



There have been strong concerns expressed about a growing 'brain drain' from Australia.

4 Emigration of recent university graduates

4.1 Introduction

There is increasing attention focused on the growing loss of highly educated and skilled young people from Australia through emigration. In the Prime Minister's 2001 introduction of an initiative on innovation¹ and statements by the Minister of Immigration and Ethnic Affairs,² there have been strong concerns expressed about a growing 'brain drain' from the country. This has followed a number of references in the Australian media to the increased tempo of out-movement of recent graduates (for example, see *Losing Our Minds* by M. Morris, *The Australian*, 27 July 2000, p. 19). In this chapter we focus on the extent to which recent graduates from Australian universities have gone overseas. It is based on data derived from the *Graduate Destination Survey* (GDS), which is conducted annually by the Graduate Careers Council of Australia (GCCA).

The principal purpose of the GDS is to monitor the occupation destinations of graduates and to provide data on the relationship between supply and demand in the various professions. Graduates in employment at the time of the survey are asked to provide the location of their employer. The GCCA prepares the survey, which is distributed by Australian higher education institutions to most students who qualified for the award of degree or diploma (including higher degrees or diplomas) in the preceding year. Students who completed their award in the first half of the year are provided with a questionnaire on or about 31 October of the same year, while those who completed at the end of the year are surveyed on or about 30 April of the following year. The GCCA has developed a questionnaire that is distributed to each Australian institution of higher education. In some cases institutions use their own versions of the standard questionnaire, and some data about students who proceed to higher degrees is made available by student records offices. Responses are coded according to GCCA standard coding instructions and forwarded to the GCCA office in Melbourne for computer processing and compilation.

The response rate to the GDS is relatively high. In 1998 the national response rate was 65.1 per cent (67.8 per cent for Australian citizens and permanent residents), compared with 64.2 per cent in 1997 and 68.3 per cent in 1996. Generally speaking, analyses of the GDS have shown it to be a reasonably accurate reflection of the total population, particularly in terms of their fields of study and their broad GDS results. The primary function of the GDS is to provide data to higher education institutions that may be used to assist planning and to provide information to university careers services for current and prospective students.

In terms of the present study, the GDS has a number of variables that can help to define some of the dimensions of the emigration process and the 'brain drain'. In particular, there are variables that enable the identifications of respondents who are Australian citizens and who were overseas at the time of the survey. This group can be further segmented to identify those who were working overseas at the time of the survey. The selected group is, therefore, likely to be emigrants, especially those identified as working overseas at the time of the survey. An analysis of their levels of educational attainment, fields of study, occupations, and salary levels will provide some critical dimensions to the extent of the 'brain drain' associated with their emigration.

For each respondent, the survey provides data for a number of social and economic variables. The data are available at the state level so that a regional analysis of the 'brain drain' can be conducted. Moreover, the 1996 and 1999 GDS provides country of destination for those graduates who were overseas at the time of the survey. The



Table 4.1 Recent graduates working overseas

	Number	Per cent of total
1991	1437	2.2
1996	3136	4.6
1999	3707	5.6

Source: GDS 1991, 1996, 1999

Table 4.2 Recent graduates working overseas by state of their university

State	1990		1995		1998	
	No.	%	No.	%	No.	%
New South Wales	458	2.2	1086	5.1	1751	8.6
Australian Capital Territory	53	2.4	150	5.7	41	3.6
Victoria	420	2.3	755	4.2	712	3.8
Queensland	220	2.1	627	4.7	751	5.7
South Australia	133	2.3	284	5.3	151	3.1
Western Australia	123	2.1	184	3.4	226	3.4
Tasmania	24	1.9	41	3.5	58	4.2
Northern Territory	6	2.0	9	4.5	17	4.7
Total	1437	2.2	3136	4.6	3707	5.6

Source: GDS 1991, 1996, 1999

There has been a significant increase in both the numbers and proportion of all recent graduates who were working overseas in the year after their graduation.

The majority of graduates detected overseas were not overseas principally for employment.

temporal dimension of the 'brain drain' associated with emigration will be analysed using data from the 1991, 1996 and 1999 GDSs. It must be remembered, however, that these data relate only to graduates who go overseas to work within a year of graduating. It does not pick up those who initially get a job in Australia and then move overseas. Nevertheless, it is clear that there is some concern in Australia about new graduates leaving to work overseas.

4.2 The extent to which new graduates go overseas to work

It is apparent from Table 4.1 that there has been a significant increase in both the numbers and proportion of all recent graduates who were working overseas in the year after their graduation during the 1990s. By 1998, 5.6 per cent of all graduates were working overseas in the year after their graduation. There is not a large variation between the states and territories in that respect, as Table 4.2 indicates. There seems to be a slightly higher level in New South Wales than elsewhere, but it seems that there is a fairly common level of emigration overseas after graduation among graduates and a generally common pattern of increasing levels of overseas migration.

Turning to a separate analysis of each survey year, it was apparent that the majority of those graduates detected overseas were not overseas principally for employment. Information provided by respondents on employer's name and address, and the type of business carried out, enabled respondents with employment outside of Australia to be identified and their employment to be categorised into either government or non-government. Of course, some of those actually working overseas may not have identified their employer but it would seem that most would be holidaying.



In 1991 female graduates overseas outnumbered males. While women dominate the 20s age group, males outnumber females in the 30s. The results were quite similar in 1996.

What is very significant, especially in terms of its impact on the 'brain drain', is that 29.8 per cent of those with a previous qualification had completed a PhD before leaving Australia to take up work overseas.

Some 310 or 21.6 per cent of respondents identified an overseas employer. Similarly, in 1996, 740 respondents or 23.5 per cent of the total contacted overseas reported an employer. It was interesting in the 1998 survey, however, that the proportion of overseas respondents who nominated an employer was substantially greater – 1873 or 50.5 per cent of the total interviewed.

4.3 Age and sex characteristics of emigrant graduates working overseas

The age–sex characteristics of the 1991 sample of graduates overseas who were working are shown in Figure 4.1. Overall, females outnumber males, making up 53.2 per cent of the group. It will be noted, however, that while women dominate the 20s' age group, males outnumber females in the 30s. There is a distinctive age pattern with 79.7 per cent aged 20–29 years and 14.8 per cent aged 30–39. As would be expected, the group are dominated by young people.

The results were quite similar in the 1996 GDS. Again, females predominated accounting for 53.6 per cent of the group. Some 71 per cent were aged 20–29 and 19.6 per cent aged 30–39. Again, females dominate in the 20s and males in the 30s. By the 1999 survey, the female dominance had increased with them accounting for 62 per cent. In fact, there were more females than males in each age cohort in 1998. Some 61.5 per cent of all of the 1998 graduates were in their 20s.

4.4 Qualifications

In the 1991 survey, Bachelor Pass and Honours degrees comprised 87.2 per cent of qualifications obtained by graduates with no previous post-school qualification – in contrast to 35.1 per cent for the group who had a previous tertiary qualification. Of those with a previous post-school qualification, 61.1 per cent had graduated in 1990 with a post-graduate award (Post-graduate Diploma, Masters or PhD). What is very significant, especially in terms of its impact on the 'brain drain', is that 29.8 per cent of those with a previous qualification had completed a PhD before leaving Australia to take up work overseas (see Figure 4.2).

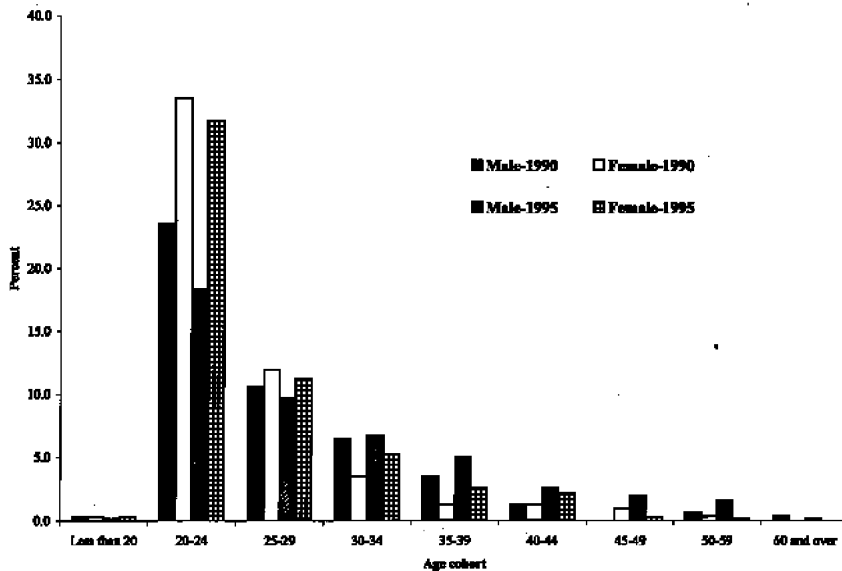
Respondents in the 1996 GDS were asked whether the qualification they had obtained in 1995 was their first since leaving school. Within this group, 47.8 per cent had obtained their first qualification in 1995. For those who had previously obtained a post-school qualification, 53.4 per cent held a Bachelor Pass or Honours degree, 11.3 per cent had an undergraduate diploma and 18.8 per cent had a post-graduate degree or diploma. Figure 4.2 shows that Bachelor Pass and Honours degrees comprise 93.8 per cent of qualifications obtained by graduates with no previous post-school qualification, in contrast to 27.8 per cent for the group who had a previous tertiary qualification. Of those with a previous post-school qualification, 71.3 per cent had graduated in 1995 with a post-graduate award (Certificate, Diploma, Masters or PhD).

In the 1999 GDS respondents were asked whether the qualification they obtained in 1998 was their first since leaving school. Within this group, 44.3 per cent had obtained their first qualification in 1998, compared with 47.8 per cent who had obtained their first qualification in 1995. This suggests that between 1995 and 1998 the proportion of recent emigrant graduates with a previous qualification increased, suggesting that the graduate stream was generally more highly qualified than previously was the case.

For those who had previously obtained a post-school qualification, 23.4 per cent held

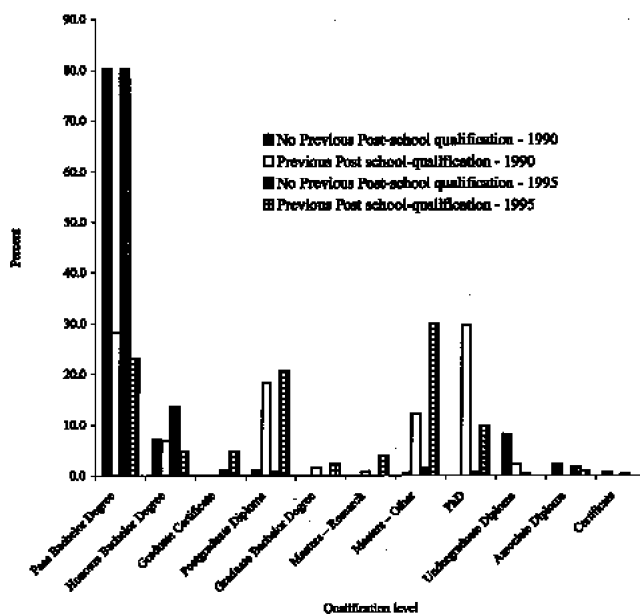


Figure 4.1 Age-sex characteristics of 1990 and 1995 graduates employed overseas



Source: GDS 1996

Figure 4.2 Qualifications of 1990 and 1995 graduates employed overseas



Source: GDS 1991 and 1996



Within the recent graduate emigrant stream, the dominant group comprised persons who had completed a Bachelor degree as their first tertiary qualification and decided to seek employment overseas.

In 1990 the dominant field of study for those with no previous post-school qualification were Business and Administration (including accounting) (20.2 per cent); Arts, Humanities and Social Sciences (15.6 per cent); Education (13.9 per cent); and Language, Visual and Performing Arts (11 per cent).

a Bachelor Pass or Honours degree, 22.6 per cent had an undergraduate diploma, and 9.7 per cent had a post-graduate degree or diploma. Bachelor Pass and Honours degrees comprised 95.8 per cent of qualifications obtained by graduates with no previous post-school qualification, in contrast to 55.9 per cent for the group who had a previous tertiary qualification. Of those with a previous post-school qualification, 41.5 per cent had graduated in 1998 with a post-graduate award (Certificate, Diploma, Masters or PhD).

A number of key points emerged:

- Within the recent graduate emigrant stream, the dominant group comprised persons who had completed a Bachelor degree as their first tertiary qualification and decided to seek employment overseas.
- Since the 1991 survey, the proportion of recent emigrant graduates seeking employment overseas as a PhD graduate has steadily declined, while the proportions seeking work overseas with a Masters degree has increased.
- Those graduates with a Post-Graduate Diploma rose slightly to just over 20 per cent of the stream in 1995, but fell away by almost half in 1998.

4.5 Fields of study

From the perspective of a possible 'brain drain' it is important to establish which were the fields of study of the graduates going overseas to work. In 1990 the dominant field of study for those with no previous post-school qualification were Business and Administration (including accounting) (20.2 per cent); Arts, Humanities and Social Sciences (15.6 per cent); Education (13.9 per cent); and Language, Visual and Performing Arts (11 per cent). For graduates who had a previous post-school qualification, the major fields of study were Education (21.4 per cent); Life and General Sciences (15.3 per cent); and Business and Administration (including accounting) (11.5 per cent).

Among all graduates from 1990 who were working overseas in 1991, 46.2 per cent studied in Education (16.8 per cent); Business and Administration (including accounting) (16.5 per cent) and Arts, Humanities and Social Sciences (12.9 per cent).

Table 4.3 shows the predominant fields of study within each level of qualification possessed by 1990 graduates who were working overseas at 30 April 1991.

A number of points were derived from the chart:

- Arts and Humanities and Social Sciences, Language, Visual and Performing Arts and Business and Administration (including Accounting) were significant fields of study for graduates with Bachelor degrees and Masters by coursework awards.
- Education tended to produce high proportions of graduates at Degree and Diploma level.
- Engineering, Surveying and Science trained relatively large numbers of Honours graduates.
- Computing and IT fields of study were strongest at the Post-graduate Diploma level.
- Life Science and General Science and Mathematics had a high proportion of graduates at Masters and PhD levels.



Table 4.3 Main fields of study of 1991 graduates employed overseas

	Pass Bach.	Hons Bach.	PG Dip.	GD Bach.	Masters –Res.	Masters –other	PhD	UG Dip.	Assoc. Dip.	Cert.	Total
Agriculture, Animal Husbandry									✓	✓	
Architecture, Building											
Arts, Humanities and Social Sciences	✓	✓				✓	✓				✓
Language, Visual and Performing Arts	✓					✓					✓
Business, Administration, Accounting	✓					✓					✓
Economics											
Education	✓		✓					✓			✓
Engineering, Surveying		✓				✓					
Health							✓				
Law, Legal Studies											
Science		✓									
Computing, IT			✓								
Life, General Science						✓	✓				✓
Mathematics							✓				
Veterinary Science											

Note: ✓ denotes 10 per cent or more of all graduates in qualification level, and 20 per cent or more for Masters by Research (due to low numbers – 16). Undergraduate Diploma, Associate Degree/Diploma and Certificate excluded from analysis due to low numbers.

Source: GDS 1991

Table 4.4 Main fields of study of 1995 graduates employed overseas

	Pass Bach.	Hons Bach.	Grad. Cert.	PG Dip.	GD Bach.	Masters –Res.	Masters –other	PhD	UG Dip.	Assoc. Dip.	Cert.	Total
Agriculture, Animal Husbandry						✓						
Architecture, Building, Urban and Regional Planning					✓							
Humanities and Social Sciences	✓	✓		✓	✓							✓
Language, Visual and Performing Arts	✓											
Business, Administration	✓		✓	✓			✓					✓
Economics												
Education			✓	✓	✓		✓					✓
Engineering, Surveying		✓					✓	✓		✓		✓
Health	✓		✓			✓		✓				
Law, Legal Studies					✓							
Science												
Computing Science, Information Systems												
Life, General Science						✓		✓				
Mathematics												
Physical Sciences								✓				
Veterinary Science												

Note: ✓ denotes 10 per cent or more of all graduates in qualification level, except for Associate Degree/Diploma (30 per cent or more, due to low numbers). Undergraduate Diploma not considered as there were only two graduates in this qualification level.

Source: GDS 1996



Table 4.5 Main fields of study of 1998 graduates employed overseas

	Pass Bach.	Hons Bach.	Grad. Cert.	PG Dip.	GD Bach.	Masters -Res.	Masters -other	PhD	UG Dip.	Assoc. Dip.	Cert.	Total
Agriculture, Animal Husbandry												
Architecture, Building, Urban and Regional Planning												
Arts, Humanities and Social Sciences	✓	✓					✓	✓				✓
Language, Visual and Performing Arts	✓		✓			✓						✓
Business, Administration	✓		✓	✓		✓	✓					✓
Economics												
Education	✓		✓	✓	✓	✓	✓					✓
Engineering, Surveying		✓				✓		✓				
Health			✓	✓				✓				
Law, Legal Studies												
Science												
Computing Science, Information Systems												
Life, General Science						✓		✓				
Mathematics												
Physical Sciences												
Veterinary Science												

Note: ✓ denotes 10 per cent or more of all graduates in qualification level, and 20 per cent or more for Masters by Research (due to low numbers – 16). Undergraduate Diploma, Associate Degree/Diploma and Certificate excluded from analysis due to low numbers.

Source: GDS 1999

For 1995 graduates, the dominant field of study for those with no previous post-school qualification was Business and Administration (20.9 per cent); Arts, Humanities and Social Sciences (12.9 per cent); Engineering and Surveying (12.6 per cent); and Language Studies, Visual and Performing Arts (11.2 per cent).

- Overall, high proportions of graduates were prepared in Arts, Humanities and Social Sciences; Language and Visual and Performing Arts; Business and Administration (including Accounting); Education and Life and General Science.

For 1995 graduates, the dominant field of study for those with no previous post-school qualification was Business and Administration (20.9 per cent); Arts, Humanities and Social Sciences (12.9 per cent); Engineering and Surveying (12.6 per cent); and Language Studies, Visual and Performing Arts (11.2 per cent). For graduates who had a previous post-school qualification, the major fields of study were Business Administration (22.3 per cent), Education (18.6 per cent), Humanities and Social Sciences (10.9 per cent), and Health (10.6 per cent). The main areas of study of the 1996 graduates overseas are shown in Table 4.4. Among all graduates from 1995 who were working overseas in 1996, 56.2 per cent studied in one of four main fields of study: Business and Administration (21.6 per cent), Education (12.3 per cent), Humanities and Social Sciences (11.9 per cent), and Engineering and Surveying (10.4 per cent).

Among all students from 1998 who were working overseas in 1999, 66.8 per cent studied in one of three main fields of study: Business and Administration (24.9 per cent); Education (15.2 per cent); and Arts, Humanities and Social Sciences (26.7 per cent). Table 4.5 shows the predominant fields of study within each level of qualification possessed by 1998 graduates who were working overseas at 30 April 1999.

The main patterns are as follows:

- Arts, Humanities and Social Sciences; Language Studies; Visual and Performing



Table 4.6 Main jobs of graduates working overseas in the graduate destination survey of 1996

Type of work	Number	Per cent
Secondary schoolteacher	50	7.0
Intermediate or elementary service worker	44	6.2
Computing professional	39	5.5
Accountant, auditor	38	5.1
Vocational education teacher	35	4.9
Specialist manager	33	4.6
Primary schoolteacher	26	3.6
Registered nurse	20	2.8
Intermediate or elementary clerical worker	20	2.8
Intermediate or elementary sales worker	20	2.8

Source: GDS 1996

Arts; Business and Administration; and Education were significant fields of study for graduates with Bachelor degrees.

- Education tended to produce higher proportions of post-graduates rather than undergraduates.
- Arts, Humanities and Social Sciences; and Engineering and Surveying produced the highest proportions of Honours graduates.
- Graduate Certificate and Graduate Diploma awards predominated in the Business and Administration, Education and Health fields of study, while there were a high proportion of Language Studies, Visual and Performing Arts graduate certificates.
- Research Masters awards were heavily concentrated in Language Studies, Visual and Performing Arts field of study, while Coursework Masters degrees predominated in Business and Administration, Education and Arts, Humanities and Social Sciences.
- PhD graduates occurred principally in Engineering and Surveying; Health; Life and General Sciences; and Arts, Humanities and Social Sciences.

4.6 Types of work engaged in

In the 1991 survey nearly three-quarters (71.3 per cent) of these graduates were employed in non-government positions, and only 3.9 per cent were self-employed. Among those graduates working in government positions, 83.1 per cent were in professional, and 3.4 per cent in para-professional, occupations. A further 9 per cent were employed by governments in managerial and administration occupations. Within the non-government sector, most occupations were in the professional (63 per cent) and sales, personal services, finance and insurance (19.2 per cent) categories.

Respondents were asked whether the job they had was likely to be permanent or short-term and 45 per cent of government employees considered their current job to be permanent, compared with 39.5 per cent among non-government employees. The short-term employment proportions were 41.3 per cent and 48.8 per cent, respectively. Overall, the 'brain drain' splits fairly evenly between employees in permanent positions (41.1 per cent) and those in short-term positions (46.7 per cent).

Among all students from 1998 who were working overseas in 1999, 66.8 per cent studied in one of three main fields of study: Business and Administration; Education; and Arts, Humanities and Social Sciences.

In the 1991 survey nearly three-quarters of graduates were employed in non-government positions. Among those graduates working in government positions, 83.1 per cent were in professional occupations.

Overall, the 'brain drain' splits fairly evenly between employees in permanent positions and those in short-term positions.



There were lower proportions of persons working low hours in non-government jobs than in government jobs.

In 1996 for graduates working in the UK, the dominant types of work were primary schoolteacher; intermediate or elementary service work; and secondary schoolteacher.

The dominant types of work in Hong Kong were accountants and auditors; secondary schoolteachers; and specialist managers.

Graduates employed in Singapore mainly worked as computing professionals; accountants and auditors; or marketing specialists.

There were lower proportions of persons working low hours in non-government jobs than in government jobs. Some 13 per cent of government workers worked up to 20 hours per week compared with 5.6 per cent of non-government employees. The proportions working full-time and/or extended hours were higher among employees in non-government jobs. Although there were 45.9 per cent of employees in government jobs working between 35 and 40 hours per week, the proportion in non-government jobs was 40.5 per cent. However, for employees working more than 40 hours per week, the proportions were 32 per cent for government employees and 40.1 per cent for non-government employees.

Turning to the graduates surveyed in 1996, the main types of jobs they were working in are shown in Table 4.6.

For graduates working in the UK, the dominant types of work were:

- primary schoolteacher (11.7 per cent)
- intermediate or elementary service work (11.7 per cent)
- secondary schoolteacher (7.1 per cent).

The dominant types of work in Hong Kong were:

- accountants, auditors (15.4 per cent)
- secondary schoolteachers (8.8 per cent)
- specialist managers (8.8 per cent).

Graduates employed in Singapore mainly worked as:

- computing professionals (12.5 per cent)
- accountants, auditors (11.1 per cent)
- marketing specialists (9.7 per cent).

In Japan, the dominant occupations for graduates were:

- vocational education teachers (37.7 per cent)
- secondary schoolteachers (24.5 per cent).

Graduates employed in the US occupied a wide range of occupations. Consequently, the numbers in any given type of work were low. The highest concentrations were in:

- life sciences (8.7 per cent)
- intermediate or elementary service work (8.7 per cent).

Although based on relatively low numbers, the dominant types of work for Australian graduates in Canada were:

- intermediate or elementary service work (27.3 per cent)
- intermediate or elementary clerical work (13.6 per cent).

Within the group of 740 graduates from 1995 who were employed overseas in April 1996, 54 per cent were employed in a permanent position likely to last longer than 12 months, with 37.3 per cent in short-term positions likely to be up to 12 months.



Table 4.7 Hours worked by recent Australian graduates working overseas by nation of destination, 1996

Hours worked	All countries	UK	Hong Kong	Singapore	Japan	US	Canada
	Number						
1-10 hours	12	–	1	–	3	1	–
11-20 hours	28	8	–	2	6	5	–
21-30 hours	38	10	2	2	8	3	2
31-40 hours	290	87	37	16	23	13	14
41-50 hours	213	25	36	41	10	13	2
51-60 hours	71	11	11	8	2	6	3
More than 60 hours	27	5	2	1	–	3	–
Total	679	146	89	70	52	44	21
	Per cent						
1-10 hours	1.8	–	1.1	–	5.8	2.3	–
11-20 hours	4.1	5.5	–	2.9	11.5	11.4	–
21-30 hours	5.6	6.8	2.2	2.9	15.4	6.8	9.5
31-40 hours	42.7	59.6	41.6	22.9	44.2	29.5	66.7
41-50 hours	31.4	17.1	40.4	58.6	19.2	29.5	9.5
51-60 hours	10.5	7.5	12.4	11.4	3.8	13.6	14.3
More than 60 hours	4.0	3.4	2.2	1.4	–	6.8	–
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: GDS 1996

Table 4.8 Main jobs of recent graduates working overseas, 1999

Type of work	Number	Per cent
Intermediate or elementary service worker	127	8.2
Specialist manager	106	6.9
Intermediate or elementary clerical worker	89	5.8
Primary schoolteacher	88	5.7
Secondary schoolteacher	79	5.1
Registered nurse	79	5.1
Vocational education teacher	76	4.9
University lecturer, tutor	73	4.7
Intermediate or elementary service worker	63	4.1
Computing professional	62	4.0
Accountants, auditor	56	3.6

Source: GDS 1999



Recent graduates working overseas would seem to be divided between those on some form of working holiday and those in more professional types of employment linked to their qualifications.

In 1999, for graduates working in the UK, the dominant types of work were intermediate or elementary clerical work; primary schoolteacher; and intermediate or elementary service work.

Graduates employed in the US occupied a wide range of occupations, with the result that the numbers in any given type of work were low.

A further 8.7 per cent were in 'other', details of which were not provided in the GDS data. This constitutes a higher proportion in permanent positions than was the case in 1996, indicating that there was a tendency for the graduates to anticipate working overseas longer in 1996 than was the case five years earlier.

Table 4.7 shows the distribution of the number of hours worked by recent graduates working overseas in 1995 according to the major destination nations. Less than 12 per cent worked less than 30 hours a week so most were in full-time employment. Indeed, 45.9 per cent worked more than 40 hours per week.

Japan and the US had relatively large proportions of Australian graduates working less than 20 hours per week. In contrast, the UK had the highest proportion working between 31 and 40 hours per week. Canada also reported a high percentage in this category, but the level was based on relatively low numbers. Quite high proportions of graduates worked between 51 and 60 hours per week in Hong Kong, Singapore, the US and Canada.

Turning to the 1999 Graduate Destination Survey, Table 4.8 shows the main types of work of the overseas-based graduates. As was the case with the 1996 data, it is clear that recent graduates working overseas would seem to be divided between those on some form of working holiday – evidenced by relatively high proportions in service, sales and clerical occupations – and those in more professional types of employment linked to their qualifications. A further significant point is that the top ten types of work from the 1996 GDS are included in the top eleven types of work in 1999. There is, therefore, a temporal stability in the predominant types of work that recent graduates take when obtaining work in another country.

For graduates working in the UK, the dominant types of work were:

- intermediate or elementary clerical work (13.8 per cent)
- primary schoolteacher (11.1 per cent)
- intermediate or elementary service work (9.0 per cent).

In Japan, the dominant occupations for graduates were:

- vocational education teachers (37.7 per cent)
- extra-systemic teacher (15.6 per cent)
- secondary schoolteachers (10.4 per cent)
- university lecturer, tutor (10.4 per cent).

As was the case in the 1996 GDS, graduates employed in the US occupied a wide range of occupations, with the result that the numbers in any given type of work were low. The highest concentrations were in:

- specialist manager (10.9 per cent)
- life sciences (9.1 per cent)
- intermediate or elementary service worker (9.1 per cent).

The dominant types of work in Hong Kong were:

- university lecturer, tutor (12.5 per cent)



Table 4.9 Hours worked by recent Australian graduates working overseas by nation of destination, 1999

Hours worked	All countries	UK	Hong Kong	Japan	US
			Number		
1–10 hours	90	3	2	2	2
11–20 hours	101	6	–	7	3
21–30 hours	121	16	2	7	4
31–40 hours	715	99	13	34	22
41–50 hours	288	25	21	9	13
51–60 hours	84	7	3	1	5
More than 60 hours	43	2	3	1	3
Total	1442	158	42	61	52
			Per cent		
1–10 hours	6.2	1.9	4.5	3.3	3.8
11–20 hours	7.0	3.8	–	11.5	5.8
21–30 hours	8.4	10.4	4.5	11.5	7.7
31–40 hours	49.6	62.7	29.5	55.7	42.3
41–50 hours	20.0	15.8	47.7	14.8	25.0
51–60 hours	5.8	11.4	6.8	1.6	9.6
More than 60 hours	3.0	1.3	6.8	1.6	5.8
Total	100.0	100.0	100.0	100.0	100.0

Source: GDS 1999

- specialist manager (10.4 per cent)
- accountant, auditor (8.3 per cent).

Actual numbers of recent graduates working in countries other than those above were less than 30, and therefore details of the dominant types of work have not been provided, even though some of these countries may be in the top eleven destinations.

In April 1999 there were 1873 of the 1998 graduates employed overseas. Within the group 46.7 per cent were employed in a permanent position likely to last longer than 12 months, with 27.5 per cent in short-term positions likely to be up to 12 months. A further 25.8 per cent were in 'other', details of which were not provided in the GDS data. The proportion of graduates in permanent employment was about 8 per cent lower than in 1996. Nevertheless, the significance of these results remains and nearly half of recent graduate emigrants are likely to be lost to Australia for more than a year.

Table 4.9 provides details of hours worked for graduates employed in all countries, as well as the hours worked in the major destinations for Australian graduates. Overall, about half (49.6 per cent) of Australian graduates worked between 31 and 40 hours per week. In the UK and Japan this proportion was considerably higher at 62.7 per cent and 55.7 per cent, respectively. In Japan, nearly a quarter of Australian 1998 graduates worked less than 20 hours per week. The distribution of working hours in Hong Kong was positively skewed, with 47.7 per cent of recent Australian graduates working between 41 and 50 hours per week, and a further 29.5 per cent working between 31 and 40 hours per week. In the US, although 42.3 per cent of Australian graduates worked between 31 and 40 hours per week, a further 9.6 per cent worked less than 20 hours per week and 15.4 per cent more than 50 hours per week.

The dominant types of work in Hong Kong were university lecturer and tutor; specialist manager; and accountant or auditor.

In April 1999 there were 1873 of the 1998 graduates employed overseas. Within the group 46.7 per cent were employed in a permanent position likely to last longer than 12 months.



In 1996 nearly a quarter of recent graduate emigrants gained employment in the UK; 14.1 per cent obtained employment in Hong Kong and 11.2 per cent went to Singapore for employment.

Of the top ten destination countries in 1996, eight remained in the top ten for 1999. Indonesia and Malaysia dropped out, and were replaced by China.

Table 4.10 Main countries of destinations of recent Australian graduates working overseas, 1996

Destination country	Number	Per cent
UK	158	24.2
Hong Kong	92	14.1
Singapore	73	11.2
Japan	54	8.3
US	46	7.0
Canada	23	3.5
Indonesia	21	3.2
Malaysia	21	3.2
New Zealand	21	3.2
Papua New Guinea	15	2.3

Source: GDS 1996

Table 4.11 Main countries of destinations of recent Australian graduates working overseas, 1999

Destination country	Number	Per cent
UK	199	31.3
Japan	80	12.6
US	60	9.4
Hong Kong	49	7.7
New Zealand	25	3.9
Singapore	21	3.3
Taiwan	18	2.8
China	15	2.4
Papua New Guinea	15	2.4
Canada	14	2.2

Source: GDS 1999

4.7 Overseas destinations of recent Australian graduates

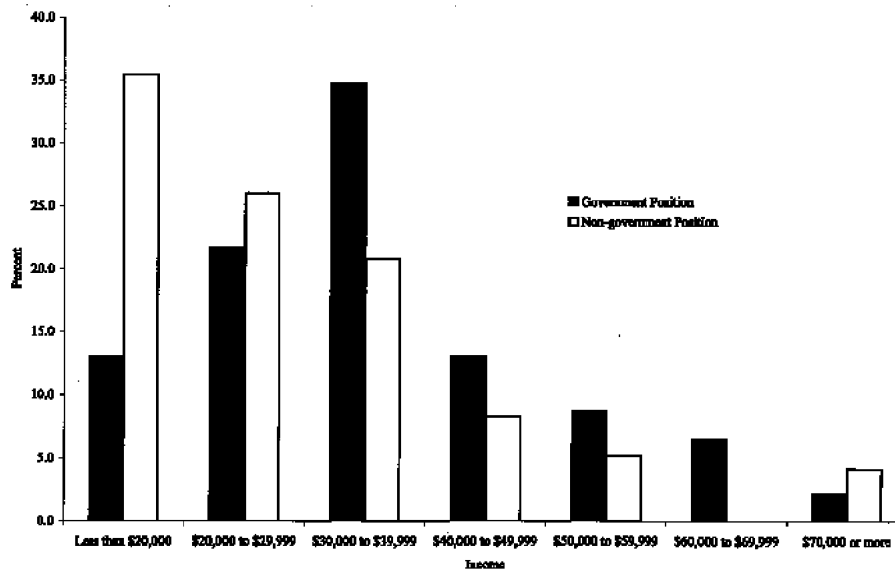
In the 1999 Graduate Destination Survey, respondents were asked to provide details of the country they were in at 30 April 1999. This question was not asked in the 1991 survey, but was asked in the 1996 survey. Therefore, comparisons between 1995 and 1998 graduates are possible. This variable provides data on the dominant countries attracting recent graduates to work in them.

In 1996 nearly a quarter (24.2 per cent) of recent graduate emigrants gained employment in the UK. This proportion was considerably higher than the 14.1 per cent who obtained employment in Hong Kong and the 11.2 per cent who went to Singapore for employment. No other country attracted more than 10 per cent of Australian graduates, although the combined proportions going to the US and Canada was 10.5 per cent. The major destinations of Australian graduate emigrants obtaining employment are shown in Table 4.10. These ten destinations attracted 80.2 per cent of emigrant graduates. A further 4.6 per cent took up work in Taiwan (1.7 per cent), China (1.5 per cent) and South Korea (1.4 per cent).



Of those countries retaining their top ten position in 1999, the UK, Japan and the US increased their share of Australian recent graduates by reasonably significant proportions.

Figure 4.3 Income level of 1990 graduates employed overseas, 1991



Source: GDS 1991

Of the top ten destination countries in 1996, eight remained in the top ten for 1999. Indonesia (1.1 per cent) and Malaysia (1.4 per cent) dropped out, and were replaced by China (2.4 per cent) and Taiwan (2.8 per cent). This reflects the effect of the Asian economic crisis, which saw the demand for expatriate workers reduced considerably in the countries effected by it. Indonesia was the nation most detrimentally effected by the crisis and continues to be so. Malaysia suffered a substantial economic downturn in 1997 and 1998 but has since recovered well.

Table 4.11 shows the main destinations of graduates in 1999. Of those countries retaining their top ten position in 1999, three increased their share of Australian recent graduates by reasonably significant proportions. Graduates obtaining work in the UK increased from 24.2 per cent in 1996 to 31.3 per cent in 1999. Comparable percentages for Japan were 8.3 and 12.6 per cent, the US 7 and 9.4 percent. The proportion of graduates obtaining work in New Zealand and Papua New Guinea increased only slightly from 1996 to 1999. The proportions of Australian graduates obtaining work in Hong Kong, Singapore and Canada declined between 1996 and 1999. The top ten destinations attracted 80.2 per cent of emigrant graduates. A further 4.6 per cent took up work in Taiwan (1.7 per cent), China (1.5 per cent) and South Korea (1.4 per cent).

4.8 Income levels of recent graduates overseas

In 1991 only 45.8 per cent of respondents provided information on the salary level of the overseas job they had at 30 April 1991. Figure 4.3 shows the salary distribution of persons employed in government and non-government jobs. In government jobs, the salary range was \$5000 to \$70 000, compared with \$2600 to \$90 000 for non-government jobs. The median salary for government jobs was \$32 000, while that for non-government jobs was \$24 000. Further, 17.4 per cent of graduates in government jobs earned \$50 000 or more, compared with only 9.4 per cent in non-government jobs.



Table 4.12 Income levels of recent Australian graduates working overseas, 1996

Salary	All countries	UK	Hong Kong	Singapore	Japan	US	Canada
	Number						
Less than \$20 000	69	14	6	4	1	6	5
\$20 000–\$29 999	134	33	19	26	5	4	7
\$30 000–\$39 999	85	22	2	13	11	7	3
\$40 000–\$49 999	66	11	7	3	12	6	1
\$50 000–\$59 999	28	4	3	–	2	5	–
\$60 000–\$69 999	28	3	11	4	2	2	–
\$70 000 and more	56	3	15	4	4	1	1
Total	466	90	63	54	37	31	17
	Per cent						
Less than \$20 000	14.8	15.6	9.5	7.4	2.7	19.4	29.4
\$20 000–\$29 999	28.8	36.7	30.2	48.1	13.5	12.9	41.2
\$30 000–\$39 999	18.2	24.4	3.2	24.1	29.7	22.6	17.6
\$40 000–\$49 999	14.2	12.2	11.1	5.6	32.4	19.4	5.9
\$50 000–\$59 999	6.0	4.4	4.8	–	5.4	16.1	–
\$60 000–\$69 999	6.0	3.3	17.5	7.4	5.4	6.5	–
\$70 000 and more	12.0	3.3	23.8	7.4	10.8	3.2	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: GDS 1996

In 1996, the salary distribution for Australian graduates across all countries was negatively skewed, with the highest proportions of graduates earning between \$20 000 and \$29 999 per year. The \$70 000 and more cohort at this level is, however, quite high at 12 per cent.

In 1996 nearly two-thirds (63 per cent) of respondents provided information on the salary level of the overseas job they had at 30 April 1996, and details of these responses are shown in Table 4.12.

A number of observations can be made from Table 4.12:

- The salary distribution for Australian graduates across all countries is negatively skewed, with the highest proportions of graduates earning between \$20 000 and \$29 999 per year. The \$70 000 and more cohort at this level is, however, quite high at 12 per cent.
- The UK salary distribution is also negatively skewed with highest concentrations in the \$20 000 to \$29 999 (36.7 per cent) and \$30 000 to \$39 999 (24.4 per cent) ranges.
- The Hong Kong distribution is unusual, in that the highest proportions are at either end of the distribution. Clearly, average paid jobs and very highly paid jobs are available to Australian graduates in Hong Kong.
- Singapore offer jobs to 48.1 per cent of Australian graduates employed there in the \$20 000 to \$29 999 range.
- Reasonably high salaries are paid to Australian graduates in Japan: 29.7 per cent receive \$30 000 to \$39 999 per year and 32.4 receive between \$40 000 and \$49 999 per year.
- The US has a flat, fairly normal distribution, with four salary categories embracing 77.5 per cent of Australian working graduates.
- The salary distribution among Australian graduates in Canada is very skewed



Table 4.13 Income levels of recent Australian graduates working overseas, 1998

Salary	All countries	UK	Number			US
			Hong Kong	Japan		
Less than \$20 000	215	16	4	3	9	
\$20 000–\$29 999	277	17	5	7	9	
\$30 000–\$39 999	349	29	6	15	7	
\$40 000–\$49 999	181	32	3	21	5	
\$50 000–\$59 999	75	12	3	3	2	
\$60 000–\$69 999	50	5	1	2	6	
\$70 000 and more	84	10	16	2	4	
Total	1231	121	38	53	42	
			Per cent			
Less than \$20 000	17.5	13.2	10.5	5.7	21.4	
\$20 000–\$29 999	22.5	14.0	13.2	13.2	21.4	
\$30 000–\$39 999	28.4	24.0	15.8	28.3	16.7	
\$40 000–\$49 999	14.7	26.4	7.9	39.6	11.9	
\$50 000–\$59 999	6.1	9.9	7.9	5.7	4.8	
\$60 000–\$69 999	4.1	4.1	2.6	3.8	14.3	
\$70 000 and more	6.8	8.3	42.1	3.8	9.5	
Total	100.0	100.0	100.0	100.0	100.0	

Source: GDS 1999

towards the lower two salary categories. Here, 29.4 per cent of graduates earned less than \$20 000 per year, and 41.2 per cent were paid between \$20 000 and \$29 999 per year.

In 1999, as in the 1996 survey, nearly two-thirds (65.7 per cent) of respondents provided information on the salary level of the overseas job they had at 30 April 1999, and details of these responses are shown in Table 4.13.

A number of observations can be made based on the table:

- The salary distribution for Australian graduates across all countries is negatively skewed, with the highest proportions of graduates earning between \$20 000 and \$29 999 per year. This situation is the same as 1996.
- The UK salary distribution is also negatively skewed with highest concentrations in the \$40 000 to \$49 999 (26.4 per cent) and \$30 000 to \$39 999 (24.0 per cent) ranges. Since the 1996 survey, the median UK salary has increased.
- In the 1996 survey the Hong Kong distribution was unusual, in that the highest proportions were at either end of the distribution. In 1999 there has been a reduction in the proportion of jobs with lower salaries, while the proportion of graduates earning more than \$70 000 has increased from 23.8 per cent in 1996 to 42.1 per cent in the 1998 survey.
- The distribution of salaries in Japan has remained consistent between 1996 and 1999. Reasonably high salaries are paid to Australian graduates in Japan: 28.3 per cent received \$30 000 to \$39 999 per year and 39.6 received between \$40 000 and \$49 999 per year.

In 1999, the salary distribution for Australian graduates across all countries was negatively skewed, with the highest proportions of graduates earning between \$20 000 and \$29 999 per year. This situation is the same as 1996.

In the 1996 survey the Hong Kong distribution was unusual, in that the highest proportions were at either end of the distribution. In 1999 there has been a reduction in the proportion of jobs with lower salaries, while the proportion of graduates earning more than \$70 000 has increased.



A significant proportion of the recent graduates going overseas clearly are seeking long-term employment.

- The US had a quite negative salary distribution in 1999, compared with a fairly normal, albeit flat, distribution in 1996. Hence, 59.5 per cent of recent graduates working in the US received less than \$40 000 per annum salary.

4.9 Conclusion

There are a number of components of contemporary emigration from Australia and one is the flow of recent graduates from Australian universities to overseas destinations in the year after their graduation. It is apparent that one element in this outflow is young people spending an extended period overseas as a holiday or working holiday after their graduation. Clearly, not all of the group studied in this chapter are going to spend a very long period overseas and not all are part of a 'brain drain'. Australia has a reciprocal Working Holiday Maker Program (WHM) with several nations³ and it is clear that new university graduates are an important element in the young Australians going overseas under the WHM program. This program is restricted to Australians aged 18 to 25 years who can work for up to 12 months in one of the agreement countries (Joint Standing Committee on Migration 1997). Nevertheless, a significant proportion of the recent graduates going overseas clearly are seeking long-term employment and the GDS has shed some light on the characteristics of this group.

Notes

1 Transcript of the Prime Minister, the Hon. John Howard, MP Federation Address and Launch of 'Backing Australia's Ability', Australian Technology Park Centre, Sydney, 29 January 2001, <http://www.pm.gov.au/news/speeches/2001/speech676.htm>.

2 For example, see Transcript of the Minister for Immigration and Multicultural Affairs, the Hon. Philip Ruddock MP, 'The 2001–2002 Migration Program', Address to the Sydney Institute, Sydney, Wednesday, 16 May 2001, http://www.minister.immi.gov.au/transcripts/migration_160501.htm.

3 These included in May 2001 the UK, Canada, Ireland, Japan, Malta, The Netherlands, Republic of Korea, Germany, Sweden, Norway and Denmark. There are plans to extend the program (Hugo 2001). It will be noted that the UK, Japan and Canada were among the top ten destinations of the recent graduates (Table 4.11).

5 Conclusion

5.1 Introduction

The present report represents the first stage of an investigation into the contemporary patterns, composition, causes and implications of permanent and long-term emigration out of Australia. This stage has involved the analysis of a number of secondary data sources and is intended to provide a clear picture of the scale, spatial patterning and composition of the movement, and clarify some of the major issues and questions about contemporary emigration in Australia. This is a necessary preliminary to undertaking primary data collection among the emigrants themselves and the institutions and gatekeepers who influence their movement and are impacted by it. This second phase of the study is intended to delve more deeply into the underlying causes of emigration from Australia and to assess the impacts of that movement on the emigrants themselves, but more widely on the Australian economy and society. In this final chapter we will attempt to bring together and summarise the findings of the analyses presented here and to draw out some initial ideas on the implications of these findings. In particular, we raise the issue of the possibility of Australia developing a policy or series of policies relating to emigration.

There can be little doubt that the last two decades have seen an exponential increase in international population movement. Less frequently observed is the fact that governments have become increasingly involved in attempting to shape and influence that mobility. Table 5.1 shows the results of the regular surveys of nations by the United Nations' Population Division, which seeks information about government attitudes towards specific population issues and their population policies. The table shows that the number of countries considering that their immigration was too high had increased over the 1976–96 period but then stabilised, perhaps due to the increasing concern in OECD nations about low fertility, ageing and immigrant population decline (Hugo 2001b).

A quite different picture is evident in Table 5.2, which shows the same set of data on government views on emigration. There has been a substantial increase in the number of nations who are concerned about emigration, reflecting an increasing concern with 'brain drain'.

5.2 Some data-collection issues

Emigrants present some unique problems to demographers and other social scientists wishing to study them. These predominantly arise from the fact that the subjects of the study (that is, the emigrants) are by definition outside of the nation from whose perspective they are being studied. Hence, conventional population censuses do not provide any information on the emigrants themselves and studies based in the country of emigration can only survey them before they leave, or in the case of some, after they return. To some extent, the censuses of the countries of destination may be useful in providing some detail on the characteristics of emigrants residing in those countries and the country of emigration may bring together information from censuses in each of the main destinations. Some nations keep close contact with their emigrants through embassies, consulates, and so on, and have regular collections of information from them. One example of this is Japan, which has a substantial population overseas, especially those associated with the activities of Japanese-owned and based multinational companies. For example, in 1999 there were 795 852 Japanese citizens residing overseas of which 515 275 were long-term stayers in the destination countries and 280 557 permanent residents (Iguchi 2001).



There can be little doubt that the last two decades have seen an exponential increase in international population movement.

There has been a substantial increase in the number of nations who are concerned about emigration, reflecting an increasing concern with 'brain drain'.



There are an estimated 3 million US citizens living abroad and the US government has decided to carry out a special census of its citizens living abroad in 2003.

It is recommended that Australia consider undertaking a similar census.

Table 5.1 Government views on the level of immigration, 1976, 1986 and 1996

Year	View			Total
	Too Low	Satisfactory	Too High	
A. Number of Countries				
1976	11	128	10	149
1986	6	124	33	163
1996	4	135	40	179
B. Percentage of Countries				
1976	7	86	7	100
1986	4	76	20	100
1996	2	75	22	100

Source: United Nations 1998

Table 5.2 Government views on the level of emigration, 1976, 1986 and 1996

Year	View			Total
	Too Low	Satisfactory	Too High	
A. Number of Countries				
1976	6	124	19	149
1986	9	124	30	163
1996	5	129	45	179
B. Percentage of Countries				
1976	4	83	13	100
1986	6	76	18	100
1996	3	72	25	100

Source: United Nations 1998

An important innovation has been announced by the US where there has been a growing recognition of the significance of emigration of US citizens. There are an estimated 3 million US citizens living abroad and the US government has decided to carry out a special census of its citizens living abroad in 2003. It is intended that this census would prove a blueprint for extending the 2010 US census to include citizens living abroad (*New York Times*, CXLIX, 51 334, A18, 21 March 2000). Citizens abroad continue to pay taxes, vote and maintain other linkages with the US. It is perhaps an indicator of growing transnationalism that the US should conceive of its national census covering not only people living within its national boundaries but also its citizens living in other nations. One of the recommendations of the present study is that Australia at the very least needs to closely observe the US experiment and perhaps also consider undertaking a census of Australians overseas along similar lines to the planned US enumeration in 2003. Perhaps, too, there needs to be thought given to new concepts of who should be included in the Australian censuses of population. In a globalising world do we need to include Australian citizens living outside Australia?

The present study has used a range of sources relating to emigration. The DIMA Movements Data Base is the most obvious source to analyse out-movement and much



more can be done with this than has been possible here. However, there are a range of possible additional sources of information that can be tapped to increase our understanding of emigration. In this study we have analysed the LSIA to investigate the important 'settler loss' component of the emigration flow.

One of the real benefits of the LSIA data is that we can identify the characteristics of those immigrants who leave Australia so soon after settlement and compare them with those who stay. Emigrants were largely those gaining entry on economic criteria, predominantly young, highly educated, employed in professional and skilled jobs, and of European and North American origins. Questions were asked in each wave of the survey about intentions to emigrate and also levels of dissatisfaction with life in Australia. It was disappointing that these questions provided very low responses that prevented more detailed analyses which may have yielded some interesting insights into factors likely to give rise to emigration. Another limitation was that the destination of emigrants was unknown so that we could not establish whether former immigrants returned to home countries or remigrated to other countries.

The 1994 report on Emigration from Australia (Hugo 1994) made a number of recommendations about data collection, most of which remain valid. It must be reiterated that Australia is one of the few nations in the world that collects comprehensive data on emigration and most of the other major immigration nations do not. This has placed them at a major disadvantage in monitoring the movement of high-skilled labour as part of their national strategies to ensure that they have appropriate numbers and types of skilled workers. OECD countries are now being strongly advised to adopt systems of emigration data collection along the lines of those carried out by Australia (Sexton 2001). It is therefore crucial that Australia maintains this system and not follow the example of nations like the US and have an incomplete collection of emigration information. It is of interest that the Population Association of America, Subcommittee on Migration Statistics (1988, pp.11–12) has recommended as a matter of urgency that such a system be introduced in the US. To do away with the data collection would very severely hamper planning and policy efforts in a number of areas. For example:

- In making intercensal estimates of the size and composition of the Australian population.
- In assessing the effectiveness of the immigration program and establishing its net impact on the labour force.
- In detecting emerging trends in emigration not only in the area of settler loss but increasingly with respect to loss of the Australia-born. This needs to be very carefully monitored to ensure that its scale and composition do not develop to the stage where it is hampering Australia's economic development. Any effective policy development relating to settler loss or the 'brain drain' will require this information.

It will make it virtually impossible to detect and estimate the number of illegal migrants in Australia. This is especially important in the current context of a substantial increase in the amount of illegal overstaying in Australia. Moreover, there is every indication given the changes in the Asian migration system (Hugo 1991) that illegal attempts to overstay will increase greatly in the early twenty-first century.

Clearly, if the OPC was abolished efforts at estimating changes in Australian population would be severely compromised, which in turn would incur significant inefficiencies and costs through bad planning and inability to anticipate changes in

Immigrants who left Australia soon after settlement were largely those gaining entry on economic criteria, predominantly young, highly educated, employed in professional and skilled jobs, and of European and North American origins.

Australia is one of the few nations in the world that collects comprehensive data on emigration – most of the other major immigration nations do not. It is crucial that Australia maintains this system.

To do away with the data collection would make it virtually impossible to estimate the number of illegal migrants in Australia. This is especially important in the current context of a substantial increase in the amount of illegal overstaying in Australia.



With the growing emphasis on the economic effects of immigration thought could be given to the inclusion of an education level question on the arrival and departure cards. Perhaps the marital status question could be replaced with an education question.

There is an especially urgent need for an OECD Continuous Reporting System on Migration-type study to be undertaken from an Australian base.

Accordingly, it would be possible to set up a lifetime migration origin : destination matrix to establish the true balance of immigration to and emigration from Australia.

the population. Management and monitoring of the effect of the immigration program would also be severely hampered.

With the growing emphasis on the economic effects of immigration perhaps some thought could be given to the inclusion of an education level question on the arrival and departure cards. Surely in human resource development terms this is a crucial piece of information not only from arrivals but also for long-term and permanent departures. There is no doubt that the 'brain drain'-'brain gain' issue will assume much greater significance over the next decade, and the inclusion of this question will allow the direction and scale of the effect to be accurately assessed. It is realised that the addition of a single question incurs substantial extra costs in terms of data collection, processing and analysis. However, perhaps some thought could be given to replacing the marital status question with an education question. While it is useful to have information on marital status it is of less relevance than previously and certainly does not impact on planning utility as much as education level. The innovation of adding a question on the OPC to overseas-born former residents departing that asks 'Did you intend to SETTLE permanently (in Australia)?' is a good one. We have not been able to analyse the results of the data collected by that question here because it was not included on the data tape. Nevertheless, the results of this question should be subject to interpretation and could be useful for policy-related analysis.

We are wary of suggesting new data-collection initiatives because of their costliness and the fact that many such initiatives often overlap with existing data sets. Nevertheless, it would appear from the work undertaken in this study that there are some such initiatives warranted that would not overlap with existing data sets.

There is an especially urgent need for an OECD Continuous Reporting System on Migration (known under its French acronym SOPEMI)-type study to be undertaken from an Australian base. This would be a relatively inexpensive operation and involve establishing for as many overseas countries as possible:

- the number of Australian-born residents
- the number of people who previously lived in Australia
- it may also be possible to collect some information on particular characteristics of these people.

This would best be done in 2002 or 2003 to take advantage of the results of the 2000 round of censuses taken in all of the countries with which Australia has significant international migration connections. Accordingly, it would be possible to set up a lifetime migration origin : destination matrix to establish for 2000 the true balance of immigration to and emigration from Australia. This would be an inexpensive quick desk-based study that could be undertaken by an immigration expert.

There is a need for another study of the type reported upon by Fortey (1978). This should be undertaken periodically to update the correction factors that need to be applied to the departures data to arrive at meaningful estimates of category jumping.

It would also seem timely to initiate another study like that of Lukomskyj and Richards (1986), that matches the settler arrivals in a particular year with the departures over five subsequent years. One suspects that the pattern observed by Lukomskyj and Richards will have changed substantially with shifts in the composition of the immigration program and in the economic situation in Australia.



There may also be utility in giving consideration to following the lead of the US Bureau of Census in using Multiplicity and Network Sampling methods to get some information on emigration.

It is strongly recommended that the methodology developed by Dr Charles Price to estimate net migration, to take full account of category jumping, be calculated and published annually.

The level of permanent and long-term departure from Australia reached unprecedented levels in 1999–2000.

Fortey's (1978, p. 8) suggestion that a similar exercise to that of Lukomskyj and Richards (1986) could be undertaken matching permanent departures against people actually returning to Australia should be followed up. As he points out, this would 'establish the patterns behind the passenger movement figures, and the true extent of the loss of Australian-born and overseas-born residents'.

There may also be utility in giving consideration to following the lead of the US Bureau of Census in using Multiplicity and Network Sampling methods to get some information on emigration. This method would involve attaching a module to the Australian Bureau of Statistics Monthly Survey asking people about relatives who were former residents but are now living overseas.

The Longitudinal Survey of Immigrants to Australia (LSIA) could be utilised to follow up a sample of the returnees in the longitudinal study sample in a limited number of countries. Such a study would provide a unique opportunity to explore the underlying causes and some of the effects of return migration of settlers.

It is strongly recommended that the methodology developed by Dr Charles Price to estimate net migration, to take full account of category jumping be calculated annually and published together with the other excellent statistical series produced by DIMA.

5.3 Major trends in emigration

Australian emigration has undergone some substantial changes since the last major analysis of it was published (Hugo 1994). One element has been the increase in involuntary departures brought on by the substantial increase in attempted undocumented entry into Australia. Accordingly, in 1999–2000 the following involuntary departures were made (ABS 2001, p. 25):

- 573 of the 4174 who arrived on boats without authorisation were removed
- 1340 of the 1695 who arrived by air without authorisation were removed
- 330 Indonesian fishermen were detected in Australian waters and repatriated
- 2159 people were detected working illegally and were removed
- 74 criminals who offended during their first ten years of residence were removed
- 8490 unlawful non-citizens departed Australia as a monitored or supervised departure or a removal.

This reflects the increased 'compliance function' of DIMA. Our concern in the present study has been to chart the pattern of voluntary departure.

The level of permanent and long-term departure from Australia reached unprecedented levels in 1999–2000. The major trend has been in both the increasing number of Australia-born departures and the proportions that they make up in the total out-movement reaching 49.1 per cent of permanent departures in 1999–2000 and 54.2 per cent of long-term departures. The numbers of permanent emigrants who were Australia-born increased by 17 per cent over 1998–99 and 58 per cent over 1997–98. A number of recent trends in emigration have been identified not only here but also in other recent reports (ABS 2001; Cook and Ward 2001).

Despite increases in Australia-born emigration, overseas-born residents were still



Despite increases in Australia-born emigration, overseas-born residents were still more likely to emigrate than the Australia-born in all age and sex categories.

The main five destinations of the Australia-born emigrants in order are the UK, New Zealand, US, Hong Kong and Singapore. For overseas-born emigrants they are New Zealand, the UK, Hong Kong, US and China.

Australia-born emigrants are increasingly moving to Asian destinations.

In one important sector (information technology) there have been major increases in the numbers coming into Australia on a permanent or long-term basis, but there has also been an increase in out-movement of such workers. This points to a large degree of turnover and circulation in this sector, reflecting the globalisation of labour markets in the area.

more likely to emigrate than the Australia-born in all age and sex categories (ABS 2001, p. 22). It is estimated that around one in five immigrants eventually leave Australia, most returning to their home country.

Australia-born emigrants are younger than their overseas counterparts with 65 per cent aged less than 35, compared with 45 per cent. They are more likely to be in the workforce and are more highly skilled.

The main five destinations of the Australia-born emigrants are the UK (20.7 per cent), New Zealand (19), US (17.9), Hong Kong (4.9) and Singapore (4.9). For overseas-born emigrants they are New Zealand (24.5 per cent), the UK (15.7), Hong Kong (11.3), US (7) and China (5.5).

Rates of return migration vary greatly between different birthplace groups. There are high rates of return to countries such as New Zealand, the UK, US, Japan and Hong Kong.

Australia-born emigrants are increasingly moving to Asian destinations reflecting their rapidly growing economies, their lack of sufficient numbers of skilled people and their increasingly open immigration policies towards skilled workers.

Australia-born highly skilled emigrants going to the UK and US are also rapidly increasing, reflecting the central position of those countries in the global economy.

There is evidence of substantial return migration to some of Asia's more buoyant economies such as Taiwan. There is also still substantial 'astronauting' to several Asian countries.

The net effect of the difference between skilled immigrants and skilled emigrants has been increasing despite their increase in skilled emigration. In 1999–2000 the net gain of skilled people was 15 110 compared with 13 680 the year before when only permanent moves were considered (Cook and Ward 2001).

In one important sector (information technology) there have been major increases in the numbers coming into Australia on a permanent or long-term basis (to 7007 in 1999–2000), but there has also been an increase in out-movement of such workers (to 4227). This points to a large degree of *turnover and circulation* in this sector, reflecting the globalisation of labour markets in the area. It is perhaps salutary that at this stage at least there are more IT-trained Australia-born leaving the country than there are coming back. This may, however, reflect the relative youth of the industry with more likely to return in later years.

The skill profile of emigrants from Australia has increased over the last decade. In 1990–91, 61 per cent of all employed emigrants were skilled, but by 1999–2000 this had increased to 72 per cent (Cook and Ward 2001). In the last two years the numbers of skilled Australia-born emigrants outnumbered the skilled overseas-born emigrants.

In considering probable future trends in emigration in Australia, a number of issues need to be considered. One relates to the increasing orientation of immigrant selection policy towards skilled migration and the increase in the skill component of immigration compared with the family elements. This could mean an increase in overall rates of settler loss. We have shown here that the economic categories of immigrants show a higher propensity to emigrate than other groups. One would expect that more of these settlers are tied in with international labour markets and hence more likely to move on for job-related reasons. There would also not seem any reason to suggest that the outflow of young skilled Australians will decrease over the next few years.



5.4 Brain drain, brain gain or brain circulation?

It is apparent that Australia has experienced, and continues to experience, a net gain of highly skilled workers through international migration. Indeed, the introduction of a liberalised temporary worker entry policy has meant that the intake of skilled workers into Australia has greatly increased. Indeed, the number of person years of skilled workers added to the Australian labour market by non-permanent migration is substantially greater than that added through traditional settlement migration. Yet, prior to the mid-1990s this form of international migration provided only a minuscule amount of skilled labour to the national labour market. The introduction of new categories of temporary labour movement has thus added substantially to the 'brain gain' experienced by the country. In net terms there can be no doubt that Australia continues to experience a substantial 'brain gain'.

On the other hand, there can equally be no doubt that the movement of skilled workers out of the nation has increased over the same period. One element of this has been the inevitable out-movement of the skilled workers entering Australia under temporary visas. In passing it should be mentioned, however, that significant numbers of skilled workers who are entering Australia under temporary visas (students, temporary business migrants, and so on) are seeking to become permanent settlers. In 1999–2000, for example, 13.1 per cent of persons accepted in Australia for permanent settlement in the skill category were 'onshore applicants' who had entered Australia on a temporary visa. Moreover, changes to immigrant regulations in recent years have favoured this. For example, in 1999 extra points were given to applicants for immigration who had an Australian qualification, thus favouring students staying on in Australia after completing study in the country. In 2001 this was made even easier for IT graduates who did not need a sponsor or to have their qualifications tested for acceptance in the Skilled Migration Program. In Australia there has, in the past, been a pattern of most students completing studies in Australia returning to their home country, although some may subsequently seek to settle in Australia. This contrasts with the US where the majority of new graduates stay on and seek to reside in the country. For example, of 13 878 foreign Science and Engineering PhD graduates in US universities in 1990–91, some 47 per cent were working in the US in 1995. The proportion remaining in work varied between 88 per cent for Chinese students, 79 per cent for Indian students and 59 per cent for English students, down to 11 per cent for South Koreans and 13 per cent for Japanese (OECD 2001a, p. 21).

Australia is one of the five¹ major countries of destination of overseas students. To link study in Australia as a possible preamble to immigration and a possible means of entering Australia as an immigrant is a relatively new phenomenon. It raises several issues, one of which relates to the countries of origin of the students. The traditional 'brain drain' argument is that the loss of highly skilled people such as those trained in countries like Australia deprives countries of the much-needed human resources to facilitate development. Moreover, the countries have often made a substantial investment in the education of those students, which means that less-developed nations are subsidising the prosperity of more developed nations. Over a long period there has been a strong body of opinion in Australia that overseas students should return to their home countries to use their training to progress the development processes at home.

While these arguments no doubt in many cases still apply, research has indicated that the simplistic 'brain drain' arguments do not fit all cases. Indeed, in some cases it has been shown that highly skilled graduates can contribute more to the development of their home country by working in a more developed country than by staying home.

It is apparent that Australia has experienced, and continues to experience, a net gain of highly skilled workers through international migration. There can equally be no doubt however that the movement of skilled workers out of the nation has increased over the same period. One element of this has been the inevitable out-movement of the skilled workers entering Australia under temporary visas.

Australia is one of the five major countries of destination of overseas students. To link study in Australia as a possible preamble to immigration and a possible means of entering Australia as an immigrant is a relatively new phenomenon.



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This is partly due to the fact that skilled labour markets in the home country may be underdeveloped so that full use may not be made of those skills. Moreover, in some cases the Indian information technology workers in Silicon Valley are an example. It has been shown that skilled people in the diaspora can add significantly to the home economy by:

- Sending remittances to the home country, which can improve the balance of payments situation. Indeed, in several Asian nations such remittances are larger earners of foreign currency than any single good trade.
- Encouraging investment of their MDC-based companies in their home area.
- Eventually returning to the home nation, not only with enhanced skills and wealth to invest but also the business linkages to facilitate the development of industry at home.

Hence, the argument about students staying on in the more developed countries (MDCs) where they study is not a simple one. Nevertheless, it is an area of much-needed research in the Australian context.

It is interesting that currently there are 61 224 persons on bridging visas in Australia (DIMA 2000a). Not all of these people are former temporary migrants awaiting determination as to whether they can gain permanent residence. For example, people who overstay their visas can often be put on a bridging visa while they prepare to return to the home country. Nevertheless, there has been an upturn in the numbers of temporary visa holders applying for entry to Australia under the 'skill migration' category.

The second group of significance among the increased numbers of long-term and permanent emigrants are the Australia-born. These reached unprecedented numbers in 1999–2000. This has led to concern about a 'brain drain'. For example, the federal government's 29 January 2001 statement *Backing Australia's Ability: An Innovation Action Plan for the Future* had a number of initiatives to attract back and retain leading Australian researchers. The research undertaken so far in the project reported on in this volume suggests that the upturn in 'permanent' and 'long-term' emigration of skilled Australians comprises the following groups:

- Recent Australian graduates who are moving overseas to work on an extended holiday basis—often through the Working Holiday Maker (WHM) Program. This is especially the case with respect to the UK with which Australia has a reciprocal WHM Program.
- Other recent graduates who are seeking to work overseas to gain experience and progress in their careers in international labour markets.
- Some slightly older skilled workers who are also going overseas for the same reasons and others who have been transferred by their multinational company employers. These latter two groups especially include many skilled young Australians going to the US.
- Another group, slightly older again, who are moving out, especially to Asian destinations where there are well-paid, high-skill job opportunities due to the inability of these nations' education systems to keep up with the rapidly increasing demands of the rapidly expanding new economy. While this demand was reduced somewhat by the onset of the Asian Economic Crisis in some countries, especially Indonesia, demand has continued and increased in places like Singapore.²



The upswing in out-movement of Australia-born young people with skills is a function of:

- The longstanding tradition of young Australians travelling overseas on extended working holidays. Such a practice has become more possible than previously through such programs as the WHM Program, but also through the processes of globalisation, which have put overseas travel within the reach of more Australians.
- The new element, however, is the internationalisation of labour markets, which means that young skilled Australians are looking for jobs in labour markets that extend beyond Australia's boundaries. In addition, the more who get jobs in Australia do so with employers who are themselves multinationals or who have links with companies in other countries that facilitate the transfer of Australian staff.

There are two ways of looking at this development. One is to say that this represents a significant loss to Australia and a lack of return on community investment in the education of young people. Such reactions would argue for policies that attempt to keep young people in Australia. An alternative approach is one which *accepts* that there will be a significant out-movement of young Australians for both of the reasons mentioned above. However, this approach should not accept that all of these skilled Australia-born emigrants are lost to Australia. A major priority would be to ensure that a substantial proportion of these emigrants are in fact *circulators* rather than emigrants. If the majority return to Australia after spending a period working overseas, their value to Australia will be even greater than if they stayed in Australia. This is because:

- They will return more experienced than when they left and in a globalising world the *international* experience will be of value to their Australian employers seeking to compete in international markets.
- They will have substantial overseas networks and contacts that will assist their Australian employers in penetrating overseas markets.
- They may bring back with them capital as investment from their larger overseas employers. This has certainly been the case in the Indian IT industry.

Moreover, while they are still overseas they can still be contributing to development within Australia:

- By remitting sums back to Australia.
- By serving as bridgeheads of Australian businesses in the destination nations. An example here is how Australian mining engineers in Asia have been instrumental in making Australian mining and mining supplies companies paramount in the region.

The example of Ireland over the last two decades is instructive here. In the 1980s Ireland's economy was one of the most depressed in Europe, with one in three graduates leaving the country upon graduation (Barrett 2001). However, the economic upturn in the 1990s has seen a major and unprecedented immigration to the country of whom more than half are the Irish people who left in the 1980s (Barrett 2001). Australia's out-movement of new graduates is much smaller than was Ireland's in the 1980s. Indeed, Chapter 4 has shown that some 5.6 per cent of 1998 graduates from Australian universities were overseas a year later.

The upswing in out-movement of Australia-born young people with skills is a function of the longstanding tradition of young Australians travelling overseas on extended working holidays and the internationalisation of labour markets.

A major priority would be to ensure that a substantial proportion of these emigrants are in fact circulators rather than emigrants.

The example of Ireland over the last two decades is instructive. The economic upturn in the 1990s has seen a major and unprecedented immigration to the country of whom more than half are the Irish people who left in the 1980s.



The policy implications of the patterns of settler loss are to continually improve post-arrival services that assist economic and social adjustment to Australia. English language training is a crucial element.

One group among the settler loss that may be of concern is the substantial numbers of returnees to some Asian nations that in recent times have sent large numbers of immigrant settlers to Australia.

While DIMA surveys indicate that the Business Migration Program has been largely successful, field studies tend to indicate that some business people from Asia have found it difficult to make the transfer of their business activity from the Asian to the Australian context.

5.5 An Australian policy on emigration?

For the entire post-World War II period there have been clearly articulated and substantial national policies and programs relating to immigration and settlement in Australia. These have been the subject of considerable public debate and have undergone substantial change over that period. This has been in line with Australia being one of the world's major sources of immigration over that period. However, Australia has also been one of the world's most significant emigration countries consistently over this period (Hugo 1994), but there has been no development of a clear national policy on emigration and little public debate about it. Certainly, the issue of 'settler loss' has attracted considerable attention from time to time but it seems that levels in Australia are similar to or lower than those in comparable countries (Hugo 1994). The reasons for settler loss are discussed in Chapter 3 and they tend to duplicate those examined in earlier settler-loss studies (Hugo 1994). They indicate that the bulk of overseas-born emigrants do not leave for economic reasons. Among this group family-related reasons, homesickness and retirement are important reasons for leaving Australia. An exception has been the New Zealanders whose migration to and from Australia 'varies according to the differences in relative real incomes and employment opportunities between the two countries (Struik and Ward 1992; Ward and Young 2000). The policy implications of the patterns of settler loss are to continually improve post-arrival services that assist economic and social adjustment to Australia. Hence, English language training is a crucial element since it greatly influences the degree of success in the labour market. However, it is clear that there will be a return flow of former settlers regardless of the economic climate and the effects made to assist adjustment to Australia.

Despite the above, we need to stress that the sample for LSIA on which Chapter 3 is predominantly based was drawn almost a decade ago before the moves to place a greater emphasis on skilled migration in the middle and late 1990s. Given the high incidence of loss among settlers who had entered Australia on economic criteria, we can expect a higher level of settler loss in the future. This is due to a greater proportion of immigrants being influenced, like the New Zealanders, by trends in the economy. Also, however, they will be influenced by the operation of international labour markets such that more settlers (like their skilled Australia-born counterparts) will operate in international labour markets and as a result move between countries when they change jobs.

One group among the settler loss that may be of concern is the substantial numbers of returnees to some Asian nations that in recent times have sent large numbers of immigrant settlers to Australia. These include especially Hong Kong with 1600 emigrants in 1999–2000 (an emigration rate of 31 per 1000³), China with 1800 (11 per 1000), Indonesia with 400 (7 per 1000). This may, in fact, represent the backflow of some business migrants from these countries. Business migrants are those who gained entry to Australia on the basis of investing a minimum level of funds in a business in Australia.⁴ While DIMA surveys indicate that the Business Migration Program has been largely successful (DIMA 1999b), field studies (for example, Nonini 2001) tend to indicate that some business people from Asia (especially Hong Kong, Taiwan and so on) have found it difficult to make the transfer of their business activity from the Asian to the Australian context. This is partly associated with a lack of local knowledge and networks, but it also is related to the very different business and regulatory environment to that which they are used to. The numbers of these returning business migrants are still relatively small but they do suggest that there is



a need to study in depth this backflow since it may have some implications for the future retention of Asian business migrants in Australia. It may mean that more intensive programs of providing information and advice to business migrants to overcome problems of adjusting to the Australian business environment are needed.

The earlier study (Hugo 1994) reported in some detail on the phenomenon of 'astronauting' among some Asian settlers, especially those to Malaysia, Hong Kong and Taiwan. The LSIA study has produced conclusive proof of the substantial level of such movement. This is the type of movement that involves the settler keeping his or her business activities in the home country, settling the family in Australia and then regularly circulating back to the home country to maintain business. While there is some research into the phenomenon (Pe Pua et al. 1996) in Australia, knowledge of it is still incomplete. In the earlier study it was argued that astronauting could be viewed positively in the sense that it is unrealistic to expect that entrepreneurs can immediately transfer all of their business activities from one country to another. Inevitably, it will be an extended transition in many cases.

It adds to the development of business linkages between Asia's growing economies and Australia.

On the other hand, the extent that astronauting is delaying business migrants committing themselves to investing in Australian businesses and the extent this could be a prelude to return migration needs to be addressed in research.

Much of the attention here has been focused on the increased out-movement of Australia-born persons on a long-term or permanent basis. It needs to be reiterated that *Australia is not experiencing a net 'brain drain'*. As previous studies (for example, Hugo 1994; Smith 1996; Lewis and Stromback 1996) have shown, immigrants to Australia in all skill groups outnumber those leaving the country. Indeed, the present study has shown that net gains of skilled persons have increased in recent years. Certainly, one has to be careful of differences between the incoming and outgoing flows in levels and types of expertise, training and so on. Undoubtedly at present there is occurring a net outmigration of Australia-born in particular skill areas. It was shown here, for example, that while Australia is reaching a net gain of people with IT skills, a net loss of Australia-born with these skills was reached. Smith (1996) has shown that this pattern has long existed for engineers. There has been considerable research documenting the difficulties of skilled immigrants from non-English-speaking backgrounds in adjusting to the Australian context. Hawthorne (1994), for example, identifies the following barriers to engineers from such backgrounds gaining jobs in their areas of expertise:

- Lack of experience in the Australian context that is often required by employers.
- Inadequate English language ability.
- Lack of knowledge of networks and appropriate strategies for job-seeking.
- Different technological requirements in the Australian context.
- Cross-cultural issues.

Nevertheless, despite these issues, Australia cannot be portrayed as experiencing a 'brain drain'. Indeed, it is experiencing an overall net 'brain gain' and a substantial 'brain circulation' in line with many other countries.

There is evidence of 'astronauting' among some Asian settlers, whereby settlers keep his or her business activities in the home country, settling the family in Australia and then regularly circulating back to the home country to maintain business.

Australia is not experiencing a net 'brain drain'. Immigrants to Australia in all skill groups outnumber those leaving the country. Net gains of skilled persons have increased in recent years. But a net outmigration of Australia-born is occurring in particular skill areas – notably IT and engineering.



Australia is experiencing an overall net 'brain gain' and a substantial 'brain circulation' in line with many other countries.

All OECD nations and many countries outside it have specific policies to attract international talent in areas such as information technology, management, engineering, research and so on. Australia is competing with an increasingly large number of countries for a limited pool of talent. In such a competitive context Australia simply cannot afford to ignore its home-grown talent in the international pool of skilled labour.

The key is to have policies in place which maximise the advantage to Australia of some of its skilled workers in companies in overseas nations and ensuring that the way is open for them to return to Australia.

Does this mean that there should be no policy concern whatsoever about the emigration of the Australia-born? It is the argument here that this is not the case, although there is a need of more detailed investigation into the behaviour and intentions of the Australia-born emigrants. In a world where it is increasingly the case where national prosperity is strongly shaped by innovation and the timely and appropriate application for innovation, human resources are crucially important to the national economy. There is an increasing amount of international competition for the best qualified people in the new economy. All OECD nations and many countries outside it have specific policies to attract international talent in areas such as information technology, management, engineering, research and so on.⁵ Hence, Australia is competing with an increasingly large number of countries for a limited pool of talent. Even countries that have long had strong anti-immigration policies like several European nations and Japan are now striving to attract such migrants.

In such a competitive context Australia simply cannot afford to ignore its home-grown talent in the international pool of skilled labour. This does not mean restricting them from taking up jobs in countries other than Australia. By all means, we need to provide high-quality opportunities within Australia for skilled new graduates who wish to stay in the country. On the other hand, there is much to be gained from young Australian, recent graduates especially, gaining experience working in other nations, provided that the *majority of them return to Australia eventually*. In the face of internationalisation of skilled labour markets it is futile and doesn't make economic sense for Australia to fight against its young people who wish to participate in those markets doing so. Indeed, it is becoming part of the *rites de passage* of skilled young people to spend a period working overseas. The key is to have policies in place which:

- Maximise the advantage that Australia can take of housing some of its skilled workers in highly paid and often pivotal positions in companies in overseas nations.
- Ensuring that the way is open for them to return to Australia at a later stage.

Regarding the first set of policies, a number of points can be made. India's investment boom of the 1990s was partly fuelled by remittances sent home by the Indian diaspora (*Far Eastern Economic Review*, 26 January 1995, p. 51). However, this massive foreign capital inflow did not just happen. Indians overseas were offered favourable tax advantages, ready access to foreign currency and so on. (Athukorala n.d.) that persuaded millions of highly paid Indians overseas to save their money in Indian banks. Given the high earning capacity of the highly skilled group, there may be ways in which the Australian government can encourage such a pattern among Australian skilled workers overseas. Second, several nations have made strategic use of their diaspora communities as bridgeheads for their homegrown companies gaining access to markets in the destination countries. The Korean use of Korean migrants in the US, especially in California, to introduce Korean-made electronic, automotive and whitegood products is well known. However, in Australia we have a good example of how this can operate with the Australian mining industry. This industry and Australian engineers are highly active in the South-east Asian region. This is built upon successful mining activity in Australia. Australians are strategically placed in some of the largest mining undertakings in the region. This includes not only Australian companies but also Australian engineers working for foreign companies. They are strongly disposed towards using other Australian companies for services since they often are strongly networked to them. The role of policy here is to identify strategic areas where such bridgeheading is possible and to develop ways in which the networking between Australians in key positions overseas and relevant Australian



connections can be enhanced. Perhaps these types of development should not be left for chance and ways considered to facilitate them through policy.

Turning to consideration of return migration, it is useful to bear in mind that much of Ireland's economic boom of the 1990s has been built by Irish returnees who emigrated in the 1980s. Returnees bring with them the greater breadth and depth of experience that working overseas gives them. Moreover, they return with extensive international networks that can assist in their Australian employers developing contacts with overseas markets. Indeed, in many cases they will be more valuable as Australian employees as returnees than would have been the case if they had remained for their entire careers in Australia.

The question then arises as to how such skilled Australians can be lured back. Of course, the availability of appropriate, well-remunerated jobs are a crucial element if the economic situation is going to play a role. This can, of course, be assisted by governments and a number of Asian nations have had successful programs to lure back highly skilled nationals with specific skills. In recent times Taiwan has been most successful in this (Luo and Wang 2001), developing a special Technology Park to accommodate hand-picked returnees to kickstart the development of new industries, especially in IT. Such policies would seem to have a role to play in particular strategic areas of needed skilled human resources.

In attracting back skilled people who originally left Australia as young recent graduates or people with only limited years of work experience, there are a number of areas to bear in mind. There is little point in attempting to lure back young people in the earliest stages of their careers who are at a stage in the lifecycle where they wish to travel and experience life in another country. However, once they begin to 'settle down' and form families there are some major attractions that Australia offers to them. These include the presence of family and friends – the grandparents' factor is an important attraction. In addition, there is often a desire for them to ensure that their children are brought up as Australians in Australia. These ideas need detailed testing empirically with controlled surveys of Australians overseas before policies and programs are developed, but the idea of targeting young skilled people with around ten years of overseas work experience as candidates for return would appear to be a feasible strategy to attract back people with particularly needed skills.

A crucial question here relates to how such potential returnees can be identified. Increasingly, it could be argued that Australia investigate maintaining registers of skilled workers overseas to facilitate programs targeted at bringing back people with particular skills and expertise. Indeed, many Asian countries have kept such registers of their graduates working overseas and worked through their embassies to maintain contact with them. This involves newsletters and organising social occasions. With the current levels of IT available, however, a number of possibilities suggest themselves. One with a great deal of potential is the alumni lists maintained by Australia's tertiary institutions. While in the past many of these have been poorly organised and maintained, this has changed with the realisation in universities that alumni can be the source of future students and funds. Accordingly, most universities now maintain well-constructed electronic databases on their alumni. These could be used to set up networks, perhaps even using the Internet. The development of attractive and informative websites, regular networking among Australians in particular overseas cities are all possibilities that can be investigated. It is clear other nations are contemplating doing this. As indicated elsewhere, the US plans a special census of its overseas citizens in 2003 and by 2001 it intends for its regular census to

The role of policy is to identify strategic areas where such bridgeheading is possible and to develop ways in which the networking between Australians in key positions overseas and relevant Australian connections can be enhanced.

The availability of appropriate, well-remunerated jobs is a crucial element in luring back skilled Australians.

A number of Asian nations have had successful programs to lure back highly skilled nationals with specific skills.



Skilled labour markets are becoming increasingly competitive and Australia needs to have a range of policies to ensure constraints are not placed on development by lack of skilled workers.

International migration must never be seen as a substitute for having the highest quality education and training systems.

All of the OECD nations and many others have active immigration policies to attract and retain highly skilled workers.

include not only all of the residents in the US but also all of its citizens abroad. This reflects an attitude of wishing the census to capture the total national human resources and Australia should be contemplating a similar system. Other systems include the registration of Australians overseas with their nearest consulate or embassy and the development of a central system for such registers using state-of-the-art information technology. It needs to be made clear that being on such lists should be voluntary and it needs to be made worthwhile for the Australians overseas to be on the list. The regular dissemination of a magazine, invitations to social events overseas, regular circulars about job and housing opportunities could be included. The point is that these skilled labour markets are becoming increasingly competitive and Australia needs to have a range of policies to ensure constraints are not placed on development by lack of skilled workers and that Australia places itself as strategically as it possibly can to foster the innovation which drives the new economy. International migration must never be seen as a substitute for having the highest quality education and training systems that are flexible enough to change to meet the labour demands of a rapidly changing economy, but also to foster the innovation and research excellence that are so critical to maintaining national prosperity.

An earlier report (Hugo 1994) put forward the argument that migration from Australia to Asian nations possibly had a number of beneficial aspects, especially if Australia was to continue to seek to embed its economy in Asia. In 1957, 51 per cent of Australia's exports were to Europe and 21 per cent to Asia. By 1995 the proportion had shifted to 12 and 65 per cent respectively, and in 1999 to 12 and 57 per cent (McGurn 1996, p. 63). Over the same period the proportion of Australia's permanent immigrants coming from Asia increased from 2.6 per cent in 1959–60 to 33.7 per cent in 1999–2000, while those from Europe fell from 91.7 per cent to 20.4 per cent. However, Australia cannot expect to be a full participant in the Asian economy if it only sees Asia as a source of skilled migrants and a massive export market. Movement of people, both nationals of Asian countries and Australians, in both directions is also required. Lewis and Stromback (1996, p. 53) also argue that Australia should encourage skilled migration to Asia. They argue that there is the need for an emigration policy that encourages more Australians to engage with Asia at a personal level.

5.6 Conclusion

The present volume represents the first stage of a comprehensive study of emigration from Australia. When the predecessor of the study was published, almost a decade ago, it was in a changing international migration environment. That environment has changed again and there is now massive international interest in the movement between nations of highly skilled workers. This interest was in its beginnings at the time of the earlier report but now all of the OECD nations and many outside the organisation have active immigration policies to attract and retain highly skilled workers. This has given the whole issue of emigration a much higher profile internationally than was the case in the earlier report (Hugo 1994). The attraction and retention of highly skilled workers is now seen as a key to success in the new economy.

This volume has summarised the results of analysis of a number of sources of secondary data available in Australia for the study of emigration. Australia is one of the very few nations with a comprehensive data base on all people who leave Australia through official channels. This has allowed us to detect some substantial changes in emigration from the nation – the upswing in the out-movement of the Australia-



born, the increase in the skill profile of those leaving, changes in the pattern of settler loss, and so on. However, the study has also utilised two unconventional sources of emigration information. A recent OECD wide study (Sexton 2001) has stressed the need to access such data sources in elucidating the pattern of international movement of highly skilled workers. The first such source, the Longitudinal Survey of Immigrants to Australia (LSIA), has allowed us to obtain unprecedented insights into the settler-loss problem. In addition, we have analysed the Graduate Destination Survey to examine the patterns of emigration of recent graduates from Australian universities.

The report has been able to identify the major shifts that have occurred in the levels of emigration, the composition of the movement and the destination of those leaving the nation. This has suggested some possible future directions for policy. However, definitive statements in this area must await the in-depth interviewing of the emigrants themselves and the institutions and groups that employ them. This is the task of the second stage of the project. Nevertheless, it is clear that the possibility of Australia developing an emigration policy that is integrated with immigration policy and wider economic, social and human resources policies needs to be given urgent consideration.

Notes

- 1 In 1998 Australia accounted for 8 per cent of all overseas students in OECD nations (OECD 2001b, p. 28).
- 2 Singapore is now one of the few nations in the world that has a smaller proportion of its population made up of overseas-born persons than Australia. Yap (2001) shows that at the 2000 census in Singapore, 26 per cent of the resident population were foreign-born.
- 3 Calculated as the number of permanent departures during 1999–2000 per 1000 estimated population in 1999 (ABS 2001, p.23).
- 4 Business Skills (Migrant) Class settlement in Australia began in 1992 and involves a structured selection test that measures the business and other attributes of applicants. Attributes assessed include turnover, labour cost and total business assets in the origin country; financial commitment to business; age; English language ability; and net assets available for transfer.
- 5 This is evident in all of the country papers delivered at a recent OECD conference on International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies, Paris, 11–12 June 2001.

The attraction and retention of highly skilled workers is now seen as a key to success in the new economy.

Developing an emigration policy that is integrated with immigration policy and wider economic, social and human resources policies needs to be given urgent consideration.



Glossary

ABS	Australian Bureau of Statistics
DETYA	Department of Education, Training and Youth Affairs
DEETYA	Department of Employment, Education and Training
DIMA	Department of Immigration and Multicultural Affairs
GCCA	Graduate Careers Council of Australia
GDS	Graduate Destination Survey
IT	Information Technology
LSIA	Longitudinal Survey of Immigrants to Australia
MDCs	More Developed Countries
NOIE	National Office for the Information Economy
NPI	National Population Inquiry
PA	Principal Applicant
T	Technology
UN	United Nations
WHM	Working Holiday Maker
AIIA	Australian Information Industry Association

References



- Adams, W., 1969. *The Brain Drain*, Macmillan, New York.
- Appleyard, R.T., 1962a. The Return of Movement of United Kingdom Migrants from Australia', *Population Studies*, 15, 214–225.
- Appleyard, R.T., 1962b. Determinants of Return Migration, *The Economic Record*, 38(83), 352–368.
- Athukorala, P., n.d.. Improving the Contribution of Migrant Remittances to Development: The Experience of Asian Labour-Exporting Countries, Department of Economics, La Trobe University, mimeo.
- Australian Bureau of Statistics (ABS). *Overseas Arrivals and Departures, Australia*, Catalogue No. 3404.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 2000a. *Australian Social Trends 2001*, Catalogue No. 4102.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 2000b. *Australian Demographic Statistics, June Quarter 2000*, Catalogue No. 3101.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 2001. *Australian Social Trends 2001*, Catalogue No. 4102.0, ABS, Canberra.
- Australian Information Industry Association (AIIA), 1999. *Future Demand for IT and T Skills in Australia: 1999–2004*, AIIA, Canberra.
- Azizah, K., 2000. Recent Trends in Migration Movements and Policies in Malaysia. Paper presented at Workshop on International Migration and Labour Markets in Asia organised by the Japan Institute of Labour, Tokyo, 27–28 January.
- Azizah, K., 2001. Country Report: Trends in Economic Development and International Migration in Malaysia. Paper presented at Workshop on International Migration and Labour Markets in Asia organised by the Japan Institute of Labour Tokyo, 1–2 February.
- Barrett, A., 2001. Return Migration of Highly-Skilled Irish into Ireland and Their Impact in Terms of GNP and Earnings Inequality. Paper presented at 'International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies' Seminar organised by OECD (DSTI/DEELSA), Paris, 11–12 June.
- Birrell, B., 1999. Residential Relocation in Sydney and the NSW Coast Over the Period 1991 to 1996, *People and Place*, 7(2), 48–59.
- Birrell, B., Dobson, I.R., Kinnaird, B. and Smith, T.F. 2000. Universities and the IT Crisis Revisited, *People and Place*, 8(3), 74–82.
- Birrell, B. and Healy, E., 1997. Globalisation and Temporary Entry, *People and Place*, 5(4), 43–52.
- Borjas, G.J., 1989. Economic Theory and International Migration, *International Migration Review*, 23(3), 457–485.
- Borjas, G.J., 1990. *Friends or Strangers: The Impact of Migration on the US Economy*, New York, Basic Books.
- Bureau of Immigration and Population Research (BIPR), 1993. *Emigration 1991–92*, Statistical Report No. 7, AGPS, Canberra.
- Commonwealth Department of Immigration, 1996. *Report on a Study of British Returnees*, Survey Section, Department of Immigration, Canberra.
- Commonwealth Immigration Advisory Council (CIAC), 1967. *Departure of Settlers from Australia*, Final Report of the Committee on Social Patterns, Canberra.
- Cook, S. and Ward, D., 2001. Emigration: Trends, Causes and Implications. Statistics Section, DIMA, Mimeo, February.



- Department of Education, Training and Youth Affairs (DETYA), 2000. *Overseas Student Statistics 1999*, AGPS, Canberra.
- Department of Employment, Education and Training (DEETYA), 1995. *Overseas Student Statistics 1994*, AGPS, Canberra.
- Department of Immigration and Ethnic Affairs, 1978. *Overseas Departures Survey*, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA). *Australian Immigration Consolidated Statistics*, various issues, AGPS, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA). *Immigration Update*, various issues, AGPS, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA). *Population Flows: Immigration Aspects*, various issues, AGPS, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA), 1999a. *Population Flows: Immigration Aspects, December 1999*, AGPS, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA), 1999b. *Business Skills Class Annual Post-Arrival Survey Reports, 24 Month Report of 1995–96 Settler Arrivals, 36-Month Report of 1994–95 Settler Arrivals*, DIMA, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA), 2000a. *Population Flows: Immigration Aspects, 2000 Edition*, AGPS, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA), 2000b. *Immigration Update June Quarter 2000*, AGPS, Canberra.
- Fawcett, J.T., 1989. Networks, Linkages and Migration Systems, *International Migration Review*, 23(3), 671–80.
- Fawcett, J.T. and Arnold, F., 1987. Explaining Diversity: Asian and Pacific Immigration Systems. In J.T. Fawcett and B.V. Carino (eds), *Pacific Bridges: The New Immigration from Asia and the Pacific Islands*, Center for Migration Studies in Association with the East-West Population Institute, East-West Center New York.
- Fortey, A.F., 1978. *Overseas Departures Survey*, Department of Immigration and Ethnic Affairs, Planning and Research Branch, Research Papers Series, Research Report 2, Canberra.
- Graduate Careers Council of Australia Ltd, 1999. *Graduate Destination Survey 1998*, Graduate Careers Council of Australia Ltd, Parkville, Victoria.
- Gurak, D.T. and Cases, F., 1992. Migration Networks and the Shaping of Migration Systems. In M.M. Kritz, L.L. Lim and H. Zlotnik (eds), *International Migration Systems: A Global Approach*, Oxford, Clarendon Press, 150–76.
- Hawthorne, L., 1994. Labour Market Barriers for Immigrant Engineers in Australia. Bureau of Immigration and Population Research.
- Hugo, G.J., 1986. *Australia's Changing Population: Trends and Implications*, Oxford University Press, Melbourne.
- Hugo, G.J., 1989–92. *Atlases of the Australian People*, Vols 1–8, AGPS, Canberra.
- Hugo, G.J., 1991. Recent International Trends in Asia: Some Implications for Australia. In J.W. Smith (ed.), *Immigration, Population and Sustainable Environments: The Limits to Australia's Growth*, Flinders University Press, Adelaide.
- Hugo, G.J., 1994. *The Economic Implications of Emigration from Australia*, AGPS, Canberra.
- Hugo, G.J., 1996. Brain Drain and Student Movements. In P.J. Lloyd and L.S. Williams (eds), *International Trade and Migration in the APEC Region*, Oxford University Press, Melbourne, 210–228.
- Hugo, G.J., 1999. *Atlas of the Australian People*, Vols 1–8, AGPS, Canberra.



- Hugo, G.J., 1999. *Atlas of the Australian People 1996 Census: National Overview*, DIMA, Canberra.
- Hugo, G.J., 2000. International Migration and Labour Markets in Asia: Australia Country Paper. Paper prepared for the Workshop on International Migration and Labour Markets in Asia organised by the Japan Institute of Labour (JIL), supported by the Government of Japan, Organisation for Economic Cooperation and Development (OECD) and the International Labour Office (ILO), Japan Institute of Labour, Tokyo, 26–28 January.
- Hugo, G.J., 2001a. International Migration and Agricultural Labour in Australia. Paper prepared for Changing Face Workshop, Imperial Valley, California, 16–18 January.
- Hugo, G.J., 2001b. Urban Demographic Futures: Replacement Migration and Social Transformations. Keynote Address to Conference on Urban Futures: Urban Policy Developments and Urban Social Transformations in the 21st Century, Stockholm, Sweden, 10–12 May.
- Iguchi, Y., 2001. The Japanese Economy from Recovery to Rebirth – Changes of the Labour Market and International Migration. In OECD Proceedings, *International Migration in Asia: Trends and Policies*, Organisation for Economic Cooperation and Development, Paris, France.
- Immigration Advisory Council, 1973. *Inquiry into the Departure of Settlers From Australia: Final Report*, AGPS, Canberra.
- Iredale, R., 1997. *Skills Transfer: International Migration and Accreditation Issues*, University of Wollongong Press, Wollongong.
- Joint Standing Committee on Migration (JSCM), 1997. *Working Holiday Makers: More than Tourists*, AGPS, Canberra.
- Kinnaird, B., 1999. Working Holiday Makers: More Than Tourists – Implications of the Report of the Joint Standing Committee on Migration, *People and Place*, 7(1), 39–52.
- Kritz, M.M. and Zlotnik, H., 1992. Global Interactions: Migration Systems Processes and Policies. In M.M. Kritz, L.L. Lim and H. Zlotnik (eds), *International Migration Systems: A Global Approach*, Oxford, Clarendon Press, 1–18.
- Lever-Tracy, C., 1988. Boomerangs on a Very Small Island: Maltese Who Returned From Australia. Unpublished paper, Griffith University, Division of Administration, Nathan, Brisbane.
- Lewis, P. and Stromback, T., 1996. *Recent Trends in Skilled Labour Movements To and From Australia*, DIMA, Canberra.
- Lukomskyj, O. and Richards, P., 1986. Return Migration from Australia: A Case Study, *International Migration*, 24(3), 603–32.
- Luo, Y. and Wang, W., 2001. High-Skill Migration and Chinese Taipei's Industrial Development. Paper presented at 'International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies' Seminar organised by OECD (DSTI/DEELSA), Paris, 11–12 June.
- Mabogunje, A.L., 1970. A Systems Approach to a Theory of Rural–Urban Migration, *Geographical Analysis*, 2(1), 1–18.
- Massey, D.L., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A. and Taylor, J.E., 1993. Theories of International Migration: Review and Appraisal, *Population and Development Review*, 19(1), 431–66.
- Massey, D.L., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A. and Taylor, J.E., 1994. An Evaluation of International Migration Theory: The North American Case, *Population and Development Review*, 20(4), 669–751.



- McGurn, W., 1996. The Lucky Country, *Far Eastern Economic Review*, 11 April, 63–4.
- National Office for the Information Economy (NOIE), 1998. Skill Shortages in Australia's IT and T Industries. Discussion Paper. Department of Communications, Information Technology and the Arts; Department of Education, Training and Youth Affairs; Department of Employment, Workplace Relations and Small Business; Department of Immigration and Multicultural Affairs, December.
- National Population Council (NPC), 1990. *Emigration*, Population Report No. 9, AGPS, Canberra.
- National Population Inquiry (NPI), 1975. *Population and Australia: A Demographic Analysis and Projection*, two volumes, AGPS, Canberra.
- Nonini, D.M., 2001. Flight and Government Rationalisation Among Chinese Indonesians in Australia. Paper prepared for the Colloquium, 'Chinese Emigrants and Refugees: Recent Population Movements in East and Southeast Asia, Australia and New Zealand', Department of History, University of Melbourne, Melbourne, Australia, 1 June.
- Organisation for Economic Cooperation and Development (OECD), 2001a. Human Resources in Science and Technology: Measurement Issues with Special Regard to International Mobility. Paper presented at 'International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies' Seminar organised by OECD (DSTI/DEELSA), Paris, 11–12 June.
- Organisation for Economic Cooperation and Development (OECD), 2001b Student Mobility Between and Towards OECD Countries: A Comparative Analysis. Paper presented at 'International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies' Seminar organised by OECD (DSTI/DEELSA), Paris, 11–12 June.
- Organisation for Economic Cooperation and Development (OECD), 2001c *SOPEMI Trends in International Migration: Continuous Reporting System on Migration*, OECD, Paris.
- Pe-Pua, R., Mitchell, C., Iredale, R. and Castles, S., 1996. *Astronaut Families and Parachute Children: The Cycle of Migration Between Hong Kong and Australia*, AGPS, Canberra.
- Population Association of America, Subcommittee on Migration Statistics, 1988. Migration Statistics in the US, Committee on Population Studies, Population Association of America, April, unpublished document.
- Price, C.A., 1973. Australian Migration: Settler Gain and Loss. In *Inquiry into the Departure of Settlers from Australia*. Final Report July 1973 of Immigration Advisory Council Committee on Social Patterns, AGPS, Canberra, 24–34.
- Price, C., 1979. *Australian Immigration: A Bibliography and Digest*, No. 4, Department of Demography, Australian National University, Canberra.
- Price, C.A., 1982. International Migration: Contribution to Growth and Distribution of Australian Population. In ESCAP, *Population of Australia*, 1, United Nations, New York.
- Price, C., 1996. *Immigration and Ethnicity*, Commonwealth Department of Immigration and Multicultural Affairs, Canberra.
- Pure, G., 1988. How Severe is Australia's Science and Engineering 'Brain Drain'?, *Search*, 19(2), 85–9.



- Rampa, H., 1988. Emigration – What Australia Loses. Paper presented at 4th National Conference of the Australian Population Association, 31 August – 2 September, Brisbane.
- Richmond, A.H., 1991. International Migration and Global Change. Paper presented at International Conference on Migration, Centre for Advanced Studies, Faculty of Arts and Social Sciences, National University of Singapore, February.
- Sexton, J.J., 2001. The Feasibility of Providing Statistical Information on the International Mobility of Human Resources in Science and Technology. Paper presented at 'International Mobility of Highly Skilled Workers: From Statistical Analysis to the Formulation of Policies' Seminar organised by OECD (DSTI/DEELSA), Paris, 11–12 June.
- Sharma, Y., 1991. Brain Gain as Recession Hits Western Countries, *Business Times* (Hong Kong), 1 April, 606.
- Shu, J. and Hawthorne, L., 1996. Asian Student Migration to Australia, *International Migration*, 24(1), 65–96.
- Smith, T.F., 1996. Australia's Brain Drain: Fact or Fiction, *People and Place*, 4(2), 67–70.
- Struik, A. and Ward, D., 1992. The Extent and Consequences of Emigration from Australia. Paper presented at Bureau of Immigration Research, Second National Immigration Outlook Conference, Sydney, 11–13 November.
- United Nations, 1997. *World Population Monitoring, 1997: Issues of International Migration and Development: Selected Aspects*, United Nations, New York.
- United Nations, 1998. *National Population Policies*, United Nations, New York.
- Ward, D. and Young, J., 2000. New Zealand Immigration to Australia. Statistics Section, DIMA, Mimeo, 10 January.
- Woodrow, K.A. and Passel, J.S., 1989. Estimates of Emigration Based on Sample Survey Data from Residential Relatives. Unpublished paper prepared for the Office of Management and Budget, Office of Information and Regulatory Affairs.
- Yap, M., 2000. Country Report: Singapore. Paper presented at Workshop on International Migration and Labour Markets in Asia organised by the Japan Institute of Labour (JIL), supported by the Government of Japan, Organisation for Economic Cooperation and Development (OECD) and the International Labour Office (ILO), Japan Institute of Labour, Tokyo, 26–28 January.
- Zlotnik, H., 1992. Empirical Identification of International Migration Systems. In M.M. Kritz, L.L. Lim and H. Zlotnik (eds), *International Migration Systems: A Global Approach*, Oxford, Clarendon Press, 19–40.



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