it became slightly superior. However, by either yardstick, some groups of immigrants who were born outside the United Kingdom and Europe and whose total labour force numbers were comparatively small appeared to be rather richly endowed with professional workers and with university education.

Finally, while by June 1966 immigrants were playing their most important role among scientists and technologists and university teachers, the immigrant labour force did not appear to be excessively composed of brains drained from other countries. A breakdown by birthplace may have suggested that this had been so in a few instances, but when these people were added to the others, the apex of the skill structure of the immigrant labour force — the professional worker — was slimmer than the Australian and would have been slimmer still if the extent to which these immigrants had been trained in Australia were known.
This study attempts to answer the question: 'What has the architectural profession gained from the immigrant intake?'

The reasons for selecting the architectural profession become clearer in the next section, but, briefly, there were several advantages. It contains a sizeable proportion and number of immigrants, sufficient to make a study worthwhile; it is a homogeneous profession, exhibiting few of the diverse occupation specialities found in other professions where migrant proportions are larger; it contains representatives of both types of professional employment status, the self-employed and employee.

Immigrants were surveyed by a postal questionnaire which was designed to elicit information on two broad aspects: countries of origin and certain characteristics of architects on arrival in Australia; and work histories after arrival in Australia. The questionnaire, reproduced as Appendix V, was accompanied by a letter from Mr E. J. Scollay, Director of the Royal Australian Institute of Architects, seeking the cooperation of respondents.

Most of the present chapter deals with the first aspect. Chapter 7 is concerned with the conditions of entry to the architectural profession, and Chapter 8 describes the performances of immigrants in the Australian profession, the distinctions acquired and the honorary services rendered.

The 1966 census of the Australian population showed that in the Australian labour force there were 3,823 architects, defined to include only 'Architect, building professional'. This number lay within the
Immigrants in a Profession

middle range of numbers in each professional occupation: below the teachers, engineers, accountants, medical practitioners, clergy, pharmacists, professional law and chemists (not pharmaceutical), but above the remainder. For the purposes of the census, a person can be classified in one occupation only, so the figure for the architects excluded all those who, while practising other professions, continued to engage in the architectural profession either as consultants or in part-time private practice.

The census also showed that 30.5 per cent of architects were foreign-born. This proportion was about equal to that of the engineering profession, but was less than the physicists, geologists and geophysicists, university teachers, physical scientists not elsewhere classified, medical workers not elsewhere classified and 'Other Professional, Technical and Related Workers'.

Engineers and university teachers are people of infinite specialisation. The physicists, and geologists and geophysicists are very small in numbers. The portmanteau classifications, the 'not elsewhere classified' and the 'Other Professional, Technical and Related Workers', were composed of several occupations and the proportion of foreign-born in any one was unknown. The architects emerged as a comparatively large profession, probably larger than the numbers in the census, with a high proportion of foreign-born. The profession met requirements of size, both total and immigrant component, and members were characterised by a uniformity of training that eliminated the need for division into smaller specialised subgroups. The 1966 census also classified the architects as 63.8 per cent employee, 8.9 per cent self-employed and 27.3 per cent employer. The profession contained all types of census employment status.

Two questions had first to be answered before the immigrants could be surveyed. Who is an immigrant and who is a member of the profession? 'Immigrants' were defined as those who were foreign-born and held foreign qualifications that entitled them to practise architecture in the country of training and who had arrived in Australia during the postwar period. An 'architect' was defined as someone who, by June 1970, was practising architecture and who was registered, or a member of the Royal Australian Institute of Architects, or the holder of a professional architect's position in the civil service. These definitions were a departure from the census classification of 'foreign-born' and the
census figures could no longer be used to estimate the number of 'immigrant architects'.

In 1967 the Department of Labour and National Service analysed the qualifications of architects registered at State registration boards and estimated that about 15 per cent were foreign-trained (Dept of Labour and National Service, 1967). New South Wales was excluded but various indicators suggested that the proportion in this State was lower. An allowance of, say, 10 per cent for New South Wales would give an estimated figure for all Australian States (excluding the Australian Capital Territory and Northern Territory) of about 526 foreign-trained registered architects. While this estimate included immigrants who had arrived before the postwar period, it also included members of the teaching profession, town planners and others who had registered in order to continue practising; and while it excluded unregistered architects, it also excluded the foreign-born who held Australian qualifications. It was somewhat closer to the preliminary estimate that was being sought before embarking on a study. The size of the study, however, indicated that the survey would have to be conducted by postal questionnaire.

The search for names and addresses began at registration board offices. In those States where numbers of registered architects were small, Registrars — in one instance, the Chairman of the Board — kindly co-operated by identifying immigrants. In States where numbers were large, an individual examination of alphabetically filed records totalling some thousands had to be made.

Date of arrival in Australia is irrelevant to a registration authority, but place of birth and qualifications were information requested on application forms. The majority of immigrants could be identified, but the final list was either too large or too small for the following reasons: first, the inclusion of those who had arrived before World War II, but who had registered after the war, possibly because of interstate movement or postponement of registration for any reason; second, gaps in records where applicants who had omitted to enter birthplace and previous qualifications had obtained registration by board examination, an avenue of qualification pursued also by Australians studying part-time. Doubtful cases were listed and inquiries made later. Those about whom information was not readily available were included in the survey, so it was inevitable that some Australians would be netted and possible that some immigrants escaped.
Table 6.1 *Response to questionnaire*

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of questionnaires despatched</td>
<td>610</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
</tr>
<tr>
<td>Number irrelevant —</td>
<td></td>
</tr>
<tr>
<td>Not practising architecture (deceased, invalids, town planners, landscape architects, etc.)</td>
<td>12</td>
</tr>
<tr>
<td>Left Australia or present address unknown</td>
<td>37</td>
</tr>
<tr>
<td>Not immigrants as defined (Australian-born, arrivals before World War II, foreign-born trained in Australia)</td>
<td>66</td>
</tr>
<tr>
<td>Non-response —</td>
<td></td>
</tr>
<tr>
<td>No replies</td>
<td>181</td>
</tr>
<tr>
<td>Refusal to co-operate</td>
<td>9</td>
</tr>
<tr>
<td>Response —</td>
<td></td>
</tr>
<tr>
<td>Usable replies</td>
<td>305</td>
</tr>
</tbody>
</table>

The membership list of the Royal Australian Institute of Architects includes members' qualifications, if these are recognised by the Institute, but United Kingdom qualifications are held by many Australians. The list of registered immigrants was extended by the addition of the overseas qualified on the membership roll of the R.A.I.A., but, again, it was inevitable that some Australians and some immigrants who had arrived before World War II would be included.

The list of immigrants was extended further from information supplied by Commonwealth and State government departments and this took the geographical coverage into Papua New Guinea.

Questionnaires were despatched in March 1971 and a follow-up letter a fortnight later. In order to elicit co-operation from respondents, it was essential that their anonymity be preserved, that the number of questions be kept to a minimum and that answers could be expressed with brevity. Names did not appear on the questionnaire; instead each addressee was given a number and reminded not to sign the completed questionnaire. Questions were straightforward and the answers sought of the type that could be transformed into statistical tables. The response is summarised in Table 6.1. If the assumptions are made that the 190 non-respondents were all still resident in Australia, were all foreign-born and foreign-trained, were all practising architecture and all had arrived in Australia during the postwar period, then the response percentage from 'immigrant architects' who received the questionnaire was 62 per cent.
The first respondent arrived from the United Kingdom in 1945; none arrived in 1946, but by early 1970 a total of 315 arrivals were recorded; some respondents were now making a second or third visit. Of these arrivals, 55 per cent were from the United Kingdom.

From the single arrival from the United Kingdom in 1945, countries of emigration widened to include Europe (22 per cent), New Zealand and Africa (each 7 per cent), North America and Asia (4 per cent and 3 per cent respectively), two persons from South America and one from Fiji.

The up and down swings of arrivals in the sample followed the intake of those from the United Kingdom, the largest group: up to a peak in 1949, down to a trough in 1954 and back to a peak in 1960. Minor fluctuations from the pattern were caused by wave-like entrances of those from Europe between 1948 and 1951 and in 1957 and from Africa in 1953 and from 1960 to 1964. Explanations of these clusterings lie in political events in the countries of origin. The first wave of Europeans came with the Displaced Persons, the second from the Hungarian uprising of 1956. The extent of African arrivals in 1953 could hardly have been unaffected by the South African Separate Representation of Voters Act, 1951, which removed coloured people from the common roll of voters and triggered a constitutional crisis and outcries against the erosion of individual rights that only subsided in 1955; and those of 1960-4 by the withdrawal of South Africa from the British Commonwealth in 1961. Likewise, those coming from Kenya in 1962 were probably affected by the London Conference that resulted in an African majority in the legislative council in 1960 and Kenyan self-government in 1963; and those from Rhodesia in 1961 by the awakening political consciousness of the African population and their hostility to the Federation of Rhodesia and Nyasaland that culminated in the civil disturbances of 1960.

European and African political exiles are also included in the intake from the United Kingdom. From 1948 to 1956 there appeared a clustering of those born in Poland, small contingents of the thousands who arrived in England during or after World War II. The Imperial Polish Resettlement Act, 1947 encouraged the emigration of these people from the United Kingdom under the auspices of the Central Polish Resettlement Office.

The clustering of Poles in the United Kingdom stream gave way to emigrants from Africa completing a triangular movement from the
Table 6.2 Migration flows of respondents

<table>
<thead>
<tr>
<th>Country</th>
<th>Birthplace</th>
<th>First qualification</th>
<th>Emigration to Australia</th>
<th>Column per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Commonwealth:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>27</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>60</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>12</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>72</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>N = 305</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

* Including South Africa.

Source: Questionnaires.

United Kingdom to Australia first in 1959, reaching a peak in 1962 and petering out at the end of 1968. With one exception all had left African countries — South Africa, Rhodesia, Kenya and Nigeria — during years of political crises. There was a small difference, however, between the African expatriates arriving from the United Kingdom and those arriving directly from Africa. Among the latter were some Europeans, Displaced Persons moving yet again, apparently for much the same reasons.

Respondents who were originally political emigrés from some other country also arrived from New Zealand, North and South America and Asia. In all, 32 per cent of respondents were people whose past histories showed that migration had occurred at least once at a time of political unrest, thus reflecting the sensitivity of the intellectual groups to this type of expulsive influence and the stability of the Australian political scene as a ‘pull’ factor.

This type of international movement suggests that country of emigration cannot be assumed to be always identical with country of qualification, nor can country of qualification be assumed to be identical with country of birth. Table 6.2 presents the international deployment of respondents at three periods of their lives: birth, first qualification and emigration. Countries of birth numbered forty-one, narrowed to twenty-two countries of qualification and then broadened.
to thirty-three before emigration to Australia.¹ Twenty per cent of respondents, more than the table suggests as there was movement within the major country groupings, recorded a different country of qualification from that of birth. Extending the percentage to include all respondents who recorded any previous international mobility between birthplace, country of first qualification and country of emigration to Australia raises the proportion to 45 per cent, a sizeable minority close to half.

The changes in proportions of columns 1 and 2 of the table point to the centripetal attraction of the United Kingdom as a country of training, drawing its students from Europe, the British Commonwealth and countries elsewhere.

Within the British Commonwealth, the flow narrowed from fifteen birthplaces to only four countries of qualification: the United Kingdom, South Africa, Canada and New Zealand. Some of the explanation of this movement lay in the absence of training facilities within less developed Commonwealth countries.

Thirty-three per cent of the European-born obtained a first qualification outside the country of birth, mostly in West Germany. One reason for the recurrence of West Germany suggested by answers to the questionnaire is that after the movement into Displaced Persons camps started in early 1945, many of these people in West Germany enrolled and qualified through local training institutions while awaiting resettlement. The European-born who qualified outside Europe did so in only four countries, the United Kingdom, South Africa, Canada and

¹ Countries of birth
Argentina, Austria, Belgium, Bulgaria, Burma, Canada, Chile, China, Czechoslovakia, Denmark, Egypt, Eire, Estonia, Fiji, Germany, Gilbert and Ellice Islands, Greece, Holland, Hong Kong, Hungary, India, Italy, Kenya, Latvia, Lithuania, Malaya, Malta, New Zealand, Norway, Poland, Rhodesia, Russia, Singapore, South Africa, Sweden, Switzerland, Trinidad, Ukraine, United Kingdom, United States of America, Yugoslavia.

Countries of first qualification
Argentina, Austria, Canada, Chile, Czechoslovakia, Denmark, France, Germany, Holland, Hungary, Italy, Latvia, Lithuania, New Zealand, Poland, Russia, South Africa, Sweden, Switzerland, United Kingdom, United States of America and Yugoslavia.

Countries of emigration
Argentina, Austria, Canada, China, Denmark, Eire, Fiji, France, Holland, Hong Kong, Hungary, India, Indonesia, Israel, Italy, Kenya, Malaysia, Malta, Mauritius, New Zealand, Poland, Rhodesia (North and South), Seychelles, Singapore, South Africa, Sweden, Switzerland, Turkey, United Kingdom, United States of America, Venezuela, West Germany, Yugoslavia.
New Zealand, the training countries for those born within the British Commonwealth.

Thirteen respondents were born outside the British Commonwealth and Europe, but nine of these qualified within the British Commonwealth, in the United Kingdom, Canada and New Zealand.

None of the non-European respondents moved to Europe for a first qualification. Only one respondent travelled later from Argentina to Holland to obtain a second, specialised qualification, but as the second column of the table is concerned only with country of first qualification, he does not appear there.

The proportions in column 3 of the table represent the distribution of respondents at the time of emigration to Australia. While about two-thirds were born within the British Commonwealth, three-quarters were resident there before emigration. Coincidentally, the proportion of respondents who held at least one British qualification, including postgraduate and those allied to architecture, was also 75 per cent, slightly higher than that suggested by the table.

Column 3 of the table is a reflection of Australian postwar immigration policy that has extended the sources of immigrants to countries outside the United Kingdom. Only about half the respondents arrived from the United Kingdom, the remainder arriving from thirty-two other countries. The number of countries of birth suggested an even wider diversification; but an itemisation of countries of qualification showed that the ‘qualification’ composition of this professional stream had altered far less than might be expected. Seventy-two per cent of respondents had acquired a first architectural qualification in the British Commonwealth, and 75 per cent held at least one British qualification.

The youngest respondent was aged 21 years on arrival, the oldest 56. The distinguishing characteristic of the age distribution was a plateau clustering, starting at 27 and diminishing after 38. Within the plateau, the distribution was sufficiently even to exclude the observation that most migration had occurred at a certain age. Divided into decades, the age distribution showed that most migration occurred before forty (see Table 6.3). More than half of the 20-year-olds were aged 27 or over. About a fifth of respondents were aged 40 or over, but from 50 onwards few had migrated.
Table 6.3 Age distribution of respondents on arrival in Australia

<table>
<thead>
<tr>
<th>Age</th>
<th>Proportionate distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-29 years</td>
<td>32</td>
</tr>
<tr>
<td>30-39 years</td>
<td>46</td>
</tr>
<tr>
<td>40-49 years</td>
<td>19</td>
</tr>
<tr>
<td>50-56 years</td>
<td>3</td>
</tr>
</tbody>
</table>

\(N = 305\)
\(\bar{X} = 35\) years

Source: Questionnaires.

The respondents belong to a highly skilled occupational group. One of the conditions for inclusion in the survey was that qualifications should have been acquired before arrival in Australia. Because of the lengthy training preceding qualification, the very young would be excluded. Assuming 4-5 years of tertiary training following completion of secondary school at 17-18 years, the minimum ages possible on arrival in Australia would be 21-23 years. The practice of studying part-time, which is not unusual, would result for some in qualification at an older age. Included among respondents, too, were a few who had first trained for some other occupation and then moved on to architecture.

The modal ages of qualification — ages at which the largest numbers of respondents had qualified — lay at 23-24 years and 79 per cent of respondents had qualified by the age of 29. Since only about a third were 29 years of age or younger on arrival in Australia, this disparity points to another factor that might have influenced the age distribution on migration: employers' preferences for those with work experience.

Two sources for filling vacancies in the professional labour market are usually identified: new entrants, or the newly qualified without work experience who are recruited directly from tertiary training institutions; and those with work experience whom employers recruit from each other. It is difficult to draw such a distinct line in the case of the architects, as full-time training includes a period of practical experience, while those studying part-time are usually employed under the supervision of a qualified architect. The newly qualified architect is not without work experience, but this could be of a minimal kind, possibly not of the complexity or responsibility that follows qualification.
Table 6.4 Types of passage and average length of work experience before migration to Australia

<table>
<thead>
<tr>
<th>Types of passage</th>
<th>Proportionate distribution of respondents (%)</th>
<th>Average length of work experience before migration (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displaced Persons</td>
<td>10.3</td>
<td>6.8</td>
</tr>
<tr>
<td>Fare self-paid</td>
<td>27.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Assisted passage</td>
<td>26.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Fare fully paid by Commonwealth or State government employer</td>
<td>29.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Fare fully paid by private employer</td>
<td>6.3</td>
<td>10.2</td>
</tr>
<tr>
<td>N = 305</td>
<td>100.0</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Source: Questionnaires.

A few respondents moved at once into self-employment in Australia and these paid their own fares. Those who moved first into employee status either paid their own fares, or received passage assistance under the official schemes, or received fully paid fares from employers. Evidence of an employer's selective process favouring previous work experience can be found by relating the various types of passage to previous length of experience. As a measure of the latter year of first qualification, or postgraduate qualification if training is continuous, can be deducted from year of arrival.

In Table 6.4, Displaced Persons have been placed in a separate category because most were employed in unskilled labour on first arrival in Australia and the extent of work experience indicated by the interval between date of qualification and date of arrival may be inaccurate, as little is known about their employment histories during World War II.

Only a minor proportion of respondents paid their own fares, while 73 per cent received passage assistance, more or less. The average length of work experience before migration for those receiving assisted passages under the Commonwealth government schemes and those paying their own fares is close, between six and seven years. The average length of work experience among those who received fully paid fares (including family fares and salary from date of embarkation) is ten years. This would suggest that where large direct financial cost is incurred by an employer, employees with more work experience are preferred. If the
average is equated with the optimum, then the preferred period of work experience is ten years.

Commenting on the length of economic life of the knowledge of university educated engineers in an industrialised society in 1967, B. W. Haveman (1967:81) pointed to its brief span:

The period during which fully effective use could be made of their up-to-date knowledge was, of course, dependent upon their specialisation but, in certain sectors of modern technology, their economic value was almost totally depleted in a period of ten years. New techniques had out-dated their knowledge in such a brief space of time.

This rapid rate of obsolescence of knowledge could not be applied to the architectural profession. The economic value of an architect appears to increase by the first ten years of work experience at least.

On the other hand, the comparatively small proportion of respondents who migrated after the age of 39 seemed to indicate that to the individual the costs of migrating increase, while the expected future benefits decrease with age. The answers to the questionnaire seemed to show that special inducements were offered by employers to older people, e.g. fully paid return fares; limiting of work contracts to three-year periods only. The constraints on international migration that increased with age were broken down not by inducements to make a once and for all decision to migrate permanently, but by an invitation to become internationally mobile with the way of return left open.

The presentation in Table 6.2 of country of first qualification disguises the fact that the major qualifying body had been a single professional association, the Royal Institute of British Architects.

Since the majority of respondents had arrived from the United Kingdom it is not surprising that many were members, but membership of this professional association is not automatically open to all who hold United Kingdom qualifications, nor to all who are eligible to register with the Architects Registration Council of the United Kingdom. The R.I.B.A. recognises only thirty-four schools of architecture whose graduates are acceptable for membership after fulfilling the requisite period of practical experience. However, such had been the desirability of membership and the status attached to it that several United Kingdom trained respondents whose qualifications were otherwise
Table 6.5  Architectural qualifications of respondents on arrival in Australia

<table>
<thead>
<tr>
<th>Type of qualification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership of the Royal Institute of British Architects</td>
<td></td>
</tr>
<tr>
<td>Licentiate</td>
<td>4</td>
</tr>
<tr>
<td>Associate</td>
<td>190</td>
</tr>
<tr>
<td>Fellow</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>200</td>
</tr>
<tr>
<td>N = 200</td>
<td></td>
</tr>
<tr>
<td>Academic qualifications</td>
<td></td>
</tr>
<tr>
<td>Respondents first qualifying within British Commonwealtha</td>
<td></td>
</tr>
<tr>
<td>Articled pupil</td>
<td>1</td>
</tr>
<tr>
<td>Certificate</td>
<td>5</td>
</tr>
<tr>
<td>Diploma</td>
<td>118</td>
</tr>
<tr>
<td>Degree</td>
<td>37</td>
</tr>
<tr>
<td>Postgraduate — M.A.</td>
<td>6</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>169</td>
</tr>
<tr>
<td>N = 154</td>
<td></td>
</tr>
<tr>
<td>Respondents first qualifying outside British Commonwealth</td>
<td></td>
</tr>
<tr>
<td>Non-university</td>
<td>42</td>
</tr>
<tr>
<td>University — first qualification</td>
<td>54</td>
</tr>
<tr>
<td>postgraduate</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td>N = 85</td>
<td></td>
</tr>
</tbody>
</table>

*aIncluding South Africa.
Source: Questionnaires.

unacceptable had attained Associate Membership either by obtaining a second acceptable qualification or by passing R.I.B.A. prescribed examinations. Membership had been held by respondents who arrived from Commonwealth countries outside the United Kingdom. Even Europeans who had undergone further examination or requalification to practise, say, in South Africa or New Zealand, had sought membership when this had meant yet further examination.

'Three elements have to be distinguished in the complex of factors permitting easier international movement', said T. C. Colchester, Secretary of the Commonwealth Association of Architects, in 1969. The first was membership of an international institute; the second, registration requirements which might not be identical with membership of the institute; the third, operation of immigration control laws. Of all national organisations of architects, the R.I.B.A.
probably had the most widely dispersed and cosmopolitan membership. About one-fifth of its total corporate membership was outside Britain (Colchester, 1969:492).

In replying to the question on qualifications, several respondents assumed that A.R.I.B.A. (Associate of the Royal Institute of British Architects) superseded the others and refrained from presenting them. One must assume, therefore, that membership standards of this Institute act as a leavening process and it is unlikely that a respondent who holds a Diploma has qualified at a lower status that one who holds a degree, if both are Associate Members.

About two-thirds of respondents were members of the Royal Institute of British Architects (see Table 6.5). The information in the second half of the table covers only 239 respondents; on average, those first qualifying within the British Commonwealth held 1.1 qualifications per head, those first qualifying outside it 1.2 qualifications, but the proportion of postgraduate qualifications was higher in the former than in the latter.

This is not the end of the story, however. Eleven respondents had come to architecture from other occupations, climbing the ladder from the building trades, or were previously engineers, interior decorators, a chartered accountant, the 'first mate of a foreign going steamship'. Sixteen held qualifications 'allied' to architecture; most were in town planning, and most had been acquired in the United Kingdom.

Respondents were also requested to list all architectural prizes, awards or competitions won. Forty-two had received such distinctions. Among those respondents who as students were already beginning to pull to the front were some who appeared to have been the cream of the crop. The following are instances:

No.295 Faculty prize, Honours grant, travelling scholarship in architecture, research award from Netherlands government.
No.449 Sir George Fowlds Memorial Prize for most distinguished honours student; New Zealand travelling scholarship; postgraduate scholarship from Federal Government of Germany.
No.581 R.I.B.A. prize awarded for sketches while at secondary school; A.R.C.U.K. (Architects Registration Council of the United Kingdom) Scholar after competing in national
examination in the United Kingdom; *Architects Journal* prize for measured drawing.

No.719 R.I.B.A. Ashpitel Prize for first place in Institute's final examination.

No.663 Cape Provincial Institute of Architects Prize awarded to best second year architectural student; university scholarship for third and fourth year, selection of winner made from students in all faculties.

Early in his career an architect possibly finds opportunity to pursue his personal interests which, later, have either to be channelled into market demand or abandoned altogether. Here, among the lists of previous distinctions gained, are pointers to the diversity of knowledge these immigrants brought with them:


No.420 Distinction in thesis associated with final examination — a reconstruction of Belgic and Roman townships in St Albans.

No.519 First prize in competition to design a royal holiday house.

Others had won in design competitions that had relevance to the Australian scene: hospitals, new towns, modestly priced houses, factories, hotels, railway stations, libraries, schools, office blocks, museums, high density development, war memorials, entertainment piers, etc. Outstanding here, at least from the number of competitions won, was a respondent from Austria who had won eleven top places in competitions before arriving in Australia.

A sprinkling of respondents who arrived from the United Kingdom had migrated immediately after graduation. The 155 entries of previous United Kingdom employment have been divided in Table 6.6 into the employment status categories used by the United Kingdom Monopolies Commission in 1970, in order to compare them with the figures published by that body. While it is unlikely that the distribution by employment status of architects registered in the United Kingdom in any one year and the distribution of respondents who arrived over a period of many years would be similar, this comparison does suggest that the self-employed are less than proportionately represented among migrants.
Table 6.6 Employment status of members of Architects Registration Council of the United Kingdom and respondents arriving from the United Kingdom

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplying professional services as principals</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>Working as employees of principals</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>Working as directors or employees of companies, public corporations, central or local government departments, etc. not primarily rendering professional services</td>
<td>50</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: The Architects Registration Council of the United Kingdom is the equivalent of the Australian registration boards.

Sources: Questionnaires.


Among the United Kingdom group, pre-migration annual incomes of the self-employed were generally higher than the salaries of employees migrating in the same year. Among the employees few were specialists. Most were engaged on a multiplicity of functions, the diversity of duties varying inversely with the number of staff employed in an office. Consequently, Australian employers recruiting abroad have not always engaged those whose past experience appears relevant. For example, a respondent employed in the United Kingdom by a local government authority as an assistant architect designing schools was recruited (fare fully paid) by an Australian State government to work on railway building design; another respondent, employed as an assistant architect with British Railways on ‘producing design and working drawings and supervising jobs in progress for a variety of buildings associated with the railway’ was recruited by another State government to work on schools.

A comparison of salaries and duties performed by the employee group leads to the conclusion that the majority were drawn from the lower and middle echelons of the profession, e.g. a respondent described his previous occupation as ‘Architect, town planner, war damage assessor’, yet a comparison of his salary with that of others migrating in the same year shows that it was similar to that of an
assistant architect with a County Borough. Those among the employees who had reached the higher levels were a few who had been recruited from central and local government bodies and public corporations. From the Ministry of Agriculture, the Department of Health and Social Security, the County Borough of Bournemouth, the City of Southampton and a Scottish development corporation Australia received top ranking architects, specialists who continued to work in their fields of specialisation in Australia.

The proportion of pre-migration self-employment recorded by those arriving from outside the United Kingdom was similar to the United Kingdom stream: 13 per cent. Most of these people had been substantial income earners, and the employee component appears to have been richer in content than its equivalent from the United Kingdom.

An evaluation of Displaced Persons is hindered by restraints on professional opportunities experienced by these people during the war and immediately afterwards. Descriptions of previous employment ranged from one whose last professional employment had ceased five years before migration to a few who had been able to maintain their professional positions. Arriving at the same time as the Displaced Persons, but independently of the Refugee Schemes, was a young architect who, within three years of qualification, had been appointed Chief Town Planner of a town in West Germany. He was later to become one of the more eminent of European architects in Australia, but the promise was already evident.

As the inflow of migrants began to gather momentum, so did the arrivals of those who appeared to be of high quality. In 1948 the future designer of Australia Square arrived, marked for success by his qualifications. In 1951 an Austrian, holder of two engineering qualifications, one architectural qualification, qualifications in stage and interior decoration and town planning, winner or place-getter in nine national and two international competitions arrived. 1956 and 1957 recorded Hungarians from senior positions with the Hungarian government. From the universities of North America, Northern Rhodesia, South Africa and New Zealand Australia received erstwhile professors, assistant professors and senior lecturers. From Yugoslavia came the principal architect and town planner of Titograd; from India and Southeast Asia, expatriate architects who had risen to the higher levels of the profession and were moving on to Australia. Their
contributions to Australian architecture and to the Australian architectural profession had yet to be made.

The information provided by respondents has been used in this chapter to answer two questions. Where did the immigrants come from and what was their likely future performance in the Australian labour force? Most respondents came from the United Kingdom. Most were born there; most qualified there; most emigrated from there. Most had migrated just once, to Australia. The international movements of the remainder who comprised a substantial proportion illustrated the complex nature of migration flows into Australia. Of those who had provided evidence of previous international movement, most had only moved once before emigrating to Australia; but, for a few, the arrival in Australia marked the fourth, or even more frequent migration.

Employers' preferences for those with work experience appeared to have had some influence on age at migration. The average length of previous work experience was about eight years, the average age on arrival in Australia, 35 years; assuming continuous residence, the average length of future productive life was about thirty years. It is unlikely, however, that all respondents will continue living in Australia. More than a third received fully paid fares, and government work contracts included return fares. The extent of previous international mobility among respondents anyway suggested that this type of movement was unlikely to cease for all. The skewness of the age distribution on arrival in Australia hints that many of these travellers will come from the younger age groups, from those who have longer productive lives to contribute.

The migrants were divided into groups and certain features investigated, in order to evaluate their 'qualitative' composition: qualifications gained by those who first qualified within a homogeneous educational system, the British Commonwealth, and by those who first qualified outside it; and previous employment of those arriving from the United Kingdom and from elsewhere.

Those who first qualified within the British Commonwealth held marginally fewer architectural qualifications per head, but the proportion of postgraduate qualifications was higher. Using the criterion of earnings, the most successful of these respondents appeared to have been the previously self-employed. The proportion of these people arriving from the United Kingdom and from countries outside it
was similar, but it was not a large proportion, only slightly more than a tenth. Most of the United Kingdom employee group had been drawn from the lower and middle levels of the profession, but there had been some exceptions and senior architects had been recruited from the public sector. Judgments about the previous professional standing of one important group, arriving from outside the United Kingdom, the Displaced Persons, could not be made because of the restraints on professional opportunities that had been faced by most of these people. Otherwise, comparing previous levels and types of employment held, the employee stream from outside the United Kingdom appeared, on the whole, to be qualitatively better.

It is with some interest now that we turn to the careers of these respondents in Australia. The first hurdle to be overcome was acceptance into the Australian profession, and this is the theme of the next chapter.
The history of the architectural profession in any country would give a great deal of space to the twin concerns of education and registration. Although achievements in the latter have often fallen short of the profession's ideal, both have been considered intertwined to the extent that an improvement of educational standards has been regarded as a futile exercise without parallel statutory requirements for entrance to the profession that excluded the poorer trained. At the International Congresses of Architects held in Paris in 1900, London in 1906, Vienna in 1908 and Rome in 1911, resolutions were passed that affirmed the need for registration. In the interests of the public of all nations and of the profession, it was seen as necessary that practitioners should hold statutory qualifications that restricted the title 'architect' to those who were thereby provided with certificates of capability.

The first registration Act was proclaimed in Illinois, USA, in 1897 and, to cut a long story short, by 1920 architects were subject to statutory registration provisions in Canada, South Africa, New Zealand, fifteen States of America and most countries in Europe.

Their Acts ranged from the 'fishing licence' type (in Italy 1908) to the full throttle-hold of the Institute on registration and the profession in general (in New Zealand 1913), from the differentiation of 'registered architects' from 'architects' (Holland 1915) to a limitation of all building to architect control (Sweden 1920) (Freeland, 1971:236).

Registration was introduced into the United Kingdom in 1932. In Australia, the first attempts to obtain registration were in South
Australia in 1889. These followed closely on similar moves in the United Kingdom but were destined for failure, and this State was the last to move into line with the others when it finally introduced statutory control in 1939.

Sections of State Acts and Ordinances of the Australian Capital Territory and the Northern Territory, or regulations under the legislation, include provisions for registration of overseas trained architects by either nominating acceptable qualifications or stipulating registration procedures that are to be followed. The Articles of Association of the Royal Australian Institute of Architects also include provisions for membership of the overseas trained. Associate membership of the Institute is a qualification acceptable to registration Boards, but registration *per se* does not always confer eligibility for associate membership. Apart from registration authorities and the professional association are State and Commonwealth governments whose selection of employees is governed by neither the standards of the Institute nor the provisions for registration, but over the years the task of examining overseas qualifications has been increasingly delegated to registration Boards.

Consequently most of the discussion that follows on the conditions of entry to the Australian architectural profession is concerned with requirements for registration, but these have never been fashioned independently of the influence of the profession itself. Standing in the wings during the postwar years has been the Royal Australian Institute of Architects. While statutory control over the profession may appear to be supreme today, this is seen by some as a stage in a process that is due to be reversed:

Developments and changes within the profession generally and in the membership structure of the R.A.I.A. and the Code of Ethics were likely to bring about a situation in which the Institute would be directly responsible for the progress or regress of architecture without the necessity for the underpinning of Statutory Registration Acts. There were those in 1970 who believed that, with growth and maturity, the R.A.I.A. alone would and should be responsible for controlling the destiny of the architectural profession. It was the same view that had been held by the opponents of registration in 1890 (Freeland, 1971:244).

The extraction and presentation of the relevant sections from the legislation and Articles of Association of the R.A.I.A. would quickly
cover a great deal of ground, but are the reasons for nominating certain qualifications only as automatically acceptable composed solely out of the need to safeguard professional standards, or do these reasons include elements of monopolistic protectionism? The answer requires an investigation of whether the various statutes and membership requirements of the R.A.I.A. are permissive or restrictive in intent, of the underlying reasons for nominating only certain qualifications, and of the form procedures devised to admit those who are not automatically acceptable has taken. Another area that deserves attention is whether, having achieved registration through procedures other than the acquisition of a nominated formal qualification, an architect can compete on equal terms in the profession.

Under by-laws approved by the Privy Council in 1889, the Royal Institute of British Architects was empowered to enter into alliances with architectural societies in the United Kingdom and Empire overseas. ‘Allied societies’ were described as those local associations of architects outside the London area which, while retaining autonomous constitutions and administration, were allied to the Royal Institute of British Architects. Each society was the accredited centre of the district and would become the agent of that district in its relations with London (Kirby, 1984:51).

Under further by-laws approved in 1925, England was divided into three provinces from which allied societies would each provide a representative to the Institute’s Council, seventeen in all; Scotland was to provide four representatives, Ireland two and Wales one. Every allied society overseas was also to be represented on the Council.

These representatives were knitted into a Conference whose function was ‘to consider matters of special interest to the Allied Societies and to make reports upon them to the Council of the R.I.B.A. and the Councils of the Allied Societies.’ (Kirby, 1984:60). A further function was to promote the annual British Architects Conference, which had been held in the United Kingdom since 1921. The Allied Societies Conference was also to nominate one of the four Vice-Presidents of the R.I.B.A., who then became an ex-officio member both of the Executive Committee and the Board of Architectural Education of the Royal Institute of British Architects. The advantages of such a loosely tied federation had been spelled out first at the Liverpool Conference of 1893 as an organisational restructuring that would unify the profession
and as a system for extending the Institute's standards of architectural education.

Over the years these objectives were largely fulfilled. By the early 1930s there were forty-nine allied societies spreading across the Empire: thirty-one in the United Kingdom, one in East Africa, four in South Africa, one in Rhodesia, seven in Australia, one in New Zealand, one in Canada, one in Burma, one in India and one in Malaya. The multiplicity of societies in Australia is explained by the date. The federal association, the Royal Australian Institute of Architects, had only recently been formed and State Associations, while surrendering certain functions, were still maintaining separate corporate existences. The claim made at this time on behalf of the British Institute that 'at the present day there are schools under the control or advice of the R.I.B.A. Board of Architectural Education in every part of the Empire' (Lanchester, 1934:89) was an accurate assessment of the international impact that the standards of this Institute have had on the quality of architectural training. While the extension of this influence must obviously have been desired also by the allied societies and the educationists, the history of the earlier Australian State professional associations and, later, the Royal Australian Institute of Architects, showed a much stronger identification with the British Institute than this Institute had ever apparently sought.

The history of the architectural profession has recently been published (Freeland, 1971). The same author earlier produced a history of Australian architecture. The former book, as its title suggests, is a resume of the creation, concerns and extension of control of the earlier State professional associations and the later merger into and course of the Royal Australian Institute of Architects after 1929; the latter, a review of the development of architecture from the time of the landing of the first convict fleet. Freeland's writings disclose that the present suzerainty of the Royal Australian Institute of Architects is a comparatively recent development. It was to be some years before all State associations finally surrendered autonomy to the federal body. Compounding the struggle for survival were unemployment during the depression, the diversion of architectural manpower into defence requirements during World War II and the acute problems associated with the postwar reconstruction of the building industry. The mid-1950s marked the turning point when consolidation of the Institute had
been accomplished; the 1960s saw the emergence of a unified profession.

The standards which the Institute intended to maintain in regard to eligibility for membership were expressed in the Articles of Association under which it incorporated in 1930:

4. The Institute shall consist of Life Fellows Honorary Fellows and Associates . . .

8. Associates shall be persons engaged in the study or practice of Architecture who have attained the age of 21 years and have served at least three years' articles or otherwise can satisfy the Council as to training and who have passed such examination or examinations as may be approved by the Institute whether such examination or examinations were held by the Institute or otherwise of a standard not less than that fixed by the Royal Institute of British Architects for admission as Associate. Associates of the Royal Institute of British Architects or of any other incorporated association of architects which the Council may from time to time recognize as upholding a sufficiently high standard of qualification may be admitted to ballot without being required to pass an examination PROVIDED that in countries where registration of architects is required by Statute none but legally qualified Architects shall be eligible for membership of the Institute (Institute of Architects of N.S.W., 1930:329).

Although clause 8 tied the membership standards to those of the Royal Institute of British Architects and upheld the principle of registration, it was permissive in intent. As far as the overseas trained were concerned, Associates and undoubtedly higher membership grades of the R.I.B.A. were acceptable and other qualifications could be 'approved' or 'recognised'. By providing for the substitution of its own examinations as a means of acquiring eligibility for membership, the door had been left open to those candidates who had attained the minimum age and had pursued the stipulated length of training, but whose qualifications were otherwise unacceptable.

The early patterning of the Institute on its British forebear was a continuation of the identification that had characterised the State professional organisations and extended much further than membership requirements. In retrospect, it appears doubtful that a federal Institute, unless it had been conceived as the alter ego of the parent that was held in such high esteem, would have been acceptable.
to State bodies, and the continuing close association between the Australian and British Institutes is a relationship whose existence has never been denied.

Until the formation of the R.A.I.A., responsibility for conducting examinations of the British Institute had been delegated to various State associations or, as in the case of New South Wales, to the registration Board. Among the functions ceded to the new federal Institute by State associations was that of architectural examination and from this there were three immediate consequences. A reciprocity arrangement was initiated by the R.I.B.A. and after 1930 it ceased to conduct examinations in Australia but accepted, instead, examinations of the R.A.I.A.

The qualifications 'recognised' by the R.A.I.A. were a sufficient condition for membership of its own Institute. The desire by training and examining bodies for 'recognition' by the R.A.I.A. set in train a movement towards uniformity of Australian architectural training standards. A second avenue was opened for reciprocity between State registration Boards which, in future, were to accept associate membership of the R.A.I.A. as being on a par with the standards of the British Institute as an acceptable qualification for registration.

By 1940 architects in each State were subject to the provisions of registration Acts whose control over the profession ranged farther than just the requirements for registration. Most of the provisions of these Acts had been fashioned to cope with conditions that existed before the broadening of the professional migrant intake. Also before the mid-1930s, the possibility that the non-British trained, even more specifically the non-U.K. trained, should be catered for had been a non-issue, government immigration policy having been directed almost solely towards the United Kingdom as a source country.

All Boards had been constituted as qualifying bodies empowered to hold prescribed examinations as an alternative to formal qualifications for registration, the subjects and other relevant details of which were enumerated in subsidiary legislation of by-laws and regulations. As an example, the subjects in New South Wales until amended in 1939 were:

- Design
- Construction
- Building materials

Hygiene
General history of architecture
Practice of architecture

All to be taken at one examination (NSW Government Gazette, 24 Nov. 1922).
The Victorian Board envisaged that its standards would be equivalent to the standard of examination for Associateship of the Royal Victorian Institute of Architects, and so on (see Victorian Government Gazette, 4 Nov. 1936).

All Boards had been made the arbiters of standards required as a prerequisite to registration and, summarised (but not interpreted as the Acts are more expansively worded), the procedures for those trained outside State boundaries, including other Australian States, were as follows when the first of our respondents arrived.

All the Acts required that applicants should be at least 21 years of age and of good character. The Western Australian and South Australian Acts imposed residential conditions. Otherwise, in 1946:

**New South Wales**

1. Holds a prescribed degree from a training institution approved of by the Board and also:
   (i) passes the prescribed examination; or
   (ii) shows that in the country or State in which such qualification was issued, architects registered in New South Wales are entitled to practise without further examination;

   or

2. Holds a qualification approved of by the Board and also satisfies the Board that he possesses the requisite knowledge and skill for the practice of architecture;

   or

3. Holds a qualification from a training institution in a British possession or foreign country approved of by the Board and also satisfies the Board that he possesses the requisite knowledge and skill for the practice of architecture (**NSW Architects Act, 1921-46**).

The prescribed and approved qualifications for the purposes of these subsections were:

- The Diploma of Associateship of the Royal Institute of British Architects; a qualification approved of by the Board as the equivalent (**NSW Government Gazette, 24 Nov. 1922**).
Queensland
1. Holds a prescribed qualification from a training institution approved of by the Board and also
   (i) satisfies the Board by Examination or otherwise that he possesses the requisite knowledge and skill for the practice of architecture; or
   (ii) shows that in the country or State in which such qualification was issued architects registered in Queensland are entitled to practise without further examination (Queensland, The Architects Act, 1928).

The prescribed qualifications were:

The Diploma of Associateship or Fellowship of the Royal Institute of British Architects or of the Royal Australian Institute of Architects (Queensland Government Gazette, 16 April 1931).

Victoria and Tasmania
1. Holds a recognised certificate

or

2. Passes the prescribed examination after five years study (Victoria, Architects Act, 1928-1939; Tasmania, The Architects Act, 1929).

A 'recognised' certificate was spelled out in the Victorian legislation as one recognised by the Board as furnishing sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of architecture and granted by a training institution outside Victoria. In Tasmania, the prescribed examination for registration was nominated as the examination for the Diploma of Architecture of the Hobart Technical College; or the examination of a training institution recognised by the R.A.I.A. as being of the same standard (Tasmania, Government Gazette, 5 Oct. 1955).

Western Australia
1. Has passed the examination for Associateship of the Royal Institute of British Architects, or for membership of the Society of Architects of London, or the prescribed examination, or some other examination declared by the Board to be the equivalent, plus four years practical experience;

or
2. Has completed a course of study in architecture at a training institution and has passed the examination set by the Board (Western Australia, Architects Act, 1921-23).

South Australia
1. Has passed the examination for Associateship of the Royal Institute of British Architects, or one of a similar standard conducted by the Incorporated Association of Architects and Surveyors or some other body approved by the Board, plus three years practical experience;

or

2. Registration as an architect in the United Kingdom or in any part of His Majesty's Dominions, or Associateship or Fellowship of the Royal Institute of British Architects or the Royal Australian Institute of Architects;

or

3. Has completed a course of study in architecture at a training institution and has passed the prescribed examination or one specially set by the Board, plus three years practical experience (South Australia, Architects Act, 1939).

The prescribed examination for South Australia became the examination set for the degree of Bachelor of Engineering (Architectural Engineering) of the University of Adelaide or for the Associate Diploma in Architecture of the South Australian School of Mines and Industries (S.A. Government Gazette, 2 May 1940). This Board was also empowered to hold special examinations.

The governing principle of all the Acts was the alienation of the title 'architect' and, sometimes, abbreviations or derivatives thereof, either alone or in conjunction with other titles, to the registered practitioner; but there were exceptions, such as Commonwealth and State public servants, employees of statutory authorities, 'architectural draftsman', 'architectural assistant', 'naval architect', 'landscape architect', etc. The intention of the legislation was to extend control over the self-employed section of the profession only.

On four very early occasions, in 1910, 1914, 1923 and 1926, the Institute of Architects of New South Wales had sought the support of
other State Associations for a uniform federal registration system, but the other bodies were not prepared to relinquish the possibilities of parochial control. While the legislation that was finally enacted by each State did not exclude extra-State Australian qualifications, Boards having discretionary powers to approve and recognise, these were not named as automatically acceptable. The reason appeared to lie with the ability of an architect to practise over an unlimited geographical area and the need to phrase legislation so that it could be invoked, if necessary, to protect local practitioners against interstate competition. This was never so blatantly stated as by Mr J. F. Maxwell, member for Too-wong, Queensland, in 1928:

> it seems to me that when we have a number of rising architects — many of whom have gone overseas for the purpose of acquiring the necessary qualifications — the ordinary individual from the South [i.e., Victoria and New South Wales] should not be allowed to come here 'by your leave or without your leave' and put up his shingle and push out a number of young professional men here and, then, after he has finished his particular job, pull his shingle down and go back South again. We ought not to encourage that sort of thing (QP D, Vol.152, 1928:1520).

Unlike Western Australia and South Australia, the Queensland legislature did not succumb to these blandishments to introduce a residential condition into the Act.

The lack of reciprocity was a recurring theme of complaint, and attempts to unify disparate legislation were to meet with successive failures. In 1957 the profession in New South Wales moved again. Pointing to the 150 of its registered architects who were not eligible for membership of the R.A.I.A. and were thus denied automatic interstate registration, the Board of Architects was successful in introducing an amendment to the legislation empowering it to enter into reciprocal arrangements with other States (NSW PD, Vol.22, 1957-8:1453), but this was to bear little fruit. In that year, too, the Council of the Royal Australian Institute of Architects began to investigate possibilities for uniform registration requirements, but eventually acknowledged that the problem appeared insuperable (Freeland, 1971:243). By 1962, forty years after the first legislation had been introduced into an Australian State, the Queensland legislature was informed by its Minister for Public Works and Local Government:
so far as standard registration is concerned, we believe that it is important to bring about a uniform standard for the registration of architects. It is far from a simple arrangement to come to an agreement with similar boards in the various countries and States. To date even talks among the Australian States have been unsuccessful. We have not been able to reach any basis of agreement but we are still trying (QPD, Vol.234, 1962:1775).

Freeland expands on the reasons:

It is difficult enough to amend an Act of Parliament when only one body is involved. With one Federal Institute, six different Chapters, six different Registration Boards, six different Governments and six different Oppositions, not to count the numerous different individual viewpoints within each, it was a hopeless task . . . there was not the slightest glimmer of hope that the goal would become reality (Freeland, 1971:244).

Today there are eight registration Boards.

It was within these legislative constraints that the profession operated when the postwar immigration intake began, bringing with it people whose qualifications were hitherto unknown to Australians. Once having achieved registration, the possibilities for these architects of extending practices beyond State boundaries remained uncertain unless membership of the Royal Australian Institute of Architects could be acquired.

The late 1940s and 1950s are usually marked as the years of first confrontation between employers, professional associations and registration authorities on the one hand, and the non-U.K. qualified on the other, but this was not, in fact, so. From about 1935 onwards, small numbers of refugees from Europe, of whom a comparatively high proportion were professionally qualified, began trickling into Australia. In December 1938, as a result of the Evian Conference of July that year, the Commonwealth government announced that 15,000 more would be admitted over a period of three years. The trickle was about to become a flood whose timing coincided with the emergence of the Australian economy from the extended and severe unemployment of the 1930s. The concern of professional associations about the impact of this inflow on the occupations they represented was, understandably, the concern of bodies whose responsibilities were nationally circumscribed. The Royal Australian Institute of Architects saw its role principally, but not solely, as a protective one:
In the early months of 1939 it was noticed that a considerable number of refugee architects were arriving in Australia, and it was thought desirable to make contact with the Department of the Interior and offer the co-operation of the Institute in regulating the influx in accord with the absorptive capacity of the profession. The Institute's overtures were cordially received and from early in April until the outbreak of war (when the issue of landing permits practically ceased) all applications for landing permits made by foreign architects were submitted to the Institute for a report and recommendation. Although a large number of applications were reported upon, hardly any recommendations for the issue of landing permits were made, for the reason that the permits already issued by the Department seemed to have exhausted the absorptive capacity of the profession.

In addition to the correspondence with the Department, the administrative officers of the Institute conducted a heavy correspondence with refugee and would-be refugee architects and people interested in them both in Australia and overseas. Further, the Honorary Registrar and Honorary Secretary, as a private contribution, but with the cordial approval of their Chapter, established classes in Sydney for the purpose of acquainting refugee architects (and for that matter, civil and structural engineers) in Australian building practice and law.

All these activities have borne fruit, not only in helpfulness to refugees, but in making friends for the Institute, and the attitude of the architects has evoked encomiums from many quarters. In particular, the Minister for the Interior has, in more than one public utterance, paid marked tribute to the attitude of the profession (R.A.I.A., 1940:9).

Both the Institute and government were discharging their legitimate functions of protecting the employment of Australian architects, but in this statement the Institute was making a declaration of policy. The first paragraph indicated that immigration control, both quantitative and qualitative, would be conducted by negotiation with the Commonwealth government; the second and third paragraphs made it clear that neither the profession nor government wished to exclude suitably trained architects who had already arrived in Australia from entering the profession.

At State level, three Boards moved to ease the prerequisites for registration under the existing legislation. In 1936 regulations were gazetted in Victoria that permitted exemptions from subjects of the prescribed examination, provided the Board was satisfied that the applicant had passed such subjects in an examination of an equivalent standard to that of the prescribed Victorian examination (Victorian
Government Gazette, 4 Nov. 1936). New South Wales followed suit in 1939 (NSW Government Gazette, 26 May 1939) and South Australia fell into line in 1940 with provisions for exemptions from subjects of its special examination (SA Government Gazette, 2 May 1940). While the total number of refugee architects who registered under these provisions is unknown, at least twenty had done so in New South Wales by 1940. In this State during that year an amending Bill, which included the rephrasing of the preamble to qualifications for registration to read 'No person shall be entitled to be registered as an architect unless he has attained the age of 21 years, is a British subject, and has satisfied the board that he is of good fame and character' had the restriction to British subjects struck out by the Legislative Council (NSW PD, Vol.163, 1940-1:1971).

Queensland and Western Australia were later to adopt the procedures of exemptions from subjects, but in Tasmania the responsibility of 'recognising' qualifications has continued to be delegated to the Royal Australian Institute of Architects. Statutory control in the Commonwealth territories of the Australian Capital Territory and Northern Territory, introduced in 1959 and 1963 respectively, has seen the creation of two registration authorities which are not empowered to hold prescribed examinations. In the former case, the Board is enjoined to register an applicant if his qualifications are recognised as being sufficient evidence that he possesses the required knowledge and skill; in the latter the Board will only register members of the Royal Australian Institute of Architects.

Over time, State Boards, with one eye on educational developments within Australia and the other on changing membership requirements of the R.A.I.A., have altered the content of prescribed examinations and the extent of practical experience demanded as a prerequisite to registration. These changes have been designed to attune a Board's role as a qualifying body to the general raising of Australian standards and have not been devised for immigrants. It would be difficult, however, to conceive of an alternative registration system that empowered the registering authority to admit newcomers without ensuring that standards of training were at least equivalent to the Australian and that immigrants were conversant with Australian conditions. Such aspects as knowledge of the language, differences in specification writing, differences in building regulations and so on spring to mind at once. On the other hand, the relaxation of ancillary conditions of residence in
Western Australia and South Australia as a prerequisite to registration, also in response to the needs of the Australian profession, would have applied across the board to all immigrants; as would the unilateral reciprocity with other registration Boards introduced into the Australian Capital Territory and South Australia.

There should be some recognition of the task faced by separate Boards in assessing the numberless variety of qualifications being presented for registration. Among respondents, there were only a few instances of more than one with an identical qualification applying initially to the same registration Board. As another example, the Architects Board of the Australian Capital Territory during its comparatively short life of twelve years had, by May 1971, registered applicants holding qualifications from schools in Austria, Czechoslovakia, Germany, Hungary, Italy, The Netherlands, Poland, South Africa, Switzerland, the United States of America and Yugoslavia in addition to those who had trained within the British Commonwealth.

While architectural registration procedures have not entirely escaped the influence of postwar immigration, changes due to it have been comparatively minimal. With a growing knowledge of European educational systems, at least four Boards have tightened requirements and demand evidence of a pre-tertiary education equivalent to entry standards to tertiary training in Australia. Otherwise, movements towards easing established procedures have been somewhat sporadic and to pursue them all here would submerge us in the petty detail of changes in primary and subsidiary legislation administered by eight different Boards.

With some exceptions, Boards have remained wedded to A.R.I.B.A./A.R.A.I.A. qualifications for automatic registration of the overseas trained and the reader who is interested in exploring various other conditions and procedures as at May 1971 is referred to COPQ (1972a). The fragmentation of registration requirements and the lack of general reciprocity between Boards that was still evident at this date may seem unwarranted, but this state of affairs has been deplored by the profession itself, which now finds the remedy bogged down in restraints that were institutionalised in legislation fashioned in an earlier period of parochial protectionism.

How exclusive has been the consequence of Boards assigning the evaluative function for automatically acceptable qualifications to the British and Australian Institutes? Until recently, the recognition of
qualifications by the latter has paralleled that of the former; the unification of the Australian profession has been a comparatively late phenomenon and it seems unlikely that the Australian Institute, had it wished to do so, could have imposed divergent standards on registration Boards until the 1960s at the very earliest.

In some of the other registrable professions, the practice has been to tie automatically acceptable qualifications to those acceptable to the appropriate registration authority of the United Kingdom. Until the late 1960s, the only overseas qualifications acceptable to the Architects Registration Council of the United Kingdom were those obtained in Hong Kong, Melbourne, South Africa and Zurich.

The number of overseas qualifications acceptable for Associate Membership of the Royal Institute of British Architects has been larger, although confined, until the recent removal of a nationality requirement for membership from its charter, to the British Commonwealth. Outside reciprocity arrangements with most of the allied societies overseas, schools within Commonwealth countries whose standards were judged appropriate have been granted exemptions from its intermediate and final examinations and its final and special final examinations have been held in Malaya, Canada, Kenya, Southern Rhodesia, India, Singapore, Uganda, Trinidad and so on. The British architectural profession has viewed the examinations of this Institute as 'the Commonwealth currency of architectural competence' (Colchester, 1967-8).

The facility of international movement between countries within the British Commonwealth that has been an outcome of the R.I.B.A.'s educational and qualifying functions probably explains why Australian registration Boards and the R.A.I.A. have seen little need to extend the list of automatically acceptable qualifications in the face of the postwar immigration program alone. However, present trends at the international and national level suggest that the number of schools of architecture and qualifications recognised by the R.A.I.A. — and, therefore, registration Boards — is due to widen. The reason is the product of an amalgam of forces: the growing needs of the Australian profession to extend services beyond national boundaries both through migration and the provision of consultative services at an international level; a growing national interest in Asia; and immigration itself playing a somewhat subsidiary part.

The first overt evidence of these trends began in the 1960s in the
participatory role the R.A.I.A. played in the creation of the Commonwealth Association of Architects. This Association has its roots in the R.I.B.A., having grown from the Conferences of Overseas Allied Societies and having representation on the R.I.B.A. Council, but it includes among its aims the furtherance of inter-recognition of qualifications, thus offering Association members the opportunity of moving from bilateral to multilateral reciprocity arrangements. A Commonwealth Board of Architectural Education appointed within the C.A.A. accredits training courses which have not been confined to the British Commonwealth but have extended to other English-speaking countries. It is not mandatory for Association members to recognise the schools of architecture and qualifications so accredited, but the R.A.I.A. accepts the accreditation, subject to the conditions of two years' practical experience and an examination in Architectural Practice, now the normal requirements from all applicants for Associate Membership.

The placing of Australia within the Asian region of mutual interest by the Commonwealth Association of Architects is more than a matter of geographical propinquity. Although the R.A.I.A. has been involved at various levels in the growing provision by Australia of training for Asian students and in the assessing of Asian qualifications, the profession now looks to New Zealand and to Southeast Asia for opportunities for the extension of professional services. Branches of Australian practices can be found in these countries. The creation of the Australian Professional Consultant Council following a tour of Southeast Asia and the Middle East in 1967 by a Professional Consultants' Mission led by R.A.I.A. President M. Parry is another example of the developing international expansion of the Australian profession.

Concurrently with its support of the formation of the Commonwealth Association of Architects, the R.A.I.A. opened its first, albeit abortive attempt to achieve reciprocal membership arrangements with the United States of America in 1963. The matter was later reopened and, by 1971, the Institute had made a tentative commitment: 'A degree or diploma on the list of the National Architectural Accrediting Board of the USA may be accepted subject to the same practical experience and Architectural Practice Examination. . .' (COPQ, 1972a:6).

The formation of two other bodies during the 1970s could be pointed to as a belated response to the postwar immigration program. These are
the Architects Accreditation Council of Australia, composed of nominees from registration Boards and the R.A.I.A., to act as an accreditation authority for both Australian and overseas qualifications; and an expert panel, under the auspices of the Committee on Overseas Professional Qualifications, to seek information and promote investigations into overseas architectural education. However, the former can also be regarded as yet another and, possibly, successful attempt to introduce reciprocity between registration Boards and the latter as a continuation of trends already in force, as the R.A.I.A., maintaining its standards and its close link with the British Institute, moves towards autonomy in membership policies.

Although the only legislative coercion to register relates to the self-employed, underlying the discussion of the previous sections has been the assumption that, because architects are either in private practice or look to this status for the future, because of changing policies by public service authorities towards recruitment and promotion, and because the professional association upholds the principle of registration, all members of the profession were likely to seek registration.

From this it was assumed that unregistered respondents would be either recent arrivals or would be the 'statutory' unqualified for whom the hurdle of examination had proved too steep. The replies of people whose names had been drawn from the membership list of the R.A.I.A. and from government employers would indicate whether this assumption was correct.

Sixteen per cent of respondents were unregistered. All were employees, principally with government or statutory authorities, but a few were employed by educational institutions and private firms. Out of the 49 who were unregistered at the time of the survey, only seven held qualifications that a registration Board might have wished to examine. Forty-two held qualifications that made them automatically acceptable; most were members of the Royal Institute of British Architects or of the Royal Australian Institute of Architects and these included the European-trained. Two had been registered once, but had allowed this to lapse.

Three of the seven unregistered non-members of the R.A.I.A. volunteered the information that they had already submitted to examination in Design and Report Writing by the N.S.W. Public
### Table 7.1 Examination exemptions granted by one State Registration Board

**Prescribed examination, 1936-53**

1. History and characteristics of the styles of architecture
2. Mouldings, features and ornament
3. Geometrical and perspective drawing
4. Shoring, underpinning, hygiene, drainage, ventilation, heating
5. Nature, properties and application of materials
6. Principles and practice of construction
7. Drawing and designing, planning and arrangement
8. Specifications
9. Professional practice

**Prescribed examination, 1954-**

**Part 1**

Candiates to submit range of working drawings. Must be original work.

**Part 2**

A. 1. Delineation  
2. (History of the) development of architecture  
3. Measuring and levelling  
4. Construction I

B. 5. Construction 2  
6. Specifications  
7. Services and equipment  
8. Town planning

C. 9. Construction 3  
10. Designing and planning  
11. Professional practice

<table>
<thead>
<tr>
<th>Institute of qualification</th>
<th>Date of registration</th>
<th>Number of exemptions granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bundesgewerbe-Schule Wein I</td>
<td>1959</td>
<td>5 from Part 2</td>
</tr>
<tr>
<td>(i) Budapesti Muszaki Egyetem (Hungary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Technische Hochschule . . . ? (Austria)</td>
<td>1959</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universidad de Chile</td>
<td>1967</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vysoke uceni technicne v Brne</td>
<td>1957</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Institute of Technology . . . ?</td>
<td>1965</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecole nationale superieure des Beaux-Arts, Paris</td>
<td>1966</td>
<td>7 from Part 2</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baltic University, Germany</td>
<td>1955</td>
<td>9 from Part 2</td>
</tr>
<tr>
<td>Technische Universitat Carolo-Wilhelmina zu Braunschweig</td>
<td>1957</td>
<td>6 from Part 2</td>
</tr>
<tr>
<td>Universitat Fridericana Karlsruhe</td>
<td>1956</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Universitat Fridericana Karlsruhe</td>
<td>1957</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Technische Universitat, Berlin</td>
<td>1956</td>
<td>9 from Part 2</td>
</tr>
<tr>
<td>Technische Universitat, Berlin</td>
<td>1957</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Technische Hochschule Munchen</td>
<td>1956</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Technische Hochschule Munchen</td>
<td>1963</td>
<td>6 from Part 2</td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Construction Institute</td>
<td>1954 or 1964</td>
<td>6 from Part 2</td>
</tr>
</tbody>
</table>
Table 7.1 (continued)

<table>
<thead>
<tr>
<th>Institute of qualification</th>
<th>Date of Registration</th>
<th>Number of exemptions granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Josef Nador Technical University</td>
<td>1955</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Royal Hungarian State Academy for Arts and Crafts</td>
<td>1956</td>
<td>7 from Part 2</td>
</tr>
<tr>
<td>Budapesti Muszaki Egyetem</td>
<td>1965</td>
<td>9 from Part 2</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Budapesti Muszaki Egyetem (Hungary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Politecnico di . . .? (Italy)</td>
<td>1956</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Trieste Technical Institute</td>
<td>1963</td>
<td>5 from Part 2</td>
</tr>
<tr>
<td><strong>Latvia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University, Riga</td>
<td>1952</td>
<td>6</td>
</tr>
<tr>
<td>University, Riga</td>
<td>1962</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td><strong>Lithuania</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University (University of Vytautas the Great, Kaunas?)</td>
<td>1964</td>
<td>6 from Part 2</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politechnika . . .? Lwow</td>
<td>1952</td>
<td>6</td>
</tr>
<tr>
<td>Politechnika . . .?</td>
<td>1957</td>
<td>6 from Part 2</td>
</tr>
<tr>
<td>Politechnika . . .? Lesno</td>
<td>1957</td>
<td>6 from Part 2</td>
</tr>
<tr>
<td>Politechnika . . .? Lemberg</td>
<td>1965</td>
<td>4 from Part 2</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eidgenössische Technische Hochschule, Zurich</td>
<td>1952</td>
<td>6</td>
</tr>
<tr>
<td>Eidgenössische Technische Hochschule, Zurich</td>
<td>1956</td>
<td>7 from Part 2</td>
</tr>
<tr>
<td><strong>The Netherlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hogere Technische School, Rotterdam</td>
<td>1963</td>
<td>4 from Part 2</td>
</tr>
<tr>
<td>Rijksuniversiteit te Utrecht</td>
<td>1964</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Koninklijke Academie van Beeldende Kunsten Den Haag</td>
<td>1966</td>
<td>9 from Part 2</td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Mass. Institute of Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Penn. State University</td>
<td>1967</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Polish University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Polish Board of Academic and Technical Studies</td>
<td>1953</td>
<td>8</td>
</tr>
<tr>
<td><strong>Yugoslavia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Univerzitet u Beogradu</td>
<td>1960</td>
<td>8 from Part 2</td>
</tr>
<tr>
<td>Novisad Institute of Technology</td>
<td>1964</td>
<td>5 from Part 2</td>
</tr>
</tbody>
</table>

Source: Examinations: Relevant regulations published in State Government Gazette. Words in parenthesis were deleted later by amending Regulation. Exemptions granted: Questionnaires.
Note: In order to preserve anonymity of respondents, the location of this State Board is not given.
Service Board under the N.S.W. Professional Higher Grades Examination (Regulation 126) for Overseas Architects.

Only ten of the unregistered had been in Australia for two years or less; the maximum period of residence was eleven years. There existed a core of architects who did not consider exclusion from registration as an impediment to professional advancement or to the practice of the profession, but, lacking data on the Australians, it is impossible to gauge the size of the unregistered group in the profession.

The majority of respondents were registered architects; 185 had been automatically acceptable and had followed one of several registration routes:

(i) Membership of the Royal Institute of British Architects;
(ii) Membership or eligibility for membership of the Royal Australian Institute of Architects;
(iii) Registration or eligibility for registration in the United Kingdom;
(iv) Requalification with an Australian degree or diploma;
(v) Registration in the Australian Capital Territory.

The majority had followed route (i). Only two respondents had sought Australian requalification. Otherwise, Boards registered people whose primary qualifications in architecture had been obtained in the United Kingdom, United States of America, Canada, Africa, New Zealand and Europe.

Seventy-one respondents had submitted to examination, including people with primary qualifications from the United Kingdom, United States of America, Africa and Europe. The procedures followed by Boards have been briefly explained already. In more detail, candidates are first requested to submit details of qualifications and training, usually accompanied by an example of working drawings. This is followed by a written examination in selected subjects of the legislatively prescribed examination. Table 7.1 clarifies these procedures by presenting exemptions granted to respondents who were examined by one State registration Board. Generally speaking, Boards emphasised the trilogy Design, Professional Practice and Specifications as subjects for examination, but these subjects were waived or reduced or extended according to strengths and weaknesses of individual candidates. In some instances, Boards appeared to have taken into account length of
practical experience in Australia and one respondent appealed successfully to a Board against an initial selection of subjects for examination.

As it has been postulated that membership of the Royal Australian Institute of Architects is of more importance to the 'examined', it is of interest to count membership among this group of respondents. Only eight were non-members compared to thirty-three of the automatically accepted.

A charge that a procedure of written examination for certain applicants is not solely directed towards the maintenance of professional standards but also includes elements of protectionism might be made on the grounds that sufficient evidence has already been presented suggesting that it discriminates by introducing higher standards and that the international training of architects is now sufficiently homogeneous to waive written examination altogether.

In support of this charge, firstly, the wide list of qualifications accepted by the Board in the Australian Capital Territory without written examination might be cited. Secondly, by tailoring the examinable subjects to individual weaknesses, other Boards demand a higher level of training than that required from the automatically acceptable, among whom must undoubtedly be individuals deficient in certain areas of knowledge.

A closer examination of registration procedures in the Australian Capital Territory and the examination experiences of some respondents would weaken this charge. The Australian Capital Territory takes a liberal view, but some applicants have been rejected outright; many were already registered elsewhere and were admitted under the reciprocity section of the Ordinance; a few whose training held doubts were referred to the Board in New South Wales, so that, in practice, the A.C.T. Board has not been able to dispense with formal examinations altogether.

Among the respondents were three Polish gentlemen, each with identical qualifications. Two applied to the Royal Institute of British Architects for Associate Membership (and thus became automatically acceptable to an Australian State Registration Board), the third applied to an Australian State Registration Board. How did these gentlemen fare at the hands of these separate bodies, one of which bases its decision on the course being offered by the training institution, the other includes assessment of the applicant's capabilities?
Another respondent applied for registration to a State Board on the basis of a partially completed overseas training course:

<table>
<thead>
<tr>
<th>Training</th>
<th>Australian Registration Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three years study at Det Kongelige Akademi for de Skome Kunster, Copenhagen</td>
<td>Examined in Design and Professional Practice only</td>
</tr>
</tbody>
</table>

Australian architectural registration procedures cut both ways. While they may require a uniform all-round knowledge from those whose qualifications are not automatically acceptable, they deal leniently with the better applicant.

The possibility that examinations for certain groups of immigrants will disappear from the Australian scene appears unlikely. The Committee on Overseas Professional Qualifications identifies two important differences in overseas training generally: the first, differences in content; the second, differences in standards. To overcome ignorance, the Committee supports a two-pronged approach. On the one hand, an investigation of overseas courses leading to a larger number of qualifications becoming automatically acceptable, and, on the other, an extension of the examination. An English language test could determine whether command of the language was adequate. A screening test, accepted on a national rather than a State basis, could be used as a preliminary assessment of whether an applicant’s professional knowledge and training were suitable for Australian conditions. Only then would an applicant have to satisfy the appropriate Australian professional authority — and the Committee prefers a national rather
than a State authority — that he had achieved an adequate level of professional competence (COPQ, 1972b). The implementation of this type of examination system would lessen an immigrant's uncertainty of whether he is likely to be acceptable and would reduce the work load on Australian registration authorities; but, for the architects, it would mean a more impersonal system than is at present in force.
It would be generally agreed that immigrants have contributed substantially to architecture in Australia, but the magnitude of their contribution would be hard to assess. Running parallel with the growth in the stock of foreign-trained architects have been other changes which have also led to innovations in design, structures and materials. The increasing incidence of foreign travel flowing from the increasing prosperity of the postwar years, the accelerating international spread of information and the developing international organisation of the profession have broken the isolation of Australians. The inflow of foreign investment has brought in its train for short periods architects to design specialised structures outside the ambit of Australian experience, but subsequently enlarging it. The practice of holding international competitions has had the same effect.

Certain beliefs are held about immigrants. The one most frequently expressed is 'These foreigners are very good at design'; but often the architect whom the speaker has in mind proves to have been born abroad and to have trained in Australia. An overseas background may mould the form in which Australian training is utilised, but credit for achievements cannot be apportioned entirely to it. On the other hand, whether any such identity as an 'Australian' training now exists, except by geographical location, is questionable; the heavy clustering of immigrants in the teaching profession at tertiary training institutions is a source of immigrant influence probably more pervasive than that found in the architectural profession itself.

Because of the complex nature of these interrelationships, this chapter does not attempt to arrive at generalised conclusions about
immigrant contributions to architecture in Australia. Instead, the focus of interest is the respondents and their performances within the Australian labour force.

Proceeding chronologically, the immediate change in salary or income as a consequence of migration is presented first. Respondents' gross salaries or self-employed incomes preceding migration, converted at official exchange rates, are compared with earnings during the first year in Australia. The objection that the use of fixed exchange rates as a conversion factor gives neither a comparison of real earnings, nor a comparison of the relative positions of respondents in respective national salary structures is valid. In the absence of exchange rates calculated on purchasing power parity and of national earnings surveys that would permit appropriate comparisons, this method is used to provide an approximation only of differentials that occurred at once.

The succeeding theme, career strategy followed by respondents after arrival in Australia, is then described. Various statistical measures were made to plot their course, including earnings distribution in 1971. Length of residence in Australia, an independent variable that might be considered to have an important influence on earnings of immigrants, is not discussed. Investigations to discover the nature of such a relationship proved fruitless; there appeared to be none that was statistically significant.

Finally, an attempt is made to evaluate the contribution of respondents to architecture and to the profession by citing distinctions won in the form of competitions, awards, etc., since arrival in Australia and indicating the extent of services in an honorary capacity with professional organisations.

All explanations of reasons for migration, whether expressed aggregatively as an international relocation of labour, or hypothesised as the outcome of a 'push-pull' process, or viewed as an individual decision resulting from a comparison of many elements, some positive, some negative, showing a net gain from migration, would incorporate differentials in real income, either alone or in conjunction with other differentials. The number of respondents in the survey represented only a fraction of the total volume of immigration into Australia and a comparison of the immediate differences in earnings only illustrates the individual nature of decisions to migrate.
Table 8.1  Earnings differentials of respondents as a consequence of migration

<table>
<thead>
<tr>
<th>Differential</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate increase</td>
<td>142</td>
</tr>
<tr>
<td>Immediate decrease</td>
<td>95</td>
</tr>
<tr>
<td>Unchanged</td>
<td>5</td>
</tr>
<tr>
<td>Migration after qualification, part-time employment in Australia, and information not given</td>
<td>73</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
</tr>
</tbody>
</table>

*Source: Questionnaires.*

The number of differentials include those of migrants who made more than one visit to Australia. Those who moved into part-time employment were such people as married women and architects pursuing postgraduate study. Among those who did not provide information were some who said they did not remember. Much of the information in the other categories is from respondents who have had to cast back in memory over a fairly long period, but it is assumed that they would have remembered whether an immediate gain or loss had been sustained.

The majority of differentials were positive, but about a third of all moves resulted in an immediate loss. The largest gain was 297 per cent, the largest loss 90 per cent for an architect who moved directly into self-employment in Australia. Those arriving from North America recorded an immediate loss, as did many of the 'political emigrés', particularly those from Africa and Hungary. Among the Displaced Persons differentials were uneven, some recording immediate gains in unskilled employment. Probably the number of negative differentials for the 'political emigré' group would have been less had the measure been between anticipated future earnings in country of emigration and actual earnings in Australia, e.g. one respondent from Africa wrote that he 'would have became a pauper at end of 1960', and another 'The move was necessitated by a complete lack of work in the private field in Kenya at that time.'

Among the negative group, however, were some whose subsequent earnings in Australia suggested a migration gamble on future income, e.g.:

*Respondent No. 698*

Migrated from United Kingdom in 1958, aged 37, with an
Table 8.2  Range of earnings differentials among United Kingdom arrivals, 1947-70

<table>
<thead>
<tr>
<th>Year</th>
<th>Range</th>
<th>Year</th>
<th>Range</th>
<th>Year</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent</td>
<td></td>
<td>Per cent</td>
<td></td>
<td>Per cent</td>
</tr>
<tr>
<td>1947</td>
<td>-24/+ 180</td>
<td>1955</td>
<td>-14/+ 41</td>
<td>1965</td>
<td>-40/+ 41</td>
</tr>
<tr>
<td>1948</td>
<td>-34/+ 60</td>
<td>1956</td>
<td>+24/+ 110</td>
<td>1966</td>
<td>-20/+ 4</td>
</tr>
<tr>
<td>1949</td>
<td>-12/+ 273</td>
<td>1957</td>
<td>+4/+ 60</td>
<td>1967</td>
<td>-67/+ 69</td>
</tr>
<tr>
<td>1951</td>
<td>-65/+ 7</td>
<td>1959</td>
<td>-66/+ 48</td>
<td>1969</td>
<td>-37/+ 26</td>
</tr>
<tr>
<td>1953</td>
<td>-2/+ 60</td>
<td>1961</td>
<td>-20/+ 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1954</td>
<td>+53</td>
<td>1962</td>
<td>-20/+ 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1963</td>
<td>-11/+ 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1964</td>
<td>-17/+ 55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of arrivals: 151

of which:

- positive differentials: 100
- negative differentials: 46
- zero: 5

Source: Questionnaires.

Immediate earnings loss of 53.3 per cent.
- 1958 Australian employee salary: $A 3,500
- 1971 Australian self-employed income: $A30,000

Respondent No. 398
Migrated from Europe (independently of Assisted Passage Schemes) in 1950, aged 35, with an immediate earnings loss of 80.5 per cent.
- 1950 Australian employee salary: $A 1,500
- 1971 Australian self-employed income: $A80,000

Though most of the respondents arriving from the United Kingdom recorded gains, about a third recorded losses. Over the years, the ranges of differentials were erratic, frequently very wide, occasionally narrow, and were rarely positive only.

The suspicion that a statistically significant relationship might exist between differentials, age at migration and subsequent income streams was explored without success. The possibility remained that those from the United Kingdom experiencing losses might have had some factors in common, but an examination of the available evidence showed none. Most were young, under the age of 40, but as high a proportion were
over 40 as among those achieving positive differentials. Some of the
negatives received assisted passages, others fully paid fares; a few paid
their own way. The later financial histories of some showed that 1971
earnings were among the higher levels of respondents' earnings struc­
ture, but lying among the negatives too were those for whom financial
gain was not, apparently, of paramount importance, e.g.:

Respondent No. 722
Migrated from United Kingdom in 1965, aged 51.
Pre-migration self-employed income $A 10,000
1965 Australian salary $A 6,000
1971 Australian salary $A 9,300

Respondent No. 101
Migrated from United Kingdom in 1957, aged 21.
Pre-migration salary $A 2,000
1957 Australian salary $A 2,800
1960 Australian salary $A 8,000
1960 Returns to U.K., salary $A 5,000
1961 Re-emigrates to Australia, salary $A 4,000
1971 Australian salary $A 8,024

Nearly all respondents moved first into employee status in Australia.
By 1971 a substantial redeployment by type of employment had taken
place. A large movement out of the employment of private practitioners
had occurred, the proportion employed by educational institutions had
nearly doubled and slightly more than a fifth of respondents were self-
employed (Table 8.3).

Employees of educational institutions who were solely teachers are not
included in this table. Respondents who were employed as architects by
educational institutions and teachers participating in the architectural
profession by maintaining separate private practices made up the
proportion shown as employees of educational institutions.

An explanation of the comparatively heavy initial clustering in the
employee of professional practice category could be that an 'old boy'
network possibly exists, in which certain private practices or firms direct
their recruiting towards immigrants from certain countries. However,
there was no evidence of such a network in respondents' work histories.
Table 8.3 *Type of employment of respondents on arrival and in 1971*

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>Arrivals 1947-70</th>
<th>As at 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent</td>
<td></td>
</tr>
<tr>
<td><strong>Self-employed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sole practitioner or partner in practice</td>
<td>1.3</td>
<td>23.1</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate in professional practice</td>
<td>0.6</td>
<td>8.4</td>
</tr>
<tr>
<td>'Other' employee of professional practice/private firm</td>
<td>39.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Employee of Commonwealth/State government or statutory authority or local authority</td>
<td>44.0</td>
<td>47.5</td>
</tr>
<tr>
<td>Employee of educational institution</td>
<td>5.9</td>
<td>10.5</td>
</tr>
<tr>
<td>Employee of professional association</td>
<td>-</td>
<td>0.6</td>
</tr>
<tr>
<td>Employee providing unskilled labour (Displaced Person)</td>
<td>5.9</td>
<td>-</td>
</tr>
<tr>
<td><strong>Type of employment not given</strong></td>
<td>1.3</td>
<td>-</td>
</tr>
<tr>
<td><strong>Retired/part-time/unemployed</strong></td>
<td>1.3</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

N = 315 305

Source: Questionnaires.

Later discussion in this section that relates the type of mobility — changes of employer and employment status — shown in Table 8.3 to 1971 earnings shows that, as far as money was concerned, respondents appeared to be moving in rational directions. Several had also acquired further qualifications. By 1971, eleven masters degrees, either in architecture or in town planning, had been awarded to respondents, fifteen diplomas in town and country or regional planning, six diplomas or bachelors degrees in architecture, two diplomas of business administration and one technical teachers certificate.

Besides taking time to improve qualifications, respondents recorded growth rates in earnings between arrival and 1971 as shown in Table 8.4. A search for a statistically significant relationship between length of residence in Australia and growth rates in earnings showed that none appeared to exist. There were, however, common factors among negative and zero growth rates; the former belonged to respondents who had moved recently to self-employment and the latter to very recent arrivals.

It would have been interesting to compare rates in this table with those of the profession as a whole, were these available. Partial information only can be found in the surveys of professional incomes in
Fig. 8.1 Range of 1971 earnings of respondents by year of arrival in Australia (N = 288)

Source: Questionnaires.

Victoria conducted periodically by the University of Melbourne Appointments Board. In the 1969 survey the response percentage for the architectural profession was 50 per cent of members of the Victorian Chapter of the Royal Australian Institute of Architects. Growth rates for median incomes in architecture from 1956 to 1969 were 5.3 per cent per annum, from 1964 to 1969, 4.5 per cent per annum (Gravell, 1970:34).
Table 8.4  Average annual growth rates of earnings of respondents between arrival and 1971

<table>
<thead>
<tr>
<th>Average annual growth rates (%)</th>
<th>Distribution of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1-6</td>
<td>11</td>
</tr>
<tr>
<td>7-12</td>
<td>64</td>
</tr>
<tr>
<td>13-18</td>
<td>13</td>
</tr>
<tr>
<td>19-24</td>
<td>4</td>
</tr>
<tr>
<td>25 and over</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

N = 241

Note: Growth rates calculated from first architectural employment, an adjustment relevant to Displaced Persons.

Source: Questionnaires.

The principal effect that length of residence in Australia appeared to have had on the earnings structure of arrival cohorts was on the spread, caused by the movement into self-employment. The highest and lowest earnings of each arrival cohort have been joined to form the bars in Fig. 8.1. The median earnings (earnings which mark the midway point, 50 per cent of respondents lying above and 50 per cent below it) for all respondents in 1971 lay at $9,421, median age 46 years. In the Victorian survey, the medians for income and age in 1969 were $7,100 and 43 years.\(^1\) The Victorian median income would have been higher in 1971, but, if it is assumed that it could have equalled that of respondents, this would represent a growth rate from 1969 to 1971 of 15.1 per cent per annum, an unlikely figure when compared with growth rates calculated from the previous Victorian surveys already cited.

It is generally believed that incomes vary with age. The Victorian 1969 survey showed that median incomes by age began to drop from about 43 years to 47 years, rising slowly thereafter until the early sixties, when the median income was about equal to that of the 43-year-old. A younger age distribution among respondents may have produced a higher median earnings figure, or an older age distribution in the Victorian survey, a lower figure. A comparison of the distribution of earnings (Fig. 8.2) shows a comparatively heavy weighting of respondents in the higher groups.
The Victorian survey disclosed that a major factor influencing the level of incomes was the way in which men were employed. Ranked in descending order, average incomes were highest for partners in professional practices, followed by the sole practitioner, then the employee group. In the Victorian survey, 39.1 per cent of architects were self-employed, amongst respondents in 1971, 23.1 per cent.

'Average incomes of women are lower than those of men in every profession — in general much lower, proportionately, than the provisions made by award rates in non-professional occupations', says the author of the Victorian survey (Gravell, 1970:35). The Victorian figures quoted in Fig. 8.2 excluded females, but figures for females among respondents were retained.

If these impressions — that, as a group, respondents appeared to lie more within the upper levels of the income structure of the profession — are placed alongside the figures in Table 8.3, which revealed changes of employer in broad categories and changes in employment status, then the key to their career strategy appeared to lie in mobility.

The types of mobility found in the work histories of respondents were the usual kinds: changes of employer, employment status, geographical location (including international migration), job, occupation, or industry. Usually believed to lead to an improvement in earnings, these can occur in a single form or in combination and are characteristic of any group of workers, but among the architects it is possible to change employer and employment status without changing a job, to acquire an

---

1 The question asked in the Victorian survey was:

Annual salary or income (before taxation) as at 30th June 1969. $ . . . (Include bonuses, but exclude locality or zone allowances). If not a salaried employee, please give estimate of current annual personal income excluding expenses of practice, etc.

Do not include income from property, investments etc.

The question asked of respondents in the survey being discussed in this chapter was:

What is your present salary or self-employed income (before tax, but excluding expenses of private practice)?

In replying to this question, respondents earning money from additional part-time employment added on the appropriate sums. The distinction of 'incomes' to describe the results of the Victorian survey, and 'earnings' to describe this survey of the architects is maintained in this chapter. It should be pointed out that the exclusion of all part-time earnings would produce a median income figure equal to the median earnings figure quoted and Fig. 8.2 would be unaffected, as part-time earners were in the $10,000 and over income group. Only the growth rates in Table 8.4 would require adjustment downwards.

2 See footnote 1.
Fig. 8.2 Distribution of architects by earnings groups (% earnings)

Sources: Gravell, 1970: 15 (the pictorial representation of distribution of income in this survey is the one used here); questionnaires.
increase in earnings without mobility and for an individual to conduct parallel types of employment, in one of which he might practise mobility but in the other/s not.

An employee may be working in a professional practice whose partners re-form or become bodies corporate. The self-employed practitioner may incorporate into a private company and become the employee. Improvements in earnings can be achieved by those who by conventional measures are immobile, who remain with the same employer, in the same occupation, industry and geographical location, but who progress steadily up the promotion ladder. A measure of mobility can be introduced into these circumstances when the individual moves out of one job into another leaving a vacancy to be filled. But this is not always so in the architectural profession; for those who are employees of professional practices, only the remuneration is increased.

Also conventionally immobile are the self-employed, who cease expressing the various types of mobility that marked their earlier work histories once the game of snakes and ladders to establish themselves begins. Those who are unable to sustain early losses return to employee status, but, for those who succeed, it could be maintained that mobility no longer contributes towards increasing returns. However, the work histories of some respondents showed that mobility was characteristic not only of the employee. Certain self-employed practitioners who had achieved a degree of eminence had begun to diversify by type of employment and the possibilities for permutations and combinations of the different kinds of mobility became endless. Witness the respondent who described himself as a sole practitioner, a partner in a practice, an employee of a private firm and in part-time employment. Each category referred to a different type of employment being conducted at one time. Another respondent was a private practitioner (self-employed) specialising in architectural consultant services to a company of which he was the Managing Director (employee) specialising in providing comprehensive consultant services on environmental design in Southeast Asia and Australia. While, for the classification purposes of Table 8.3, these kinds of people were placed in the category they described first in their work histories, distinctions between them and the employee group who retained the right to private practice began to blur and to disappear in the case of employee respondents who operated international practices as a sideline.
A mobility study of respondents' work histories after arrival in Australia might have been rewarding, but it was possible that it could have become, instead, an exercise in statistical classification whose minutiae would have had little general relevance. The evidence in Table 8.3 holds out promise that one type of mobility, change of employer and employment status, might have been more important than others, and Table 8.5 re-presents type of employment in 1971 accompanied by separate calculations of median earnings of those who had changed employer or employment status at least once and those who had remained with the same employer.3

The category ‘“other” employee of professional practice/private firm’ is composed mainly of employees of professional practices and the comparatively low average income of this group explains why a movement out of it has occurred.

Those who had changed employer/employment status held a better relative position vis-à-vis the employees of professional practices and the Commonwealth government, but the average earnings of the immobile in State government and educational institution employment were relatively better than their mobile counterparts. Differences in recruitment policies of employers may have been partly responsible. The varied professional experience of the mobile architectural employee may be preferred in selection for promotion to Associate. The Commonwealth government may recruit at several levels. State governments and educational institutions may prefer to promote from within the ranks of their own employees.

Varied experience as an employee in a professional practice is usually considered the prerequisite for promotion to Associate and for the move to self-employment; only two respondents were, in 1971, still employed in the professional practices they had entered on arrival in Australia. Respondents had been recruited at various levels into Commonwealth government employment and the higher average earnings of those who remained in State government employment appeared to owe something to promotion. The employee of an educational institution, however, has another avenue open, other than promotion, to improve earnings.

Educational institutions have recruited at all levels, from staff architect to lecturer to professor, but these employees retain the right to private practice. Respondents in the teaching profession have exercised

3 Changes of employer without an accompanying job change have been ignored.
Table 8.5  
**Type of employment and median earnings of respondents by 'employer/employment status' mobility**

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>Median earnings, 1971 (A$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer/employment status</td>
<td>Employer/employment status</td>
</tr>
<tr>
<td>changed</td>
<td>unchanged</td>
</tr>
<tr>
<td><strong>Self-employed</strong></td>
<td></td>
</tr>
<tr>
<td>Partner in practice</td>
<td>12,000</td>
</tr>
<tr>
<td>Sole practitioner</td>
<td>8,200</td>
</tr>
<tr>
<td><strong>Employee</strong></td>
<td></td>
</tr>
<tr>
<td>Associate in professional practice</td>
<td>10,100</td>
</tr>
<tr>
<td>'Other' employee of professional practice/private firm</td>
<td>7,800</td>
</tr>
<tr>
<td>Employee of Commonwealth government</td>
<td>9,377</td>
</tr>
<tr>
<td></td>
<td>8,696</td>
</tr>
<tr>
<td>Employee of State government</td>
<td>8,800</td>
</tr>
<tr>
<td>Employee of local authority</td>
<td>...</td>
</tr>
<tr>
<td>Employee of educational institution</td>
<td>9,222</td>
</tr>
<tr>
<td></td>
<td>11,315</td>
</tr>
<tr>
<td>Employee of professional association</td>
<td>...</td>
</tr>
</tbody>
</table>

N = 288

... insufficient number of cases to calculate median
none

*Source:* Questionnaires.

this right. Here was the employee who was also the part-time Associate, the part-time sole practitioner, the part-time partner in a professional practice. Some earned small fees, others large accretions to annual salaries.

Among the employee group of respondents in 1971, only 35 per cent were still with their first employers; 27 per cent had changed employers once, the remainder more often.

The greatest stability lay with educational institutions. No more than five respondents who had entered the employment of an educational institution had changed employers and three of these had moved to other educational institutions. Then, in descending order of stability, came employees of State government, Commonwealth government (in each case a majority of respondents had remained with the same government employer since arrival) and, lastly, employees of professional practices.

Only nineteen respondents had returned to employee status after trying self-employment. If these nineteen are added to the total number...
who were in self-employment in 1971, then about 30 per cent of respondents (see Table 8.3), a minority proportion, had seen self-employment as the desirable career goal. It is generally believed that architects aspire towards self-employment, but it would seem that the career strategy of respondents has held alternatives. On average, the returns, in the form of earnings achieved by all but one employee group in Table 8.5 had been better than those of the sole practitioner. With the exception of respondents still in the private sector, the majority who had retained employee status had seen the possibilities for improving earnings lying not in self-employment but in careers determined by type of employer: educational institution and government. Those who had elected to remain as employees of private practitioners could, possibly, still have been looking towards Associateships and/or self-employment.

Figure 8.2 presents the earnings distribution of respondents in 1971 and shows a comparatively heavy clustering in the $10,000 and over bracket. If, qualitatively speaking, the work of an architect is reflected in his remuneration, then it is a matter of curiosity to discover the proportionate representation of selected groups of respondents in this higher earnings bracket.

The people who had acquired distinctions — awards, scholarships, competitions, etc. — before arrival in Australia contributed 43 per cent of their numbers to the group earning $10,000 and over in 1971.

Respondents cross-classified by major country of first qualification contributed the following proportions: trained in the United Kingdom and New Zealand, 40 per cent each; trained in Europe, 41 per cent; trained in South Africa, 67 per cent.

The South African trained are dominated by the ‘political emigré’. Among the European trained, such a group, the Displaced Persons, was large enough to allow separate measurement. These people had also achieved a comparatively larger representation, 53 per cent, in the $10,000 and over earnings group, than the respondents who had won previous distinctions, or the United Kingdom trained, or the New Zealand trained, or the Europeans as a whole. The circumstances under which migration occurs appear to have been of importance. Political upheavals in other parts of the world have enriched the Australian architectural profession in a proportionately larger measure than the extent of previous distinction or the migration inflows from politically stable countries.
Three kinds of distinctions can be won by architects: scholarships, awards and competitions.

Few respondents could have won scholarships, as these are usually tied to graduates of Australian training institutions, and only two had done so. One of these scholarships, the national Copper Industry Scholarship awarded annually by the Royal Australian Institute of Architects, enabled the winner to travel overseas in 1968 to study building codes and regulations. In 1973 he was appointed as a member of a Western Australian State Cabinet Committee of Inquiry to investigate and report upon aspects of building legislation and building regulations.

The number of awards that can be given to architects in Australia has increased over the postwar years. It is unusual to find evaluation of the work of a professional group taking this form, but the reason could lie in the fact that few architects undertake formal postgraduate research. The originality of an architect's concepts and research are embodied in his designs and in his completed structures. These need evaluation, recognition and publicity.

The Royal Australian Institute of Architects is the body principally responsible for bestowing awards. Its highest distinctions and many of the State distinctions have appeared only recently on the scene, e.g.:

R.A.I.A. Gold Medal Award. The highest honour the federal institute can bestow. Created to recognise architects who have given distinguished service by designing or executing buildings of high merit or who have produced work of great distinction resulting in the advancement of architecture or who have endowed the profession of architecture in such a distinguished manner as to merit receipt of the award.

This was first made available in 1960 and the list of winners since indicates that it can only be received towards the end of a distinguished career.

Victorian Chapter of the R.A.I.A. Silver Medal. Instituted in 1970, this Award was to be given once every ten years for 'outstanding architecture' of the previous decade.

Some State awards have changed format, e.g.:
N.S.W. Chapter of the R.A.I.A. Sir John Sulman Medal and Diploma. Starting before World War II, this Award was made annually for an executed architectural work of outstanding merit. Up to 1958, it was available for six classes of buildings in turn or as nominated by the Chapter Council. In 1959 and 1960 the Award was made for all buildings without class restrictions. Commencing with the 1961 Award, all classes of buildings, except houses, became eligible and a separate award for houses was created. As from 1960 the area of the Award has been restricted to the State of New South Wales.

Bronze Medal of the W.A. Chapter of the R.A.I.A. Until the late 1960s, this Medal, awarded triennially for a building of outstanding merit erected in Western Australia, was known as the R.I.B.A. Architecture Bronze Medal and Diploma. It then became the Bronze Medal of the W.A. Chapter and the award was extended to include citations for buildings most note-worthy in certain categories: domestic, multi-housing, ecclesiastical, institutional, industrial, retail, urban, general.

It would be impossible to assess the achievements of respondents with regard to awards in relation to the profession as a whole. To do this it would be necessary to know the changing pattern of awards over the years and, as judging panels are usually empowered to withhold an award if an entry of sufficient merit is not forthcoming, the number of winners of each kind of award becomes a relevant statistic. Lastly, an award made for an executed building is usually an award made for a team effort to an architectural practice.

Similar yardsticks would be needed to assess respondents' wins in competitions. Competitions can be conducted internationally, nationally, or at State level. They may be conducted by government or a local authority or a university or some other body, or might be for a newspaper title 'House of the Year'. They can be won on design entries or on executed work. The number of competitions that could be entered or have been entered by respondents without scoring a win or a place is unknown.

Seventeen respondents had figured in awards made by chapters of the R.A.I.A. These had been conferred in the Australian Capital Territory and in all States except Tasmania. Respondents appeared most frequently in the award winning lists of New South Wales:
Sir John Sulman Medal and Diploma. Awarded annually for an executed architectural work of outstanding merit. All classes of buildings, except houses, eligible:
Five respondents (one had won twice)

The Wilkinson Award. Awarded annually for a completed house or group of houses of outstanding architectural merit:
One respondent (won three times)

The Blacket Award. Awarded annually for individual architectural work within the area encompassed by the Country and Newcastle Divisions of the New South Wales Chapter:
One respondent

Civic Design Award. Awarded annually for work of outstanding merit embodying improvements in the quality of the public environment:
One respondent

Project House Design Award. Made to prototype houses constructed in New South Wales by merchant builders to a design of a member of the Royal Australian Institute of Architects. Three awards made annually within price categories:
Two respondents (one had won twice).

With the exception of the Blacket Award, one architectural practice, in which a respondent is the principal, had appeared in each of the above, taking the Sir John Sulman Medal twice and the Wilkinson Award three times.

Elsewhere, respondents had been associated with five awards in Victoria, four in Queensland, one in South Australia, four in Western Australia and one in the Australian Capital Territory.

In Victoria, the major annual award for outstanding architecture, the Bronze Medal of the Victorian Chapter of the R.A.I.A., had been awarded on one occasion to a professional practice in which a respondent was the design associate. Later, a second professional practice in which he was employed in a similar capacity received one of the Chapter's annual citation awards. In Western Australia, another respondent, as the architect in association with a firm of private
practitioners, had been concerned twice with the award of the triennial Bronze Medal.

Fifteen respondents, two of whom had also been award winners, had been on winning lists for competitions. Wins or places had been recorded by individuals or by teams in which individuals worked. By States, the largest number of winners were practising in Victoria, but multiple winners or place-getters were in Western Australia and Queensland. Details as given by these respondents in these States are presented below but, in order to preserve anonymity, the placing of their entries is omitted, as are the dates:

**Western Australia**

No.354  
(i) Perth Town Hall, administrative offices and town hall;  
(ii) Reserve Bank, Canberra, banking premises;  
(iii) State government offices, Perth.

No.443  
(i) Commonwealth Games House. House design of one type used in Commonwealth Games Village;  

**Queensland**

No.236  
(i) Queensland housing unit for cluster groups. R.A.I.A. competition, Queensland Chapter. Cluster of 13 courtyard houses;  
(ii) Housing probe, R.A.I.A. competition, Queensland Chapter.

No.475  
(i) Civic centre, Mount Isa City Council. Administration building, library, civic hall;  
(ii) 14-storey home unit, Brisbane.  
(iii) Townsville civic centre. Administration building, library, art gallery, theatre and civic hall, civic square.  
(iv) New hotel, Townsville.  
(v) Mackay civic centre — master plan. Administration building, first stage. Feasibility study for master plan implementation.
Larger numbers of respondents, eighty-six, had held or were still holding appointments or offices in professional organisations. The numbers were dominated by the United Kingdom trained, then in descending numerical order came the European, South African, American and New Zealand trained.

Some respondents had held only one office, others several. Across the board, organisations to which they had donated their services could be classified by type of function: preparation for the profession, e.g. service on boards or committees concerned with education, many of which were within the professional association; entry to the profession, e.g. service on registration boards or as examiners for registration boards; organisation of the profession, e.g. service within the organisation structure of the Royal Australian Institute of Architects; practice of the profession, e.g. service on committees and sub-committees, both permanent and ad hoc, appointed within the R.A.I.A. to deal with the practice of the profession; and service on bodies outside the profession, e.g. Royal Australian Planning Institute, Institute of Quantity Surveyors.

Fourteen respondents had participated in the deliberations of bodies concerned with education. Most were members of the teaching profession, professors and senior lecturers, donating their expertise. Here also were a senior civil servant, a senior employee of a statutory authority, a senior partner of one of Australia's largest architectural practices, people who appeared to have reached upper levels of the type of employment in which they were engaged. Most had been trained in the United Kingdom; none had been trained in Europe.

Seven respondents had contributed services of the second kind, serving either as members of registration boards or as examiners. Once again, they were a group drawn from the higher levels of the teaching profession, civil service, the self-employed and the R.A.I.A. All had received their first qualifications in architecture in the United Kingdom.

With the third kind, organisation of the profession, numbers began to increase, seventeen respondents in all having participated. They served at many levels within the Institute and held many types of offices as executive members and committeemen. That the influence they may have had on shaping the Institute may be more than the numbers indicate is suggested by the history of honorary service and current employment of one respondent:
Honorary services

<table>
<thead>
<tr>
<th>Position</th>
<th>Years</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Councillor</td>
<td>6</td>
<td>A.C.T. Area Committee R.A.I.A.</td>
</tr>
<tr>
<td>Councillor, Honorary Secretary</td>
<td>14</td>
<td>A.C.T. Chapter, R.A.I.A.</td>
</tr>
<tr>
<td>Treasurer, President</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Councillor for A.C.T.</td>
<td>4</td>
<td>R.A.I.A. Council</td>
</tr>
<tr>
<td>Member</td>
<td>10</td>
<td>Architects Board of A.C.T.</td>
</tr>
<tr>
<td>Member</td>
<td>4</td>
<td>R.A.I.A. Practice Coordination Committee.</td>
</tr>
</tbody>
</table>

Present Employment

Director, Royal Australian Institute of Architects (Federal body). Duties: Organisation and administration of the Professional Institute.

While the United Kingdom trained dominated this group as well, two Europeans were outstanding. One had served as a councillor in a State chapter and the other as an honorary treasurer of an area committee.

The closest to a melting pot is found in the fourth and fifth types, bodies concerned with the practice of the profession and bodies outside it. Here the proportions of the United Kingdom trained, although still large, began to recede and there were respondents drawn from all the other major training areas, Europe, South Africa and New Zealand. Possibly these kinds of bodies offer greater opportunities for the expression of expertise or the pursuit of specialised interests. Within the professional association, respondents had given service on editorial and publication committees, on standards and building regulation committees and sub-committees, on professional practice committees, on committees concerned with specification writing, an almost innumerable list concerned with the many facets of the practice of architecture. The European-trained found his niche here. This was the type of respondent who stated he had served on an Alpine Committee, on historic buildings committees, on committees concerned with metric conversion, who contributed his services towards attempting to bring some sort of uniformity into the disparate building regulations resulting from the federal system of disparate legislation.

All in all, counting service to the professional association, that is, service given to its bodies concerned with education, organisation and
practice of the profession, fifty-four respondents had donated a minimum of 306 years of part-time honorary service to the R.A.I.A.

Forty-three respondents had contributed services in an honorary capacity to organisations outside the architectural profession. These organisations fell into two groups: those related to the architectural profession and those concerned with individual interests and hobbies, such as the Society of Sculptors. There were only a few instances of the latter kind, possibly because these were not considered relevant and it is probable that participation in this type of organisation was larger than that revealed by the questionnaires.

Most of these forty-three respondents had also been active in organisations concerned with the profession itself, but a few had channelled their services solely into related fields and here there were instances of innovation, e.g. the respondent who was the founder of and held subsequent executive offices in the Society of Designers for Industry and who was largely responsible for the later evolution of the Society into the Industrial Design Institute of Australia and who was also a founder member of the Industrial Design Council of Australia.

The fields related to architecture in which respondents had interested themselves were mostly the building industry generally, planning and development bodies, national trusts, historical societies, health and associated fields (e.g. hospital planning committees, the Australian Council for the Rehabilitation of the Disabled), related occupations (e.g. Australian Institute of Landscape Architects and Institute of Quantity Surveyors), and relevant specialities (e.g. acoustics and ergonomics). The office of National President had been held by respondents in the Building Science Forum of Australia, the Royal Australian Planning Institute and the Australia Modular Society. It was in the second and third of these bodies that most interest had centred at State level, respondents having served as presidents, vice-presidents, committee members and on educational and other sub-committees in the divisional or Chapter infrastructure.

In order to understand better how it was that the architectural profession gained these immigrants, it is necessary to return to the three elements distinguished by Colchester (1969) in the complex of factors permitting easier international movement: immigration control laws, membership of an international institute and registration requirements.

Australian immigration policy does not end at its own national
boundaries; Australia fits into a much larger political concept, the British Commonwealth, where the traditional policy of the United Kingdom government has been to encourage emigration to member countries and to sell tertiary training as an international commodity. The qualifications of the professional groups in any British country have always held an international component, although the need to cross national boundaries in search of training has decreased as the move to establish indigenous training institutions in member countries of the British Commonwealth has accelerated over the postwar years.

Professional associations in the United Kingdom followed in the wake of government policy, extending their qualifying functions to embrace Empire boundaries. The degree to which qualifications so accredited have been acceptable to other British countries has diverged over time. Canadian policy today would not be identical with the Australian, nor could it be assumed that members of all United Kingdom professional associations are automatically acceptable into the professions in Australia.

In the case of the architectural profession, the Royal Institute of British Architects has played a major role as an accrediting body, facilitating the international movement of architects within the British Commonwealth. The direct flow of migrants from Europe to Australia may suggest a diminution of this Institute’s role, but, if the Displaced Persons and those who fled the Hungarian uprising were removed, the European component in the Australian architectural profession would shrink to a small proportion. The overseas location of accredited qualifications largely determines the source of supply of the professionally trained worker and explains why, over the past two decades or more, the major inflow has been from the British Commonwealth as a whole and, within it, the United Kingdom has been the major donor country.

The volume of immigration into the profession could hardly have been unaffected by the extent of passage assistance, the mitigation of financial cost offered as an inducement to migrate to Australia; but employers’ recruitment activities abroad would be of little avail if immigrants were excluded from entering the Australian profession. Colchester’s third element, registration requirements which might not be identical with membership of an overseas professional association, becomes relevant.

Membership or eligibility for Associate membership of the Royal
Institute of British Architects has been an automatically acceptable qualification to Australian registration boards, but among the immigrants were a core of eligible candidates who had not sought registration. The reason probably lay mainly in the fact that statutory control over the profession is intended for the self-employed, and the architectural profession contains larger numbers of the employee group. Add to this that registration procedures for those who are not automatically acceptable are flexible, tailored to an assessment of individual candidates, and we move towards an explanation of why the architectural profession contained the high proportion of foreign-born shown by the national census, a proportion only smaller than that found in a few occupations predominantly composed of the employee group.

None of the elements identified by Colchester will remain static in Australia. Australian immigration policy has extended towards the recruitment of workers from an increasing number of countries; the Commonwealth Association of Architects is replacing the Royal Institute of British Architects as an accrediting international body; movements already in train within the Australian architectural professional association will broaden the number of qualifications that are automatically acceptable to registration boards. The qualification composition of the immigrant component of the Australian architectural profession, indeed any Australian profession, should, by the end of the next two decades, present a different picture from the one that is found now.

The exact number of immigrants in the architectural profession under the terms of the definitions created for the survey discussed in these chapters is unknown, but the numbers who participated in the survey are probably sufficiently large to suggest that the characteristics exhibited by them would be true of the whole immigrant group.

Most of the immigrants in the profession in 1971 had been trained within an educational system homogeneous to the Australian and were readily assimilable into the profession, but further than this, those trained outside the British Commonwealth included a comparatively large proportion of the university-qualified. Immigrants included those who held more than one architectural qualification, who held postgraduate qualifications, who held qualifications that were allied to architecture and qualifications that were not. They included a proportion of those who had already reached the upper levels of employee status, a proportion of the previously self-employed, a
proportion of those who had distinguished themselves in the practice of architecture. They contained all strands of these characteristics of the profession, but whether they contained them to a lesser or to a larger degree is unknown. The only comparative material presented suggested that the self-employed were less than proportionately represented in migration flows.

The majority moved, among other reasons, in response to differentials in earnings, some immediately obvious, others, apparently, to await the fulfilment of future expectations. Inevitably, also, immigrants included a residual of people to whom monetary gain had not been of paramount importance. At least there was no evidence of it.

The extent of passage assistance given and the extent of direct recruitment by employers suggests that, at initial entry into the Australian labour market, immigrants were not competing with Australians for employment. Rather, employers were looking abroad for practitioners that the Australian profession could not provide from its own members. Newcomers were easing the inelasticity of supply; shortages lay not so much in raw recruits newly emerged from training institutions but, rather, in a more valuable type, the employee with work experience.

Nearly all immigrants moved into employee status on arrival in Australia, but, from there on, the deployment by type of employment began to change. An analysis of career strategies and the results achieved by 1971 indicated that constraints on immigrants, reserving for them the role of a minority group excluded from competing or participating fully in professional life, were absent. Comparative circumstantial evidence pointed to the 1971 incomes distribution of immigrants being skewed towards the upper incomes structure of the profession and, as one would expect to find in the Australian component, some of these people had taken a share of awards, won competitions and donated generously of their time and knowledge to professional organisations.

Other than the obvious contributions that immigrants make, that they increase the elasticity of supply of workers and add to the total stock of the professionally trained, the touchstones of their contributions to architecture and to the profession were the three mentioned in the previous paragraph: earnings distribution in 1971, distinctions acquired after arrival in Australia, and the extent of honorary services rendered in a professional capacity.
There would be exceptions to the assumption that the quality of an architect's work is reflected in his remuneration, but, as a generalisation applied to a group, it should be correct. The question asked was which groups contributed most to the highest earnings bracket in 1971? In sheer weight of numbers, those trained in the United Kingdom dominated, but a measurement of the contributions of certain other groups gave the largest proportionate representation to the political emigre, particularly the African emigre.

As would be expected with the profession generally, the numbers of migrants who had achieved architectural distinctions after arrival in Australia and those who had donated honorary services were less conspicuous in the profession at the time of the survey. Two respondents had been elevated to the status of Life Fellow of the Royal Australian Institute of Architects (a distinction so far unmentioned) and a few had figured in major awards, outstandingly so in one of the larger Australian States. The extent of honorary services given suggests that migrants do not play a passive role in the shaping of the profession they enter. Migrants have concerned themselves with education, with the administration of statutory control, with the organisation of the profession, with the many facets of its practice. Their influence has extended outside the profession into related fields, some into high office.

Evaluations of contributions are more valid when made historically, when the dust has settled and the scene is clear. Possibly, though, it would not be too presumptuous to conclude now that the Australian architectural profession has gained a group of immigrants containing a quota of high quality practitioners and a few of outstanding ability, and that the profession itself has not escaped the influence of the newcomers. But none of this could have happened simply because a government decided to implement an immigration program. International differences in architectural earnings had also to be present, 'elements' facilitating the inflow had also to exist. These elements have traditionally encouraged the inflow from the United Kingdom, so that the largest contribution, by the criteria used in this study, has come from these people.
Conclusions

Except for drawing on material from other countries for illustrative purposes, each of the preceding studies has concerned itself almost exclusively with the Australian experience. This final chapter, which attempts to draw the strands together, introduces a few comparisons with the United States of America.

With the exception of minor short-lived recessions, Australia and the United States both experienced persistent dynamic shortages of professional manpower extending over approximately the same period. Both looked to international sources to ease the sluggish response of domestic supply. Both practised immigration policies that became increasingly selective in order to meet manpower requirements and less selective racially in order to encourage the highly skilled inflow.

The numbers of professional workers moving into Australia were never as large or as important among immigrants as they were in the United States. The Australian labour market for highly skilled personnel was not characterised by demand forces quite as powerful as those operating in the United States, nor were these forces spilling over as a major pull factor into Australia, as they were in Canada. Vast expenditure on research and development and defence were absent from the Australian scene; shortfalls in professional manpower that would have been the expected outcome anyway under conditions of economic growth and population increase were exacerbated not so much by the attraction of the US labour market, as in Canada, but by conditions intensifying the inelastic response of supply. Only when a crisis point had been reached in the late 1950s did official attention turn
belatedly to the need for adequate financing of tertiary education and to the possibilities of improving the volume of the overseas intake.

Hypotheses concerning the determinants of migration of highly skilled workers have arisen from observations of net postwar movements within the lines of the old colonial links and from Europe (including the United Kingdom), Canada and the developing countries towards the United States of America. Disparities in economic development between the various countries are believed to have been responsible and the United States has been viewed, to say the least, as the Mecca of the highly skilled movement. Factors creating the attraction of the United States — absolute and relative salary differentials allied with innumerable unfilled vacancies, differences in professional opportunities, differences in manpower policies, etc. — could also have been found operating to a lesser degree in Australia's favour. The majority of immigrants moving into Australia were matched through the assisted passage schemes, through direct employer recruitment and through the Australian international employment service against shortfalls in the Australian supply and the majority registered an immediately improved earning capacity. In the search for economically rational causes, however, political reasons for the highly skilled traffic have generally been considered to be of lesser importance.

It would seem though that a goodly portion of the postwar international relocation of human talent would have occurred anyway as a flight from unacceptable political systems. Australia has received substantial numbers of political emigres from Europe. Emerging nationalism and moves towards political independence over the postwar years among developing countries of the British Commonwealth have been accompanied by intakes of their expatriate intellectual manpower. The United States has received larger numbers of refugees from Europe, while a sizeable portion of its brain drain from Asia has been comprised of Chinese political emigrés, and the course of political upheavals in Latin America has also swelled its immigration statistics. The usual economic advantages that are believed to accrue in the receiving country from the international movement of the highly skilled worker need not have necessarily followed.

Displaced Persons entered Australia to perform unskilled and semi-skilled work and the subsequent difficulties experienced by Europeans in attempting to enter the Australian professions were not confined to a single country; in fact the conditions of entry to the American
professions were likely to have been more restrictive and more fragmented than the Australian. The acquisition of a few eminent men by the United States has clouded the fate of thousands of other refugees but, even so, the problem of unacceptable qualifications has not been the matter of public debate in America that it has been in Australia. The latter country has considered the conditions of entry to its own professions, firstly, to have seriously limited the international market in which it could recruit highly skilled workers; secondly, to have contributed towards the persistence of shortages of professional manpower by excluding migrants who might otherwise meet educational requirements; and, thirdly, to hold seeds of political embarrassment should highly skilled migrants brought in under any of its international treaties be excluded from entering the professional labour market.

Consequently, the United Kingdom, the traditionally most important source of Australian immigrants, appeared as a focal point in the Australian competition for highly skilled workers. Previous migration flows between the two countries may have suggested that Australia has always competed there, but the assisted passage schemes that had first sparked off emigration to the Antipodes had been envisaged as a device for increasing rather than diverting United Kingdom emigration and had been aimed at workers of a lower social and skill status than the professional. In all probability this was yet another reason why it took time before the Australians realised that, if they were to compete successfully, other factors that entered into the more complex migration decisions of the highly skilled would need attention. Subsequent official action was then concerned with improving the flow of information, reducing uncertainties and cheapening migration costs yet further by providing employment services. The close professional affiliation between the United Kingdom and Australia, closer than would have been found in the United States, must have operated uniquely in Australia's favour and could hardly have been overlooked in a migrant's decision to choose this country rather than any other. The network of Commonwealth professional affiliations spreading from the United Kingdom to which Australia also had access would have added to its ability to compete against the United States in a wider, if less important market.

Much of the publicity attendant on the US brain gain has concerned three types of occupations: scientists and technologists, in response to
US expenditure on defence, research and development and the growth needs of its technologically based economy; academics, in response to the upsurge in expenditure on tertiary education; and medical practitioners from developing countries, particularly Latin America. Scientific and technical personnel have provided the largest proportion of Australian net gain, and the Australian academic community includes a comparatively large proportion of immigrants, but the Australians have been less inclined or less able to skim off medical talent from developing countries.

The developing countries have not figured particularly prominently in the Australian inflow, anyway. Nor does the second important source of the US gain — the retention of students from developing countries — appear to have been exploited to the same extent, although Australia plays a similar, if smaller role as a training centre for Southeast Asia. It is possible though that the conditions of entry to the professions that create demarcations by reducing the effect of pull factors on certain potential migrants may have facilitated the United States gain of students and led to the dominance of medical practitioners in its gain from developing countries.

The nomination of certain qualifications only as being automatically acceptable by professional associations and statutory registration authorities cannot be dismissed as entirely monopolistic protectionism, as these bodies shoulder the very real responsibility of maintaining professional standards. The types of qualifications that are automatically acceptable in Australia appear to be the outcome of the country's political and social history, but the conditions of entry to the professions are likely to be more flexible than in the United States. Few if any of the qualifications awarded in developing countries would be automatically acceptable there and students who proceeded to acquire US qualifications may have seen this as the only possible stratagem for entering the US professional labour market. On the other hand, the loophole in the various US State legislation controlling the medical profession that permits the employment of unregistered immigrant practitioners as interns or residents in hospitals, provided they submit to preliminary written examinations before migration, would have facilitated the entry of doctors from developing countries.

Australia has preferred to limit the time students may remain after qualification and to recruit its immigrants from among those who already hold overseas qualifications. Its white Australia policy, though
considerably modified since the mid-sixties, has discouraged migration from developing countries. The selective relaxation of this policy embraces only those whose qualifications are known to be acceptable and enhances the British demarcation of its inflows.

While Australian immigration owed little to the pull of the US labour market, as did the Canadian, Australia did not escape a loss of domestic and immigrant professional manpower, but, unlike the Canadian, the outflow was not biased towards the United States. The Australian brain drain, particularly with regard to an exodus of the teaching profession to Canada, became a matter of concern from time to time, but the material available to measure it is too fragmentary to judge its overall consequence. Although it varies by occupation, a high propensity for international movement is characteristic of the highly skilled worker and building up now is a body of international evidence that points to a certain inevitability about two-way flows. The migration statistics show that, on the whole, Australia has been a net importer of brain power, increasingly so once official sights had been cleared with regard to improving the volume of the overseas intake.

If the Australian case is anything to judge by, the net has always been substantially smaller than the gross intake and can be a loss when the gross is recording increases. To assume that immigration statistics, national censuses or head counts of individual professions reveal gain distorts the picture. The proportion of annual gross intake that could be counted as net has also proved to be variable and this is probably so for the United States too. Control over emigration from either country is left to the immigration policies of receiving countries. Control over immigration into the United States follows from the quota, preference category and visa systems; into Australia, from a long-term objective of an annual one per cent addition to the population composed of unrestricted entry to the full fare-paying traveller from the United Kingdom and controls arising from the official procedures associated with the assisted passage schemes and landing permit systems for fare-paying non-British migrants. The overall Australian policy developed as one attempting to regulate migrant target numbers and to achieve appropriate migrants mixes — dependants, workers, skill types — according to the current or expected state of the economy. In years of full or over-full employment, migrant numbers and worker proportions have been increased and labour priorities given to those industries and occupations whose shortages have been deemed most acute; in times of
rising unemployment, migrant numbers and worker proportions have been reduced and reductions made in the proportions of skill types experiencing unemployment. The net gain of highly skilled workers has not been the sole outcome of international supply and demand forces operating on immigration and emigration within a defined international labour market, but was also the consequence of the application of immigration policy through control procedures aimed at balancing size and composition of migrant labour inputs according to the very short-term overall needs of the Australian labour market and to longer-term estimates of suitable population increments.

While the passage of time has seen an increasing expertise by the Australian authorities in attracting the highly skilled from abroad, a domestic educational policy also became defined that aligned itself with current international practices on these matters. During the period of acute international shortages of professional manpower, Australia extended and diversified its tertiary educational system in order to meet the educational aspirations of its own citizens and its own labour market requirements. The limitations on recruiting from abroad and the characteristics of net gain of migrant human capital have led to immigration being relegated to a marginal role in estimates of future manpower requirements and to its own educational institutions being regarded as the primary source.

Given the period of gestation that would have been involved in awaiting the output from training institutions, Australia's immigrant human capital was useful in immediately filling shortfalls in the market. It may have seemed appropriate to attempt a retrospective estimate of the gain, but the migration statistics are too imprecise to begin the exercise. If we turn to the national census statistics, which overstate the case; the highly skilled content of the postwar immigrant labour force proved, in 1966, to be lower than the Australian. It would seem that the immigration program has been more useful in providing comparatively larger proportions of lower skill types.

While the aim of the various studies in this book has been descriptive only, it would be pointless to assemble so much information without leading on to policy recommendations that would enable Australia to increase its intake of international human capital. However, the present international economic downturn and the present international relaxation in the demand for professional manpower would make such
recommendations irrelevant. Furthermore, the surplus human talent of its previous recruiting competitors has already appeared on the Australian market to swell the domestic over-supply. While it is possible that demand elements can alter dramatically and unforeseeably in the short run, few governments would consider it politically feasible to resolve the international disequilibria by deliberately curtailing educational opportunities for their own citizens. Given the time lags that educational systems take to adapt to changes in the labour market, it would seem that the present and foreseeable problem for Australia is and will be one of too much rather than the too little of the past.
Apendixes
### Appendix I

**Assisted settler arrivals in Australia of workers in professional occupations, by assisted migration program, 1950-1960**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community services</strong>a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>271</td>
<td>232</td>
<td>260</td>
<td>201</td>
<td>167</td>
<td>212</td>
<td>236</td>
<td>366</td>
<td>368</td>
<td>439</td>
<td>449</td>
</tr>
<tr>
<td>European Schemesd</td>
<td>818</td>
<td>150</td>
<td>21</td>
<td>15</td>
<td>21</td>
<td>26</td>
<td>42</td>
<td>176</td>
<td>63</td>
<td>78</td>
<td>101</td>
</tr>
<tr>
<td>Other schemesc</td>
<td>31</td>
<td>49</td>
<td>41</td>
<td>22</td>
<td>43</td>
<td>30</td>
<td>39</td>
<td>39</td>
<td>36</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td><strong>All schemes</strong></td>
<td>1120</td>
<td>431</td>
<td>322</td>
<td>238</td>
<td>231</td>
<td>268</td>
<td>317</td>
<td>581</td>
<td>467</td>
<td>585</td>
<td>611</td>
</tr>
<tr>
<td><strong>Scientists and technologists</strong>b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>87</td>
<td>53</td>
<td>50</td>
<td>29</td>
<td>21</td>
<td>33</td>
<td>34</td>
<td>50</td>
<td>36</td>
<td>44</td>
<td>55</td>
</tr>
<tr>
<td>European schemesd</td>
<td>97</td>
<td>15</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>26</td>
<td>10</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Other schemesc</td>
<td>34</td>
<td>22</td>
<td>9</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td><strong>All schemes</strong></td>
<td>218</td>
<td>90</td>
<td>62</td>
<td>30</td>
<td>25</td>
<td>37</td>
<td>47</td>
<td>62</td>
<td>51</td>
<td>61</td>
<td>97</td>
</tr>
<tr>
<td><strong>All other professional occupations</strong>c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>105</td>
<td>89</td>
<td>104</td>
<td>44</td>
<td>62</td>
<td>102</td>
<td>88</td>
<td>126</td>
<td>139</td>
<td>176</td>
<td>168</td>
</tr>
<tr>
<td>European schemesd</td>
<td>410</td>
<td>72</td>
<td>10</td>
<td>7</td>
<td>16</td>
<td>35</td>
<td>54</td>
<td>123</td>
<td>49</td>
<td>79</td>
<td>95</td>
</tr>
<tr>
<td>Other schemesc</td>
<td>32</td>
<td>28</td>
<td>29</td>
<td>13</td>
<td>11</td>
<td>16</td>
<td>14</td>
<td>19</td>
<td>11</td>
<td>35</td>
<td>48</td>
</tr>
<tr>
<td><strong>All schemes</strong></td>
<td>547</td>
<td>189</td>
<td>143</td>
<td>64</td>
<td>89</td>
<td>153</td>
<td>156</td>
<td>268</td>
<td>199</td>
<td>290</td>
<td>309</td>
</tr>
<tr>
<td>TOTAL PROFESSIONAL</td>
<td>1885</td>
<td>710</td>
<td>527</td>
<td>332</td>
<td>345</td>
<td>458</td>
<td>520</td>
<td>911</td>
<td>717</td>
<td>936</td>
<td>1017</td>
</tr>
<tr>
<td></td>
<td>Per cent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community services&lt;sup&gt;a&lt;/sup&gt;</td>
<td>59.4</td>
<td>60.7</td>
<td>61.1</td>
<td>71.7</td>
<td>67.0</td>
<td>58.5</td>
<td>61.0</td>
<td>63.8</td>
<td>65.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scientists and technologists&lt;sup&gt;b&lt;/sup&gt;</td>
<td>11.6</td>
<td>12.7</td>
<td>11.8</td>
<td>9.0</td>
<td>7.2</td>
<td>8.1</td>
<td>9.0</td>
<td>6.8</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All other professional occupations&lt;sup&gt;c&lt;/sup&gt;</td>
<td>29.0</td>
<td>26.6</td>
<td>27.1</td>
<td>19.3</td>
<td>25.8</td>
<td>33.4</td>
<td>30.0</td>
<td>29.4</td>
<td>27.8</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PROFESSIONAL</strong></td>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Number of professional workers as a percentage of all workers under:

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United Kingdom schemes</td>
<td>2.1</td>
<td>1.9</td>
<td>2.4</td>
<td>4.7</td>
<td>3.4</td>
<td>3.2</td>
<td>3.5</td>
<td>5.0</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>European schemes&lt;sup&gt;d&lt;/sup&gt;</td>
<td>3.4</td>
<td>3.2</td>
<td>0.2</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.7</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Other schemes&lt;sup&gt;e&lt;/sup&gt;</td>
<td>2.8</td>
<td>4.3</td>
<td>5.0</td>
<td>7.5</td>
<td>7.8</td>
<td>5.8</td>
<td>5.3</td>
<td>5.3</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>All schemes</td>
<td>3.0</td>
<td>2.4</td>
<td>1.6</td>
<td>2.8</td>
<td>1.5</td>
<td>1.4</td>
<td>2.0</td>
<td>2.0</td>
<td>2.8</td>
</tr>
</tbody>
</table>

<sup>a</sup> Including teachers, medical practitioners, dentists, physiotherapists, pharmacists and chemists, clergy, social workers, professional law.

<sup>b</sup> Including metallurgists, architects, surveyors, civil engineers, veterinary scientists.

<sup>c</sup> A portmanteau classification, which would have included, had they arrived, actors, actuaries, agrostologists, artists, authors, bacteriologists, biochemists, chiropodists, chiropractors, dancers, dieticians, entomologists, geologists, geophysicists, hand writing experts, herbalists, interpreters, journalists, marine biologists, meteorologists, mineralogists, musicians, naturopathologists, osteopaths, photographers, physicists, plant pathologists, politicians, psychologists, radiographers, radiophysicists, research workers and other scientists. Therefore, it could, possibly, include some who are not professional workers and, as far as the professional content is concerned, is impossible to allocate between the two preceding classifications.

<sup>d</sup> Including Australia/Malta Migration Agreement, Netherlands/Australia Migration Agreement, Refugee Scheme, Australia/Italy Migration Agreement, Australia/Germany Migration Agreement, Austrian Scheme, Greek Scheme, Danish Scheme, Spanish Scheme.

<sup>e</sup> Including Irish Scheme, Empire and Allied Ex-Servicemen Programme, General Assisted Passage Scheme.

Source: Classifications made from statistics supplied by Commonwealth Department of Immigration.
**Appendix I**

*Assisted settler arrivals in Australia of workers in professional occupations, by assisted migration program, 1961-1970*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Community services</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>590</td>
<td>677</td>
<td>957</td>
<td>1106</td>
<td>1173</td>
<td>1064</td>
<td>922</td>
<td>1166</td>
<td>1407</td>
<td>1503</td>
</tr>
<tr>
<td>European Schemes</td>
<td>99</td>
<td>90</td>
<td>78</td>
<td>84</td>
<td>112</td>
<td>114</td>
<td>121</td>
<td>210</td>
<td>194</td>
<td>146</td>
</tr>
<tr>
<td>Other schemes</td>
<td>125</td>
<td>102</td>
<td>123</td>
<td>160</td>
<td>140</td>
<td>178</td>
<td>274</td>
<td>361</td>
<td>486</td>
<td>657</td>
</tr>
<tr>
<td><strong>All schemes</strong></td>
<td>814</td>
<td>869</td>
<td>1158</td>
<td>1350</td>
<td>1425</td>
<td>1356</td>
<td>1317</td>
<td>1737</td>
<td>2087</td>
<td>2306</td>
</tr>
<tr>
<td><em>Scientists and technologists</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>265</td>
<td>320</td>
<td>535</td>
<td>783</td>
<td>951</td>
<td>771</td>
<td>758</td>
<td>874</td>
<td>1017</td>
<td>1113</td>
</tr>
<tr>
<td>European schemes</td>
<td>54</td>
<td>42</td>
<td>27</td>
<td>23</td>
<td>59</td>
<td>40</td>
<td>36</td>
<td>95</td>
<td>107</td>
<td>79</td>
</tr>
<tr>
<td>Other schemes</td>
<td>68</td>
<td>34</td>
<td>51</td>
<td>60</td>
<td>89</td>
<td>104</td>
<td>156</td>
<td>206</td>
<td>249</td>
<td>340</td>
</tr>
<tr>
<td><strong>All schemes</strong></td>
<td>367</td>
<td>396</td>
<td>613</td>
<td>866</td>
<td>1099</td>
<td>915</td>
<td>950</td>
<td>1173</td>
<td>1373</td>
<td>1532</td>
</tr>
<tr>
<td><strong>TOTAL PROFESSIONAL</strong></td>
<td>1181</td>
<td>1265</td>
<td>1771</td>
<td>2216</td>
<td>2524</td>
<td>2271</td>
<td>2267</td>
<td>2910</td>
<td>3460</td>
<td>3838</td>
</tr>
</tbody>
</table>
### Appendix I (continued)

**Per cent**

<table>
<thead>
<tr>
<th></th>
<th>68.9</th>
<th>68.7</th>
<th>65.4</th>
<th>60.9</th>
<th>56.5</th>
<th>59.7</th>
<th>58.1</th>
<th>59.7</th>
<th>60.3</th>
<th>60.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community services(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientists and technologists(b, c)</td>
<td>31.1</td>
<td>31.3</td>
<td>34.6</td>
<td>39.1</td>
<td>43.5</td>
<td>40.3</td>
<td>41.9</td>
<td>40.3</td>
<td>39.7</td>
<td>39.9</td>
</tr>
</tbody>
</table>

**TOTAL PROFESSIONAL**

<table>
<thead>
<tr>
<th></th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
<th>100.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of professional workers as a percentage of all workers under:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom schemes</td>
<td>6.0</td>
<td>7.7</td>
<td>7.2</td>
<td>7.1</td>
<td>6.6</td>
<td>6.2</td>
<td>6.4</td>
<td>6.9</td>
<td>7.5</td>
<td>8.6</td>
</tr>
<tr>
<td>European schemes(e)</td>
<td>1.1</td>
<td>1.7</td>
<td>1.3</td>
<td>1.1</td>
<td>1.9</td>
<td>2.0</td>
<td>2.4</td>
<td>2.8</td>
<td>2.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Other schemes(d)</td>
<td>12.9</td>
<td>18.2</td>
<td>14.4</td>
<td>15.7</td>
<td>10.3</td>
<td>8.1</td>
<td>7.6</td>
<td>7.0</td>
<td>7.2</td>
<td>8.0</td>
</tr>
<tr>
<td>All schemes</td>
<td>4.3</td>
<td>5.9</td>
<td>6.0</td>
<td>5.9</td>
<td>5.8</td>
<td>5.6</td>
<td>5.9</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

\(a\) Including medical practitioners, dentists, other professional medical workers, teachers, clergy, professional law, and all other professional workers not elsewhere classified.

\(b\) Including architects, surveyors, professional engineers, chemists (not pharmaceutical) and scientists.

\(c\) Including Australia/Malta Migration Agreement, Danish Scheme, Austrian Scheme, Belgian Scheme, Netherlands/Australia Migration Agreement, Australia/Germany Migration Agreement, Greek Scheme, Australia/Italy Migration Agreement, Refugees, Spanish Scheme, Turkish Scheme.

\(d\) Including General Assisted Passage Scheme, Special Passage Assistance Programme, United States Passage Assistance Programme.

\(e\) Architects, draftsmen and surveyors are presented as a portmanteau classification in the Immigration statistics. An approximate adjustment to exclude draftsmen was made in the following way. The total of architects, draftsmen and surveyors entering Australia in 1960 (when they were recorded separately under the 1947 classification) were summed for United Kingdom Schemes, European Schemes and Other Schemes. The proportionate yearly change for each year from 1960 to 1970 was then calculated for the group 'Architects, draftsmen, surveyors' and the yearly rates of increase or decrease were applied to the preceding year's estimate of draftsmen, commencing from 1960 when the actual number of draftsmen entering under the major divisions of the schemes were known.

**Source:** Classifications made from statistics supplied by Commonwealth Department of Immigration.
### Appendix II

**Professions for which statutory requirements exist in the Australian Capital Territory and the Northern Territory**

<table>
<thead>
<tr>
<th>Profession</th>
<th>Overseas qualifications entitling an applicant to registration</th>
<th><strong>AUSTRALIAN CAPITAL TERRITORY</strong></th>
<th><strong>NORTHERN TERRITORY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accountancy</strong></td>
<td></td>
<td><strong>As at August 1970</strong></td>
<td><strong>Similar to A.C.T.</strong></td>
</tr>
<tr>
<td>Taxation accounting</td>
<td>None. Applicants must first pass a prescribed examination in Australian Commonwealth Income Tax Law and Practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company auditing and liquidating</td>
<td>None. Australian professional associations used as accrediting agencies. Basic requirement is membership of either the Australian Society of Accountants or the Institute of Chartered Accountants in Australia. Overseas bodies whose members are acceptable for membership of either or both of these professional associations are located in the United Kingdom, Ireland, United States of America, South Africa, Canada and New Zealand.</td>
<td><strong>Similar to A.C.T.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td>Any overseas qualification, provided the standard of training and competence is at least equivalent to the Australian.</td>
<td><strong>As at January 1972</strong></td>
<td><strong>None.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professional association used as accrediting agency. Registration requirement is Associate Membership of the Royal Australian Institute of Architects. In turn, the Royal Australian Institute of Architects uses the Royal Institute of British Architects, the Commonwealth Association of Architects and the National Architectural Accrediting Board of the United States as accrediting agencies.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix II (continued)

<table>
<thead>
<tr>
<th>Profession</th>
<th>Overseas qualifications entitling an applicant to registration</th>
<th>AUSTRALIAN CAPITAL TERRITORY</th>
<th>NORTHERN TERRITORY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dentistry</strong></td>
<td>As at January 1972&lt;br&gt;Any overseas qualification, provided its standing is at least equivalent to the Australian, and that there is reciprocity of registration between the country in which the qualification was obtained and the A.C.T. The reciprocity condition limits acceptable qualifications to those appearing on the list of the General Dental Council of the United Kingdom.</td>
<td></td>
<td>Any overseas qualification provided its standing is at least equivalent to the Australian.</td>
</tr>
<tr>
<td><strong>Law</strong></td>
<td>As at January 1970&lt;br&gt;Qualifications admitting registration in the United Kingdom, Northern Ireland or New Zealand, after six months residence in Australia. The applicant must be a British subject.</td>
<td>None.</td>
<td>Registration requirement is a qualification admitting registration as a legal practitioner in an Australian State or in the Australian Capital Territory.</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td>As at January 1972&lt;br&gt;Qualifications eligible for registration under the Imperial Medical Acts.</td>
<td>Any overseas qualification provided its standing is at least equivalent to the Australian.</td>
<td></td>
</tr>
<tr>
<td><strong>Optometry</strong></td>
<td>As at January 1972&lt;br&gt;Evidence of registration as an optometrist within the British Commonwealth where the standards of qualification are equivalent to the Australian and where optometrists registered under the A.C.T. Ordinance are admitted to the register or rolls.</td>
<td>Evidence of registration as an optometrist within the British Commonwealth where the standard of qualification is equivalent to the Australian and where optometrists registered under the Northern Territory Ordinance are admitted to the register or rolls.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix II (continued)

<table>
<thead>
<tr>
<th>Profession</th>
<th>Overseas qualifications entitling an applicant to registration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>AUSTRALIAN CAPITAL TERRITORY</strong></td>
</tr>
<tr>
<td></td>
<td><strong>NORTHERN TERRITORY</strong></td>
</tr>
<tr>
<td><strong>As at January 1972</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pharmacy</strong></td>
<td>Certificate of Registration from the</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Society of Great Britain, or the</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Society of Northern Ireland, or</td>
</tr>
<tr>
<td></td>
<td>the Pharmaceutical Council of New Zealand, provided the</td>
</tr>
<tr>
<td></td>
<td>applicant is a British subject. The</td>
</tr>
<tr>
<td></td>
<td>Pharmacy Board has discretionary power, applicable to British</td>
</tr>
<tr>
<td></td>
<td>subjects only, to register any applicant with a certificate</td>
</tr>
<tr>
<td></td>
<td>from an appropriate college or board of pharmacy.</td>
</tr>
<tr>
<td></td>
<td>Certificate of Registration from the</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Society of Great Britain, or the</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Council of New Zealand, provided the applicant</td>
</tr>
<tr>
<td></td>
<td>is a British subject. The Pharmacy Board has discretionary</td>
</tr>
<tr>
<td></td>
<td>power, applicable to British subjects only, to register any</td>
</tr>
<tr>
<td></td>
<td>applicant with a certificate from an appropriate college or</td>
</tr>
<tr>
<td></td>
<td>board of pharmacy.</td>
</tr>
<tr>
<td><strong>Surveying</strong></td>
<td>Licensed land surveyors of the Survey Board of New Zealand</td>
</tr>
<tr>
<td></td>
<td>only. Other applicants with overseas qualifications equivalent</td>
</tr>
<tr>
<td></td>
<td>in standing to the Australian are required to pass practical</td>
</tr>
<tr>
<td></td>
<td>examinations and a written examination in Laws and</td>
</tr>
<tr>
<td></td>
<td>Regulations, plus a minimum of 6 months or a maximum of 2</td>
</tr>
<tr>
<td></td>
<td>years service under a licensed surveyor in Australia.</td>
</tr>
<tr>
<td><strong>Veterinary Science</strong></td>
<td>Qualifications obtained from universities or colleges</td>
</tr>
<tr>
<td></td>
<td>recognised by the Royal College of Veterinary Surgeons or</td>
</tr>
<tr>
<td></td>
<td>qualifications accredited by the American Veterinary Medical</td>
</tr>
<tr>
<td></td>
<td>Association.</td>
</tr>
<tr>
<td><strong>As at January 1972</strong></td>
<td>Similar to A.C.T.</td>
</tr>
<tr>
<td><strong>As at January 1972</strong></td>
<td>Similar to A.C.T.</td>
</tr>
</tbody>
</table>

**Sources:** The relevant Ordinances. Committee on Overseas Professional Qualifications, *Accountancy*, Canberra, 1970

### Appendix III

#### A

**Migration of professional and semi-professional workers, Australia 1948-60**

Permanent and long-term movement: arrivals, departures, net gain

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>617</td>
<td>1342</td>
<td>1165</td>
<td>814</td>
<td>796</td>
<td>683</td>
<td>662</td>
<td>757</td>
<td>906</td>
<td>1027</td>
<td>1106</td>
<td>1346</td>
<td>1539</td>
</tr>
<tr>
<td>dep</td>
<td>301</td>
<td>521</td>
<td>563</td>
<td>559</td>
<td>611</td>
<td>590</td>
<td>786</td>
<td>821</td>
<td>860</td>
<td>1031</td>
<td>1166</td>
<td>1128</td>
<td>1161</td>
</tr>
<tr>
<td>gain</td>
<td>316</td>
<td>821</td>
<td>602</td>
<td>255</td>
<td>185</td>
<td>93</td>
<td>-124</td>
<td>-64</td>
<td>46</td>
<td>4</td>
<td>-60</td>
<td>218</td>
<td>378</td>
</tr>
<tr>
<td>Medical practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>199</td>
<td>346</td>
<td>248</td>
<td>255</td>
<td>161</td>
<td>154</td>
<td>159</td>
<td>192</td>
<td>290</td>
<td>430</td>
<td>381</td>
<td>395</td>
<td>408</td>
</tr>
<tr>
<td>dep</td>
<td>110</td>
<td>140</td>
<td>154</td>
<td>143</td>
<td>196</td>
<td>194</td>
<td>271</td>
<td>262</td>
<td>230</td>
<td>245</td>
<td>265</td>
<td>240</td>
<td>246</td>
</tr>
<tr>
<td>gain</td>
<td>89</td>
<td>206</td>
<td>94</td>
<td>92</td>
<td>95</td>
<td>-40</td>
<td>-112</td>
<td>-70</td>
<td>60</td>
<td>185</td>
<td>116</td>
<td>155</td>
<td>162</td>
</tr>
<tr>
<td>Dentists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>65</td>
<td>147</td>
<td>90</td>
<td>48</td>
<td>47</td>
<td>48</td>
<td>58</td>
<td>63</td>
<td>61</td>
<td>109</td>
<td>98</td>
<td>101</td>
<td>84</td>
</tr>
<tr>
<td>dep</td>
<td>14</td>
<td>29</td>
<td>45</td>
<td>88</td>
<td>85</td>
<td>72</td>
<td>81</td>
<td>107</td>
<td>104</td>
<td>149</td>
<td>148</td>
<td>134</td>
<td>109</td>
</tr>
<tr>
<td>gain</td>
<td>51</td>
<td>118</td>
<td>45</td>
<td>-40</td>
<td>-38</td>
<td>-24</td>
<td>-23</td>
<td>-44</td>
<td>-43</td>
<td>-40</td>
<td>-50</td>
<td>-33</td>
<td>-25</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>27</td>
<td>48</td>
<td>58</td>
<td>60</td>
<td>53</td>
<td>71</td>
<td>66</td>
<td>55</td>
<td>51</td>
<td>74</td>
<td>66</td>
<td>65</td>
<td>82</td>
</tr>
<tr>
<td>dep</td>
<td>22</td>
<td>62</td>
<td>58</td>
<td>62</td>
<td>56</td>
<td>53</td>
<td>53</td>
<td>74</td>
<td>93</td>
<td>73</td>
<td>95</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>gain</td>
<td>5</td>
<td>-14</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>18</td>
<td>15</td>
<td>19</td>
<td>42</td>
<td>1</td>
<td>29</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>946</td>
<td>1900</td>
<td>1781</td>
<td>1217</td>
<td>1298</td>
<td>1065</td>
<td>999</td>
<td>1255</td>
<td>1382</td>
<td>1472</td>
<td>1457</td>
<td>1649</td>
<td>1608</td>
</tr>
<tr>
<td>dep</td>
<td>380</td>
<td>732</td>
<td>889</td>
<td>862</td>
<td>1012</td>
<td>966</td>
<td>1073</td>
<td>1115</td>
<td>1037</td>
<td>1060</td>
<td>1255</td>
<td>1239</td>
<td>1347</td>
</tr>
<tr>
<td>gain</td>
<td>566</td>
<td>1168</td>
<td>892</td>
<td>355</td>
<td>286</td>
<td>99</td>
<td>-74</td>
<td>140</td>
<td>345</td>
<td>412</td>
<td>204</td>
<td>410</td>
<td>261</td>
</tr>
<tr>
<td>Pharmacists, Chemists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>188</td>
<td>411</td>
<td>358</td>
<td>240</td>
<td>193</td>
<td>161</td>
<td>175</td>
<td>182</td>
<td>195</td>
<td>283</td>
<td>257</td>
<td>255</td>
<td>260</td>
</tr>
<tr>
<td>dep</td>
<td>64</td>
<td>110</td>
<td>140</td>
<td>142</td>
<td>154</td>
<td>133</td>
<td>183</td>
<td>186</td>
<td>194</td>
<td>221</td>
<td>216</td>
<td>184</td>
<td>182</td>
</tr>
<tr>
<td>gain</td>
<td>124</td>
<td>301</td>
<td>218</td>
<td>98</td>
<td>39</td>
<td>28</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>62</td>
<td>41</td>
<td>71</td>
<td>78</td>
</tr>
<tr>
<td>Veterinary surgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>28</td>
<td>56</td>
<td>41</td>
<td>31</td>
<td>13</td>
<td>17</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>22</td>
<td>19</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>dep</td>
<td>17</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>20</td>
<td>23</td>
<td>13</td>
<td>20</td>
<td>17</td>
<td>22</td>
<td>17</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>gain</td>
<td>11</td>
<td>44</td>
<td>29</td>
<td>19</td>
<td>-7</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix III (A) (continued)

<table>
<thead>
<tr>
<th>Profession</th>
<th>arr</th>
<th>dep</th>
<th>gain</th>
<th>arr</th>
<th>dep</th>
<th>gain</th>
<th>arr</th>
<th>dep</th>
<th>gain</th>
<th>arr</th>
<th>dep</th>
<th>gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clergy, Religious workers etc.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>387</td>
<td>469</td>
<td>382</td>
<td>455</td>
<td>388</td>
<td>425</td>
<td>442</td>
<td>422</td>
<td>476</td>
<td>378</td>
<td>488</td>
<td>454</td>
</tr>
<tr>
<td>dep</td>
<td>369</td>
<td>421</td>
<td>348</td>
<td>348</td>
<td>397</td>
<td>440</td>
<td>455</td>
<td>456</td>
<td>497</td>
<td>376</td>
<td>374</td>
<td>352</td>
</tr>
<tr>
<td>gain</td>
<td>18</td>
<td>48</td>
<td>34</td>
<td>107</td>
<td>9</td>
<td>15</td>
<td>13</td>
<td>34</td>
<td>21</td>
<td>2</td>
<td>114</td>
<td>102</td>
</tr>
<tr>
<td><strong>Social workers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>58</td>
<td>60</td>
<td>67</td>
<td>54</td>
<td>92</td>
<td>53</td>
<td>36</td>
<td>49</td>
<td>77</td>
<td>82</td>
<td>103</td>
<td>92</td>
</tr>
<tr>
<td>dep</td>
<td>64</td>
<td>59</td>
<td>48</td>
<td>29</td>
<td>70</td>
<td>46</td>
<td>43</td>
<td>48</td>
<td>69</td>
<td>102</td>
<td>99</td>
<td>68</td>
</tr>
<tr>
<td>gain</td>
<td>6</td>
<td>1</td>
<td>19</td>
<td>25</td>
<td>22</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td><strong>Solicitors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>52</td>
<td>145</td>
<td>106</td>
<td>52</td>
<td>33</td>
<td>28</td>
<td>38</td>
<td>27</td>
<td>35</td>
<td>74</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>dep</td>
<td>10</td>
<td>14</td>
<td>31</td>
<td>22</td>
<td>38</td>
<td>32</td>
<td>42</td>
<td>42</td>
<td>45</td>
<td>40</td>
<td>45</td>
<td>37</td>
</tr>
<tr>
<td>gain</td>
<td>42</td>
<td>131</td>
<td>75</td>
<td>30</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>15</td>
<td>10</td>
<td>34</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td><strong>Magistrates, Judges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>dep</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>gain</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Metallurgists</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>12</td>
<td>24</td>
<td>16</td>
<td>20</td>
<td>10</td>
<td>17</td>
<td>10</td>
<td>22</td>
<td>23</td>
<td>21</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>dep</td>
<td>14</td>
<td>16</td>
<td>19</td>
<td>13</td>
<td>18</td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>24</td>
<td>21</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>gain</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>23</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td><strong>Architects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>69</td>
<td>147</td>
<td>113</td>
<td>117</td>
<td>101</td>
<td>66</td>
<td>59</td>
<td>79</td>
<td>97</td>
<td>100</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>dep</td>
<td>28</td>
<td>28</td>
<td>61</td>
<td>70</td>
<td>64</td>
<td>68</td>
<td>56</td>
<td>70</td>
<td>77</td>
<td>75</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>gain</td>
<td>41</td>
<td>119</td>
<td>52</td>
<td>47</td>
<td>37</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>20</td>
<td>25</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td><strong>Surveyors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>51</td>
<td>94</td>
<td>114</td>
<td>113</td>
<td>70</td>
<td>59</td>
<td>51</td>
<td>70</td>
<td>99</td>
<td>79</td>
<td>79</td>
<td>103</td>
</tr>
<tr>
<td>dep</td>
<td>18</td>
<td>15</td>
<td>24</td>
<td>27</td>
<td>40</td>
<td>47</td>
<td>46</td>
<td>55</td>
<td>54</td>
<td>54</td>
<td>47</td>
<td>48</td>
</tr>
<tr>
<td>gain</td>
<td>33</td>
<td>79</td>
<td>90</td>
<td>86</td>
<td>30</td>
<td>12</td>
<td>5</td>
<td>15</td>
<td>45</td>
<td>25</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td><strong>Draftsmen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>171</td>
<td>541</td>
<td>349</td>
<td>189</td>
<td>164</td>
<td>74</td>
<td>107</td>
<td>121</td>
<td>147</td>
<td>212</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>dep</td>
<td>36</td>
<td>56</td>
<td>61</td>
<td>54</td>
<td>70</td>
<td>87</td>
<td>106</td>
<td>93</td>
<td>107</td>
<td>110</td>
<td>97</td>
<td>102</td>
</tr>
<tr>
<td>gain</td>
<td>135</td>
<td>285</td>
<td>288</td>
<td>135</td>
<td>94</td>
<td>13</td>
<td>1</td>
<td>28</td>
<td>40</td>
<td>102</td>
<td>101</td>
<td>148</td>
</tr>
<tr>
<td><strong>Civil engineers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arr</td>
<td>-</td>
<td>139</td>
<td>159</td>
<td>128</td>
<td>114</td>
<td>53</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>dep</td>
<td>-</td>
<td>30</td>
<td>45</td>
<td>50</td>
<td>84</td>
<td>76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>gain</td>
<td>-</td>
<td>109</td>
<td>114</td>
<td>78</td>
<td>30</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Appendix III (A) (continued)

<table>
<thead>
<tr>
<th>Artists</th>
<th>arr</th>
<th>85</th>
<th>139</th>
<th>164</th>
<th>146</th>
<th>116</th>
<th>80</th>
<th>99</th>
<th>89</th>
<th>98</th>
<th>97</th>
<th>91</th>
<th>154</th>
<th>134</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dep</td>
<td>42</td>
<td>71</td>
<td>77</td>
<td>68</td>
<td>80</td>
<td>84</td>
<td>100</td>
<td>75</td>
<td>83</td>
<td>87</td>
<td>98</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>43</td>
<td>68</td>
<td>87</td>
<td>78</td>
<td>36</td>
<td>-4</td>
<td>1</td>
<td>14</td>
<td>15</td>
<td>10</td>
<td>7</td>
<td>82</td>
<td>54</td>
</tr>
<tr>
<td>Photographers</td>
<td>arr</td>
<td>72</td>
<td>189</td>
<td>211</td>
<td>128</td>
<td>96</td>
<td>50</td>
<td>67</td>
<td>98</td>
<td>97</td>
<td>111</td>
<td>91</td>
<td>121</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>17</td>
<td>19</td>
<td>29</td>
<td>30</td>
<td>42</td>
<td>43</td>
<td>42</td>
<td>39</td>
<td>54</td>
<td>56</td>
<td>58</td>
<td>33</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>55</td>
<td>170</td>
<td>182</td>
<td>98</td>
<td>54</td>
<td>7</td>
<td>25</td>
<td>59</td>
<td>68</td>
<td>55</td>
<td>33</td>
<td>88</td>
<td>105</td>
</tr>
<tr>
<td>Journalists, Authors</td>
<td>arr</td>
<td>137</td>
<td>214</td>
<td>212</td>
<td>166</td>
<td>116</td>
<td>104</td>
<td>134</td>
<td>155</td>
<td>176</td>
<td>154</td>
<td>160</td>
<td>180</td>
<td>208</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>100</td>
<td>109</td>
<td>104</td>
<td>122</td>
<td>124</td>
<td>98</td>
<td>133</td>
<td>132</td>
<td>141</td>
<td>160</td>
<td>128</td>
<td>103</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>37</td>
<td>105</td>
<td>108</td>
<td>44</td>
<td>-8</td>
<td>6</td>
<td>21</td>
<td>35</td>
<td>-6</td>
<td>32</td>
<td>77</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Musicians</td>
<td>arr</td>
<td>101</td>
<td>211</td>
<td>157</td>
<td>103</td>
<td>110</td>
<td>61</td>
<td>85</td>
<td>65</td>
<td>90</td>
<td>103</td>
<td>118</td>
<td>101</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>46</td>
<td>64</td>
<td>81</td>
<td>74</td>
<td>87</td>
<td>72</td>
<td>71</td>
<td>88</td>
<td>58</td>
<td>72</td>
<td>74</td>
<td>62</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>55</td>
<td>147</td>
<td>76</td>
<td>29</td>
<td>23</td>
<td>11</td>
<td>12</td>
<td>23</td>
<td>32</td>
<td>31</td>
<td>44</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>Actors, Dancers</td>
<td>arr</td>
<td>126</td>
<td>198</td>
<td>186</td>
<td>128</td>
<td>107</td>
<td>98</td>
<td>118</td>
<td>116</td>
<td>146</td>
<td>134</td>
<td>141</td>
<td>194</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>122</td>
<td>113</td>
<td>110</td>
<td>86</td>
<td>158</td>
<td>131</td>
<td>139</td>
<td>129</td>
<td>129</td>
<td>94</td>
<td>147</td>
<td>137</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>4</td>
<td>85</td>
<td>76</td>
<td>42</td>
<td>-31</td>
<td>-33</td>
<td>-21</td>
<td>-13</td>
<td>17</td>
<td>40</td>
<td>6</td>
<td>57</td>
<td>30</td>
</tr>
<tr>
<td>Politicians</td>
<td>arr</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Other professional and semi-professional workers</td>
<td>arr</td>
<td>270</td>
<td>290</td>
<td>341</td>
<td>254</td>
<td>280</td>
<td>269</td>
<td>328</td>
<td>412</td>
<td>383</td>
<td>458</td>
<td>483</td>
<td>601</td>
<td>667</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>254</td>
<td>166</td>
<td>180</td>
<td>194</td>
<td>243</td>
<td>204</td>
<td>359</td>
<td>416</td>
<td>372</td>
<td>429</td>
<td>462</td>
<td>380</td>
<td>362</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>6</td>
<td>124</td>
<td>161</td>
<td>60</td>
<td>37</td>
<td>65</td>
<td>-31</td>
<td>4</td>
<td>11</td>
<td>29</td>
<td>211</td>
<td>221</td>
<td>305</td>
</tr>
<tr>
<td>TOTAL</td>
<td>arr</td>
<td>3667</td>
<td>6916</td>
<td>6321</td>
<td>4706</td>
<td>4362</td>
<td>3589</td>
<td>3689</td>
<td>4262</td>
<td>4793</td>
<td>5519</td>
<td>5410</td>
<td>6295</td>
<td>6618</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>2044</td>
<td>2790</td>
<td>3081</td>
<td>3061</td>
<td>3632</td>
<td>3426</td>
<td>4063</td>
<td>4249</td>
<td>4187</td>
<td>4599</td>
<td>4893</td>
<td>4513</td>
<td>4712</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>1623</td>
<td>4126</td>
<td>3240</td>
<td>1645</td>
<td>730</td>
<td>168</td>
<td>-374</td>
<td>18</td>
<td>606</td>
<td>920</td>
<td>517</td>
<td>1782</td>
<td>1906</td>
</tr>
</tbody>
</table>

Source: Arrival and departure figures from Commonwealth Bureau of Census and Statistics.
### Appendix III

#### B

**Migration of professional, technical and related workers, Australia, 1961-70**

Permutation and long-term movement: arrivals, departures, net gain

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects, Draftsmen, Surveyors</td>
<td>arr</td>
<td>601</td>
<td>510</td>
<td>700</td>
<td>893</td>
<td>907</td>
<td>951</td>
<td>945</td>
<td>1174</td>
<td>1436</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>331</td>
<td>386</td>
<td>409</td>
<td>515</td>
<td>612</td>
<td>766</td>
<td>761</td>
<td>727</td>
<td>761</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>270</td>
<td>124</td>
<td>291</td>
<td>378</td>
<td>295</td>
<td>185</td>
<td>184</td>
<td>447</td>
<td>675</td>
</tr>
<tr>
<td>Professional engineers</td>
<td>arr</td>
<td>623</td>
<td>672</td>
<td>812</td>
<td>1058</td>
<td>1506</td>
<td>1364</td>
<td>1502</td>
<td>1766</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>263</td>
<td>311</td>
<td>887</td>
<td>407</td>
<td>680</td>
<td>765</td>
<td>845</td>
<td>780</td>
<td>880</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>360</td>
<td>561</td>
<td>425</td>
<td>651</td>
<td>826</td>
<td>599</td>
<td>657</td>
<td>986</td>
<td>1133</td>
</tr>
<tr>
<td>Chemists, not pharmaceutical</td>
<td>arr</td>
<td>103</td>
<td>91</td>
<td>147</td>
<td>146</td>
<td>189</td>
<td>189</td>
<td>215</td>
<td>207</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>79</td>
<td>75</td>
<td>116</td>
<td>106</td>
<td>168</td>
<td>155</td>
<td>218</td>
<td>177</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>24</td>
<td>16</td>
<td>31</td>
<td>40</td>
<td>21</td>
<td>34</td>
<td>3</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>Scientists</td>
<td>arr</td>
<td>444</td>
<td>569</td>
<td>551</td>
<td>584</td>
<td>715</td>
<td>842</td>
<td>832</td>
<td>1024</td>
<td>1178</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>260</td>
<td>268</td>
<td>378</td>
<td>441</td>
<td>484</td>
<td>597</td>
<td>682</td>
<td>674</td>
<td>739</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>184</td>
<td>301</td>
<td>173</td>
<td>143</td>
<td>231</td>
<td>245</td>
<td>150</td>
<td>350</td>
<td>439</td>
</tr>
<tr>
<td>Medical practitioners</td>
<td>arr</td>
<td>363</td>
<td>443</td>
<td>469</td>
<td>559</td>
<td>521</td>
<td>569</td>
<td>578</td>
<td>630</td>
<td>794</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>296</td>
<td>317</td>
<td>310</td>
<td>366</td>
<td>420</td>
<td>465</td>
<td>573</td>
<td>544</td>
<td>632</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>.67</td>
<td>126</td>
<td>159</td>
<td>173</td>
<td>101</td>
<td>104</td>
<td>5</td>
<td>86</td>
<td>162</td>
</tr>
<tr>
<td>Dentists</td>
<td>arr</td>
<td>98</td>
<td>100</td>
<td>112</td>
<td>110</td>
<td>149</td>
<td>148</td>
<td>154</td>
<td>132</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>109</td>
<td>128</td>
<td>98</td>
<td>108</td>
<td>101</td>
<td>80</td>
<td>109</td>
<td>121</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>-11</td>
<td>-28</td>
<td>14</td>
<td>2</td>
<td>48</td>
<td>68</td>
<td>45</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>Other professional medical workers, Technicians</td>
<td>arr</td>
<td>472</td>
<td>441</td>
<td>504</td>
<td>520</td>
<td>588</td>
<td>561</td>
<td>591</td>
<td>763</td>
<td>857</td>
</tr>
<tr>
<td></td>
<td>dep</td>
<td>402</td>
<td>362</td>
<td>404</td>
<td>478</td>
<td>499</td>
<td>514</td>
<td>531</td>
<td>557</td>
<td>635</td>
</tr>
<tr>
<td></td>
<td>gain</td>
<td>70</td>
<td>79</td>
<td>100</td>
<td>42</td>
<td>89</td>
<td>47</td>
<td>60</td>
<td>206</td>
<td>222</td>
</tr>
</tbody>
</table>
### Appendix III (B) (continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Arrivals</th>
<th>Departures</th>
<th>Gain</th>
<th>Losses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nurses</strong></td>
<td>1729</td>
<td>1647</td>
<td>82</td>
<td>238</td>
<td>2586</td>
</tr>
<tr>
<td><strong>Technicians and Technical assistants</strong></td>
<td>468</td>
<td>218</td>
<td>250</td>
<td>247</td>
<td>451</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td>1663</td>
<td>1558</td>
<td>105</td>
<td>121</td>
<td>2334</td>
</tr>
<tr>
<td><strong>Clergy, Religious workers etc.</strong></td>
<td>425</td>
<td>394</td>
<td>31</td>
<td>7</td>
<td>505</td>
</tr>
<tr>
<td><strong>Professional law</strong></td>
<td>60</td>
<td>57</td>
<td>3</td>
<td>-5</td>
<td>7</td>
</tr>
<tr>
<td><strong>Artists, Writers, Entertainers</strong></td>
<td>728</td>
<td>644</td>
<td>84</td>
<td>255</td>
<td>1283</td>
</tr>
<tr>
<td><strong>Other professional, technical and related workers</strong></td>
<td>734</td>
<td>533</td>
<td>201</td>
<td>322</td>
<td>956</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8511</td>
<td>6791</td>
<td>1720</td>
<td>2107</td>
<td>2253</td>
</tr>
</tbody>
</table>

*Source:* Arrival and departure figures from Commonwealth Bureau of Census and Statistics.
### Appendix IV

**Labour force in professional occupations, by birthplace and length of residence in Australia, Census, 1966**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Code Numbera</th>
<th>Total (all birth-places) No.</th>
<th>Foreign born Total No.</th>
<th>Per cent of total in occupation %</th>
<th>Foreign born (1-18 years residence) Total No.</th>
<th>Per cent of total in occupation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects</td>
<td>001</td>
<td>3,823</td>
<td>1,165</td>
<td>30.5</td>
<td>837</td>
<td>21.9</td>
</tr>
<tr>
<td>Engineers</td>
<td>002-5</td>
<td>24,654</td>
<td>7,631</td>
<td>31.0</td>
<td>5,519</td>
<td>22.4</td>
</tr>
<tr>
<td>Metallurgists</td>
<td>006</td>
<td>1,266</td>
<td>289</td>
<td>22.8</td>
<td>209</td>
<td>16.5</td>
</tr>
<tr>
<td>Surveyors</td>
<td>009</td>
<td>2,014</td>
<td>363</td>
<td>18.0</td>
<td>270</td>
<td>13.4</td>
</tr>
<tr>
<td>Chemists, not pharmaceutical</td>
<td>015</td>
<td>4,689</td>
<td>1,390</td>
<td>29.6</td>
<td>1,056</td>
<td>22.5</td>
</tr>
<tr>
<td>Physicists</td>
<td>014</td>
<td>366</td>
<td>125</td>
<td>34.2</td>
<td>76</td>
<td>20.8</td>
</tr>
<tr>
<td>Geologists and geophysicists</td>
<td>015</td>
<td>1,518</td>
<td>623</td>
<td>47.3</td>
<td>430</td>
<td>32.6</td>
</tr>
<tr>
<td>Meteorologists</td>
<td>016</td>
<td>270</td>
<td>52</td>
<td>19.3</td>
<td>39</td>
<td>14.4</td>
</tr>
<tr>
<td>Physical scientists not elsewhere classified</td>
<td>017</td>
<td>3,489</td>
<td>1,206</td>
<td>34.6</td>
<td>914</td>
<td>26.2</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>020</td>
<td>947</td>
<td>280</td>
<td>29.6</td>
<td>205</td>
<td>21.6</td>
</tr>
<tr>
<td>Biological and animal scientists not elsewhere classified</td>
<td>021</td>
<td>1,557</td>
<td>318</td>
<td>23.4</td>
<td>223</td>
<td>16.4</td>
</tr>
</tbody>
</table>
Appendix IV (continued)

<table>
<thead>
<tr>
<th>Professional Category</th>
<th>Code</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomists, foresters, horticultural scientists</td>
<td>022</td>
<td>2,258</td>
<td>502</td>
<td>22.2</td>
<td>357</td>
<td>15.8</td>
<td></td>
</tr>
<tr>
<td>Medical practitioners</td>
<td>025</td>
<td>13,697</td>
<td>3,757</td>
<td>27.4</td>
<td>2,609</td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>Dentists</td>
<td>026</td>
<td>3,467</td>
<td>511</td>
<td>14.7</td>
<td>289</td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td>Pharmacists</td>
<td>035</td>
<td>8,374</td>
<td>852</td>
<td>10.2</td>
<td>498</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>Optometrists</td>
<td>036</td>
<td>590</td>
<td>120</td>
<td>20.3</td>
<td>66</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>057</td>
<td>1,486</td>
<td>294</td>
<td>19.8</td>
<td>205</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Medical workers not elsewhere classified</td>
<td>040</td>
<td>2,208</td>
<td>714</td>
<td>32.3</td>
<td>553</td>
<td>24.1</td>
<td></td>
</tr>
<tr>
<td>University teachers</td>
<td>045</td>
<td>6,199</td>
<td>2,486</td>
<td>40.1</td>
<td>1,823</td>
<td>29.4</td>
<td></td>
</tr>
<tr>
<td>School teachers</td>
<td>047-8</td>
<td>109,207</td>
<td>15,044</td>
<td>13.8</td>
<td>10,436</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Teachers, not elsewhere classified</td>
<td>050</td>
<td>6,305</td>
<td>1,255</td>
<td>19.9</td>
<td>834</td>
<td>13.2</td>
<td></td>
</tr>
<tr>
<td>Clergymen, priests</td>
<td>055</td>
<td>9,864</td>
<td>2,655</td>
<td>26.9</td>
<td>1,324</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Law professionals</td>
<td>060</td>
<td>8,071</td>
<td>823</td>
<td>10.2</td>
<td>420</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Accountants, auditors</td>
<td>075</td>
<td>18,362</td>
<td>2,941</td>
<td>16.0</td>
<td>1,796</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td>Social workers</td>
<td>076</td>
<td>2,740</td>
<td>741</td>
<td>27.0</td>
<td>493</td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td>Librarians, archivists</td>
<td>077</td>
<td>3,590</td>
<td>804</td>
<td>22.4</td>
<td>579</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>Economists, actuaries, statisticians</td>
<td>078</td>
<td>1,608</td>
<td>439</td>
<td>27.3</td>
<td>306</td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>Personnel specialists</td>
<td>079</td>
<td>3,148</td>
<td>541</td>
<td>17.2</td>
<td>349</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Other professional, technical and related workers</td>
<td>082</td>
<td>5,598</td>
<td>2,180</td>
<td>38.9</td>
<td>1,670</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td>Total professional</td>
<td></td>
<td>250,965</td>
<td>50,101</td>
<td>20.0</td>
<td>34,365</td>
<td>13.7</td>
<td></td>
</tr>
</tbody>
</table>


*Source*: Commonwealth Bureau of Census and Statistics.
Appendix V

(This was in fact a 4-page document)

Social Science Research Council of Australia

Questionnaire

Please give

1. Place of birth .................... 2. Date of birth .................... 3. Sex ............................

4. Date of first arrival in Australia .............................................................................

5. Country from which you migrated to Australia ..........................................................

6. List all professional qualifications:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Year</th>
<th>Institute/University</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Give a brief description of your last employment before you migrated to Australia:

Note: Salary or self-employed income should be before tax, but excluding expenses of private practice. Currency should be stated.

<table>
<thead>
<tr>
<th>Annual salary or income</th>
<th>Name of employer.</th>
<th>Description of occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>Amount</td>
<td></td>
</tr>
</tbody>
</table>

8. Give a brief history of employment undertaken after first arrival in Australia, starting with your first appointment and concluding with your present employment:

Note: (i) Promotion within an organisation should be listed as a separate job. (ii) Salary or self-employed income should be before tax, but excluding expenses of private practice. Currency, £ or $, should be stated.

<table>
<thead>
<tr>
<th>Dates of employment</th>
<th>Annual salary or income</th>
<th>Name of employer.</th>
<th>Brief description of occupation and location (town or city and State only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencing</td>
<td>Currency</td>
<td>Leaving</td>
<td>self-employed</td>
</tr>
</tbody>
</table>
9. What is your *present salary or self-employed income* (before tax, but excluding expenses of private practice)?

$ ....................................................

Indicate by a tick

10. How the *cost of your fare* to Australia was paid:

- Commonwealth Government Assisted Passage .............................................................. □
- Fare fully paid by Commonwealth or State Government .................................................. □
- Fare paid by private employer .......................................................................................... □
- Fare self-paid .................................................................................................................... □

11. Whether you *are registered* with an Australian *Architects Registration Board*:

- Registered ........................................ □
- Not registered ................................ □

Date and State of first registration

12. If you are registered and, if your overseas qualifications were not acceptable for registration purposes, *how you qualified for registration*:

- Membership of the Royal Australian Institute of Architects ........................................... □
- State Registration Board examination** .............................................................................. □
- Requalification with Australian degree or diploma .......................................................... □

** List subjects and dates of passing examination

13. The *type of architectural employment* in which you are presently engaged:

- Sole practitioner ................................................................................................................... □
- Partner in practice .............................................................................................................. □
- Associate in practice ......................................................................................................... □
- Employed by private firm ................................................................................................... □
- Employed by local authority .............................................................................................. □
- Employed by State Government or Authority ................................................................... □
- Employed by Commonwealth Government or Authority ............................................. □
- Employed by educational institution ................................................................................. □
- Retired/part-time ................................................................................................................ □
- Other, specify ..................................................................................................................... □
14. The type of architectural work in which you are presently engaged:

<table>
<thead>
<tr>
<th>Work Type</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Research</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Teaching</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Supervision</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Design</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Drafting</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>General architectural work</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other, specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full-time: □ Part-time: □

15. Whether you are a member of the Royal Australian Institute of Architects:

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Date of joining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a member</td>
<td></td>
</tr>
<tr>
<td>Affiliate of R.A.I.A.</td>
<td></td>
</tr>
<tr>
<td>Associate of R.A.I.A.</td>
<td></td>
</tr>
<tr>
<td>Fellow of R.A.I.A.</td>
<td></td>
</tr>
<tr>
<td>Life Fellow of R.A.I.A.</td>
<td></td>
</tr>
</tbody>
</table>

16. List offices or appointments that have been held by you in an honorary capacity with Australian professional associations, committees, State registration boards, etc.

<table>
<thead>
<tr>
<th>Title of appointment</th>
<th>Length of tenure</th>
<th>Name of organization</th>
</tr>
</thead>
</table>

17. List architectural prizes, awards or competitions, that you have won:

| Name of prize, award or competition | Brief description of winning entry |

DO NOT SIGN THIS FORM
REFERENCES

Australian Vice-Chancellors' Committee (AVCC), 1952. *A Crisis in the Finances and Development of the Australian Universities*, Melbourne.

Clunies Ross, I., 1952. 'The responsibility of science and the university in the modern world'. An oration delivered at the centenary of the University of Sydney and during the 29th ANZAAS meeting, Melbourne.
196 Studies in the Immigration of the Highly Skilled

Commonwealth Department of Labour, 1973. 'Physicists', Planning and Research Division Research Study Paper No. 9 (mimeo.).
Commonwealth Department of Labour and National Service, 1952. 'Report of the delegation appointed by the Commonwealth Government to enquire into conditions relevant to the acceptance of selected migrants as tradesmen in the metal and electrical trades in Holland, the Federal Republic of Germany and Italy (the Eltham Report)', Melbourne.
—, 1959. The Employment of Engineers in Australia, Melbourne.
—, 1967. 'The employment of architects in Australia', Melbourne (mimeo.).
Commonwealth of Australia, Parliamentary Debates (CPD).
Co-ordinating Committee on Needs of the University, 1954. 'The needs of the University for the decade 1954-64', Sydney. (Cited in CPD, Vol. H of R 14, Mar.-Apr. 1957:718.)
Great Britain, 1826-7. 'Report from the Select Committee appointed to inquire into the expediency of encouraging emigration from the United Kingdom', House of Commons Papers, Vols. 4 and 5.
—, 1840. Copy of instructions addressed by Lord John Russell to the Land and Emigration Commissioners. 'Royal Commission and Instructions', House of Commons Papers, Vol. 33.
References


Historical Records of Australia (HRA), Series 1, Vol. 16.

Holt, H. E., 1951. 'Victory for peace'. Address to Australian Citizenship Convention, Canberra.
—, 1952. 'Building a nation'. Address to Australian Citizenship Convention, Canberra.
—, 1956. 'Building for a better Australia'. Address to Australian Citizenship Convention, Canberra.


—, 1973. 'Australian professional attitudes and the immigrant professional'. Paper given to Sociology Section of ANZAAS Congress, Perth.


New South Wales Parliamentary Debates (NSWPD).
Studies in the Immigration of the Highly Skilled

Parai, L., 1965. *Immigration and Emigration of Professional and Skilled Manpower During the Post-War Period*, Economic Council of Canada Special Study No. 1, Ottawa.
Price, C. A., 1956. 'The social consequences of the present distribution of nationalities'.
Queensland Parliamentary Debates (QPD).
Royal Australian Institute of Architects, 1940. *Year Book, 1940*, Melbourne.
Academy of the Social Sciences in Australia, ix
Accountants, auditors: labourforce by birthplace and length of residence, 191; statutory requirements, Commonwealth Territories, 51, 182
Act for Regulating Sale of Waste Lands belonging to the Crown in the Australian Colonies, 1842, 18
Actors, dancers: migration, 187; net gain, 187
Actuaries, training, 9
Adams, W., 1, 40
Advanced Education Board, New South Wales, 70
Agreement between Australia and: Federal Republic of Germany, 1952, 26, 43; Italy, 1951, 26, 43; Netherlands, 1951, 26, 42-3
Agronomists, foresters, horticultural scientists, labourforce by birthplace and length of residence, 191
American Veterinary Medical Association, 51
Animal scientists, labourforce by birthplace and length of residence, 190
Anti-inflationary policy, 82
Appleyard, R. T., vii, x, 4, 24, 26, 36, 37, 42
Applied scientists, resources and needs, 74, 67
Architects: age at migration, 111, 112, 120; in labourforce, 104, 105; in labourforce by birthplace and length of residence, 190; country of (birth) 110, 111, 120, 190, 191, (emigration) 108, 110, 111, 120, (qualification) 110, 120; definition,
Architects Accreditation Council of Australia, 138
Architects, draftsmen and surveyors, 85
Architects Registration Board: automatic registration, 123, 127, 135; conditions for registration, 128-30, 135, 141; easing of registration conditions, 133-4; examination exemptions, 134, 141, 141-3; examination of immigrants, 139; prescribed examinations, 127-30; reciprocity, lack of, 131-2, 135
Architects Registration Council of United Kingdom, 114; acceptable qualifications, 136; employment status, members, 117
Architects, Royal Institute of British, see Royal

Architectural Education, Commonwealth Board of, 137
Architectural profession: conditions of entry, 122-38; contribution from immigrants, 163-5, 168-9; immigrants, 105-21, 138-69; statutory requirements, Commonwealth Territories, 182; survey questionnaire, 107, 192-4; unification, 126-36
Architectural prizes, 116-17
Artists, writers, entertainers: migration, 187, 189; net gain, 187, 189
Assisted immigration: 1829-1940, 16; 1860-1970, 19; agreements and schemes, 16, 24-5, 42, 43, 44, 53, 54; arrival class, 1926-1930, 23; Australian colonies, 19; buyers market, 27; cessation, 22; Commonwealth Government, responsibilities, 21; Commonwealth selected immigrants, 24; demand determined, 32; eligibility, 13; employment 26; European, 24-5, 41ff., 53, 54, 178-81; highly skilled (policy) 77-9; (statistics, 1950-1970) 38, 47, 54, 178-81, (recruitment overseas) 33ff.; history, 15-32; and labour market conditions, 21-4, 27-30; occupational priorities, 23, 36; New Zealand, 34; pitfalls, 31; ratios (dependants: workers) 47; (professional workers: all workers) 47; Rhodesia, 34; selection procedures, 15, 16, 22, 25; supply control, 31; United Kingdom, 16-41, 42, 46, 53, 178-81
Association of Professional Engineers, Australia, 1955 survey, 95
Australia Modular Society, 165
Australian Academy of Science, 67, 74, 77
Australian Capital Territory, statutory requirements, 51-2, 182-4
Australian Citizenship Convention, 1950, 46
Australian Committee on Medical Schools, 87, 88
Australian Council for Overseas Aid, 26
Australian Council for Rehabilitation of Disabled, 165
Australian employers, preferred immigrants, 6
Australian Government policies: anti-inflationary, 46, 82; immigration, 4, 5, 15-20, 24, 46, 55-7, 79, 174; manpower, professional, 3, 71-3, 81; retraining, 80; 'tertiary education, 71-3; 'White Australian', 20, 55-7, 59
Australian Institute of Landscape Architects, 165
Australian Medical Association, 7
Australian population: British contribution, 7, 16; Non-British origin, 7
Australian Professional Consultant Council, 137
Australian professional groups, immigrant qualifications, 6
Australian Universities Commission, 64, 68-70
Australian Vice-Chancellors Committee, 63, 65, 66
Bandiana Camp, 45
Beale, H. E., 36, 46
Bensusan-Butt, D., x
Biological and animal scientists n.e.c.: demand, 67; labourforce by birthplace and length of residence, 190
Blacket Award, 161
Bonegilla Migrant Hostel, 45
Borrie, W. D., 16, 67, 68
Brain drain: Australia, 174; definition, 1; Far East, 56; invisible, 4; Report of Working Group on Migration, 40; U.K., 39, 40, 47
Brain gain: Australia, 84-103, 174, 175; definition, 1; from developing countries, 173; U.S.A., 2, 40, 173
British Architects Conference, 124
Building Science Forum of Australia, 165
Calwell, A. A., 15, 34, 35, 41, 50, 59
Canada: immigration regulations, 57; professional migrants, 94
Carr-Saunders, A. M., 8n.
Census and Statistics, Commonwealth Bureau of, 12, 64
Chain of substitutions, 5, 94
Chartered Institute of Secretaries, 7
Chemists: demand, 67, 74; labourforce by birthplace and length of residence, 190; migration, 54, 185, 188; net gain, 185, 188
Circular movement, 95
Civic Design Award, 161
Civil engineers: migration, 38, 186; net gain, 186
Clergy, religious workers: labourforce by birthplace and length of residence, 191; migration, 54, 90, 93, 186, 189; net gain, 93, 186, 189
Clunies Ross, Sir Ian, 66
Colchester, T. C., x, 115, 136, 165, 166, 167
Colonial Land and Emigration Commissioners, 17, 18, 26
Committee: of Examiners, Medical Practitioners, 49; of Inquiry into Science and Technology, 67; on Future of Tertiary Education in Australia, 9, 71, 77, 81; on Manpower Resources for Science and Technology, Report 1966, 39; on Overseas Professional Qualifications, ix, 50, 61, 62, 78, 135, 137, 138, 143
Commonwealth: Association of Architects, x, 137, 167; Advisory Committee on Advanced Education, 70; of Australia Constitution Act, 1900, 20; Board of Architectural Education, 137; Conciliation and Arbitration Commission, 52n.
Contract Immigrants Act, 1905, 20;
Department of (Education) 70,
(Education and Science) 70, 73,
(Immigration) ix, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Immigration and Industrial Relations) x, (External Affairs) 26,
(Department of Education and Science) 70, 73,
(Employment and Industrial Relations) x, (Education and Science) 70,
(Employment and Industrial Relations) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Employment and Industrial Relations) x, (External Affairs) 26,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Immigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Imigration) ix, 13, 15, 24, 26, 55, 62, (Labour) 96, (Labour and Immigration) 83,
(Higher Appointments Office) 55, 64,
(Branch) 33, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
(Branch and National Service) x, 24, 25, 42, 45, 55, 62, 64, 67, 74, 106,
(Higher Appointments Office) 55, 64,
Labour and National Service, 74; survey 1967, by Association of Professional Engineers, Australia, 75; and technologists, migration to U.S.A., 40

European assisted passage schemes, professional worker arrivals, 53, 178, 179, 180, 181

European tradesmen, qualification recognition, 44

Financing of tertiary education, 33, 63, 68, 69

Footscray Employment Office, 45

Forecasting: economic, 82; manpower, 80, 81, 82; student numbers, 66

Form E.S. 35A, 55

Foster, J., 33

Freeland, J. M., 123, 125, 131, 132

'Full Employment in Australia', 1945 White Paper, 79

General Council of Medical Education and Registration of U.K., 10

Geologists, geophysicists, workforce by birthplace and length of residence, 190

Geological Society of Australia, 52, 98

Geoscientists, proportion of immigrants, 98

Graduates: demand, 73; shortages, 70

Graham, H. E., 48

Gravell, K., 151

Grubel, H. G., 2, 95

Harabinson's rule, 81n.

Haveman, B. W., 114

Herrnstadt, I. L., 81

Higher Appointments Office, Department of Labour and National Service, 55, 64

Higher Education Act, 1969, New South Wales, 70

Highly skilled: birthplace, 97-100, 190-1; definition, 11-13; emigration, see Emigration; immigration, see Assisted Immigration and Immigration; immigration comparison, Australia and U.S.A., 170ff.; immigration changes, 53, 58; immigration demarcations, 59, 60; net gain, 91-4, 185-9; over supply, 3, 83, 176; recruitment, 33-61; shortfalls, 37, 55, 67, 68, 73-9

Holt, H., 35, 50

Horowitz, M. A., 81

House of Commons Select Committee, appointed to inquire into the expediency of encouraging emigration from U.K., 17

Immigration: agreements and schemes, see Assisted immigration; annual target, 25; assisted, see Assisted immigration; Commonwealth Department of, ix, 13, 15, 24, 26, 55, 62; determinants, 21-2, 23-4, 27-30; facilitating factors, 114, 115, 165; graduates, Ph.D., 4; highly skilled (Australia compared with Canada) 2, (Australia compared with U.S.A.) 170-4, (statistics) 15, 38, 84-95, 180-1, 185-9; and Nationality Act, 1965, U.S.A., 56; Planning Council, 47; policy, 4, 5, 15-20, 24, 46, 56-7, 79, 174; political emigrés, 108, 109, 113, 119, 121, 158, 171; population contribution, vi, 7; refugees, pre-World War II, 132; Restriction Act, 1901, Commonwealth, 20; returnees, 87, 88; selection, 22-3, 36, 44, 46; sources, 35-45 passim, 53, 54, 55-7; 'White Australia', 20, 55-7, 59

Imperial Conference, 1921, 17

Industrial conscription, 43
Industrial Design Council of Australia, 165
Institution of Chemical Engineers, 7
Institution of Engineers, Australia, 52
Institution of Quantity Surveyors, 165
Intergovernmental Committee for European Migration, 24
International Congress of Architects, 122
Industrial Design Institute of Australia, 165
International Refugee Organization, 24, 42
International Standard Classification of Occupations, 1958 12, 85
International training differences, 46, 51, 77
Isaac, J. E., 25, 79, 80
Italian Foreign Office, intervention, 45
Italy, migration treaty 1951, 24, 43
Jerome, H., 21
Johnson, H. G., 94
Jolly, A. R., 81n.
Journalists, authors: migration, 187; net gain, 187
Judges, migration, 186
Kelley, A. C., 23, 27
Kelly, P. J., 4
Kilcullen, J., 3, 83
Kunz, E. F., 4, 86
Labour: Commonwealth Department of, 96; distribution within Empire, 20, 33; Exchanges, State, 24; force, 1966 census (in professional occupations by birthplace and length of residence) 14, 97-100, 190-1, (with university education by birthplace) 101; and Immigration, Commonwealth Department of, 83; input from universities, 70, 71-5; Ministry, U.K., 36; and National Service, see Commonwealth Department of; overeducation, 3; oversupply, professional manpower, 83, 176; shortages, professional manpower, 3-5, 67, 73-9
Landing Permit System, 46
Lanchester, H. V., 125
Law professionals: proportion of immigrants, 99; labourforce by birthplace and length of residence, 191; migration, 38, 90, 186, 189; net gain, 93, 186, 189; shortages, 75; statutory requirements, Commonwealth Territories, 51, 183
Layard, P. R. G., 81
Librarians, archivists, labourforce by birthplace and length of residence, 191
Lloyd, P. J., 29n.
Long term movement, definition, 87
Lynch, P., 58
Male professional incomes, Victoria, 76
Malthus, T. R., 17
Manpower: forecasting, 80, 81, 82, 83; needs, 34; planning, 5, 62, 64, 79, 80, 81; policy, professional, 3, 71-3; professional (oversupply), see Labour, (shortages) see Labour; scientific and technological as per cent of population, 67; university trained, see Labour; Working Group on Parameters for Scientific Growth, 1966, U.K., 39
Maribyrnong Migrant Hostel, 45
Martin Committee, 71, 72
Martin, Sir Leslie, 71
Medical Board of New South Wales, 49
Medical practitioners: brain gain, 2, 173; examination, 49; foreign, 49; labourforce by birthplace and length of residence, 191; migration, 38, 54, 58, 90, 185, 188; net gain, 93, 185,
Index 205

188; shortages, 75; statutory requirements, Commonwealth Territories, 51, 183
Medical registers, overseas accessions, 77
Medical workers n.e.c.: labourforce by birthplace and length of residence, 191; migration, 54, 189; and technicians, migration, 90, 93
Metallurgists: demand, 67, 74; labourforce by birthplace and length of residence, 190; migration, 38, 186; net gain, 186
Meteorologists, by birthplace and length of residence, 190
Migration, see Assisted immigration, Immigration, Emigration and under individual occupations
Mills Committee, 65
Ministry of Labour Advisory Council, 74
Ministry of Overseas Development, 40
Monckton, Sir Walter, 35
Muir, J. D., 2
Murray Committee, 68
Murray, Sir Keith, 68
Musicians: migration, 187; net gain, 187

National Architectural Accrediting Board of U.S.A., 137
National Farmers' Union, 35
National Library of Australia, x
National Register of Scientific and Technical Personnel, 96
National Security Regulations (University Commission), 1943, 63
National Union of Australian University Students, 67
Net gain, highly skilled, 91-4, 101-3; see also Statistics, net gain and under individual occupations
Netherlands Economics Institute, 81
Netherlands Migration Treaty 1951, 24
Nicholls, N. M., 4
Niland, J., x, 83
Norris, Major-General Sir Kingsley, 55
Norris Report, 78
Northern Territory, statutory requirements, 51

Occupation survey of Commonwealth of Australia in 1945, 12, 84
Occupational classification: Australian, 12-13, 84-6; errors, 84-6; international, 12
Occupational statistics: assisted immigration, 38, 53, 54, 178-81; official classification, 12; labourforce by birthplace and length of residence, 97-9, 101, 190-1; labourforce by education and birthplace, 101; migration, permanent and long term movement, 89-90, 185-9; migration, net gain, 92-3
Optometrists: labourforce by birthplace and length of residence, 191; statutory requirements, Commonwealth Territories, 51, 52, 183
Other professional and semi-professional workers: migration, 187; net gain, 187
Other professional medical workers, technicians: migration, 90, 188; net gain, 93, 188
Other professional occupations: labourforce by birthplace and length of residence, 97, 99
Other professional, technical and related workers: labourforce by birthplace and length of residence, 191; migration, 189; net gain, 93, 189
Overeducation, 3
Overseas recruitment, 55, 76-7, 78

Pacific Island Labourers Act, 1901, Commonwealth, 20
Paramedical professions, 75n.
Parry, M., 137
Permanent movement, definition, 86, 87
Personnel specialists, labourforce by birthplace and length of residence, 191
Pharmacists: labourforce by birthplace and length of residence, 191; migration, 38, 185; net gain, 185; statutory requirements, Commonwealth Territories, 51, 52, 184
Physical scientists, labourforce by birthplace and length of residence, 190
Physicists: demand, 67, 74; foreign born, 96; labourforce by birthplace and length of residence, 190
Physiotherapists: assisted passage scheme, U.K., 38; labourforce by birthplace and length of residence, 191; migration, 185; net gain, 185
Polish Resettlement Act, 1947, U.K., 108
Politicians, migration, 187
Pope, D., 21
Portmanteau categories, 85
Premiers Conference: 1920, 21; 1946, 24; 1950, 47
Price, C. A., v, x, 3, 4, 7, 16, 25n, 87, 94
Privy Council, 8
Profession, definition, 11-13
Professions: access, 46-53, 60, 173; accrediting agencies, 51; Adviser, London, 55; Commonwealth Territories, statutory requirements, 51-2, 182-4; examination, 47, 48, 141-3; fragmentation, 60; protectionism, 10, 48-52; retraining, 47; statutory control, 46, 47, 50-2, 122-3, 127-30; uniformity, lack of, 51
Professional: affiliation, 7, 172; associations, 7-9, 10, 48, 52, 60, 67; Engineers Award, 1961, 74; Higher Grades Examination, 139; occupation, definition, 11-13; occupations, see Occupational statistics; workers in labourforce by birthplace and length of residence, 97-9, 190-1; see also Assisted immigration, Immigration, Emigration, Highly skilled, Statistics Professional and semi-professional workers: migration, 185-7; net gain, 185-7
Professional, Technical and Related Workers: occupational classification, 85; migration, 15, 78-9, 188-9
Professional workers: employment service, 55; ratio to all workers, assisted immigrants, 46; see also Assisted immigration, Immigration, Emigration, Highly skilled, Statistics Project House Design Award, 161
Qualifications: acceptable, 6, 11, 34, 51-2, 128-30, 182-4; Committee on Overseas Professional, ix, 50, 61, 62, 78, 135, 137, 138, 143; international component of, 7, 9, 10; unacceptable, 4, 46-50, 139-44, 172
Rado, E. R., 81n.
Recession 1952-3, 80
Reciprocity agreements, 7, 10, 11, 52, 56
Re-establishment and Employment Act 1945, Commonwealth, 24
Refugee: architects, 132, 133, 166; assisted passage scheme, 1953, 24; and Migrant Service Conference, 25; Organization, International, 24, 25; pre-World War II, 132
Registrable professions, 46, 51-2, 182-4
Registration Boards, 47, 51; see also Architects, registration
Report of Committee on Higher Education, 70
Report of Committee on Future of Tertiary Education, 9, 71, 77, 79, 81

Richmond, A. H., 87, 88

Royal Australian Institute of Architects, x, 104, 105, 107, 125, 138; articles of association, 126; immigration control, 133; medals, 159, 160, 161; membership, 126, 140; protective role, 132; as qualifying body, 127, 131, 135, 141; and R.I.B.A., 127-5; and refugees, 132, 133; reciprocity with U.S.A., 137; recognized qualifications 126, 127, 136, 137-8

Royal Australian Planning Institute, 165

Royal College of Veterinary Surgeons, 51

Royal Institute of British Architects, x; acceptable overseas qualifications, 136; allied societies, 124, 125; Board of Architectural Education, 125; education, 125, 136; as qualifying body, 114-16, 126, 127, 135, 141, 166, 167

Royal Society Report, 1963, 39

Rural workers, 44, 45

Saigal, J. C., 81

Scholarships Board, 64

Scientific and Industrial Research Organization, 76

Scientific and technical personnel: migration, 89, 92, 94, 97, 102; net gain, 92, 94, 102; national register of, 96

Scientists: birthplace, 97-9, 100, 190-1; brain gain U.S.A., 172-3; entry to professions, 52-3; foreign born in U.S.A., 96; in labourforce, 97, 190-1; migration, 38, 40, 54, 89, 178-9, 180-1, 188; net gain, 188; occupational classification, 85; survey by Department of Labour and National Service, 1956, 74

Scientists and technologists: birthplace, 97-9, 100; brain gain, U.S.A., 172, 173; migration, 178, 179, 180, 181; percentage of population, 67; see also Scientists

Science and Technology, Commission of Inquiry, 67

Scollay, E. J., x, 104

Scott, A. D., 2

Scoville, J. C., 81

Separate Representation of Voters Act, 1951, South Africa, 108

Short term movement, definition, 86, 87

Sixteenth census of U.S.A., 84

Skilled workers, 36, 43-4, 46

Snedden, B. M., 50

Social Science Research Council of Australia, v

Social workers: labourforce by birthplace and length of residence, 191; migration, 38, 186; net gain, 186

Society of Designers for Industry, 165

Speech therapists, 9

State Labour Exchanges, 24

States Grant (Universities) Act, 1958, Commonwealth, 68

Statistics: highly skilled (birthplace) 97-9, 101, 190-1, (length of residence) 97-9, 101, 190-1, (migration) 38, 53, 54, 89-90, 94, 178-81, 185-9, (net gain) 185-9, (components) 92, 93, 94, (proportion of arrivals) 91; human capital, 84; labourforce (in professional occupations) 97-9, 101, 190-1, (with university education) 101; long term movement, definition, 86, 87; male incomes, 76; survey, architectural profession, see Architects

Statutory requirements, 46-50; Commonwealth Territories, 51, 184; architectural profession, 128-30

Surveyors: labourforce by birthplace
and length of residence, 190; migration, 38, 54, 186, 188; net gain, 186, 188.

Sutherland, Sir Gordon, 39

Teachers: labourforce by birthplace and length of residence, 97-9, 191; migration, 38, 54, 58, 90, 92, 93, 94, 97, 185, 189; net gain, 93, 94, 102, 183, 189; occupational classification, 85; shortfalls, 67, 75

Technologists, see Scientists and technologists

Tertiary education: Australian crisis, 4-70; Committee on Future of, 9, 71, 77, 79, 81; forward planning, 64, 70; policy, 71-3

Thomas, B., 1, 2

Tradesmen: qualification recognition, 43, 44; Rights Regulation Act, 1946, Commonwealth, 41, 43, 44, 46, 60

University: Appointments Board, Melbourne, 13, 151-4; Appointments Board, Sydney, 73-4, 75; educated migrants, 100, 101; enrolment projections, 66-8; graduates, supply, 70, 75, 82; lecturers, 58; Scholarship Scheme, Commonwealth, 64; Staff Associations, Federal Council of, 67; Students, National Union of Australian, 67; teachers, birthplace, 99, 102; teachers, length of residence, 191

Veterinarians: foreign, 48; labourforce by birthplace and length of residence, 190; migration, 38, 183; net gain, 185; shortages, 75; statutory requirements, Commonwealth Territories, 51, 184

Veterinary surgeons: Board of New South Wales, 48, 49; occupational classification, 85; Royal College of, 51

Wages fund theory, 17

Wakefield, E. G., 17

Waste Lands Act, 1842, United Kingdom, 18, 26

Watson, G. C., 26

West, K. M., 2

West Germany, Migration Treaty 1952, 24

‘White Australia’ policy, 55-9, 78, 173, 174

Wilkinson Award, 161

Wilmot-Horton, R. J., 17

Wilson, P. A., 8

Wool prices 1950-1, 44

Writers, migration, 189

‘Yo-yo’ Movement, 95

Zubrzycki, J., 3

Zymelman, M., 81
Moira Salter is herself an immigrant, having travelled to Australia aboard a troopship bringing Anglo-Indians from turbulent pre-Independence India.

After her arrival she became a student of Economics at the University of Western Australia. Both as a student and, after graduation, as a professional economist working here and overseas, Mrs Salter observed with particular interest the struggles of highly qualified migrants to achieve professional status.

Whilst on the staff of the Australian National University (where she completed a Master's degree), she seized the opportunity offered to her by the Australian Academy of the Social Sciences to study and write about immigrant professional manpower in this country and elsewhere, and this book is the result.
The series *Immigrants in Australia* is the result of a project sponsored by the Academy of the Social Sciences in Australia. Already published are:

Jean I. Martin, *Community and Identity: Refugee Groups in Adelaide*

Ruth Johnston, *Future Australians: Immigrant Children in Perth, Western Australia*

Paul R. Wilson, *Immigrants and Politics*

Alan Richardson, *British Immigrants and Australia: a Psycho-social Inquiry*

Charles Price (ed.), *Greeks in Australia*

Eva Isaacs, *Greek Children in Sydney*

Despite the quantity of official and academic studies generated by the postwar immigration program, little publicity has been given to Australia's gain of highly skilled workers. This book has been written to fill out our knowledge in this area.

Until recently, Australia experienced shortages of professional manpower, and both government and private employers looked abroad for it. But professional skills are not as easily transferred across the globe as are lesser skills. The postwar years have seen conflict between the Australian government, seeking a broad immigration policy, and the professional groups, responsible for maintaining standards within their professions.

The author devotes the last part of her book to one of the larger professions, the architects, yet many of her findings apply to the professions generally. Most 'professional' immigrants are British by training, if not by birth, and this happy accident has made them automatically acceptable. The 'non-acceptable' must face examination — yet the level of average earnings does not suggest that the non-British trained are inferior as practitioners. Mrs Salter shows that of recent years the trend has been towards an 'internationalisation' of standards by the professional bodies.

This book will be read with interest by government officers and professional people, and by all students of Australia's immigrant population.

Jacket design by Philippa Walker

Printed in Australia

Australian National University Press Canberra ISBN 0 7081 1803 8