

# Australia's Net Gains from International Skilled Movement

Skilled Movements in 2004-05  
and earlier years

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## Skills Movement 2004-05

This report details the movements of skilled workers to and from Australia in 2004-05, along with trend data since the mid-1990s. It covers persons indicating that they are moving to and from Australia on a permanent and long term basis (defined as a movement of one year or more). No data are included for persons moving on a short term basis (movements where the length of stay is of less than one year). This is because the Department of Immigration and Multicultural Affairs (DIMA) does not record occupational data for such movements and also because the great majority of short-term movements are for holidays, not work. Most of the information is drawn from passenger cards processed by DIMA, supplemented where appropriate by visa issued data for persons who change their immigration status while already in Australia. For the purposes of this report, only persons who indicate that they hold an occupation when they fill in their departure or arrival card are included. The passenger card data have some limitations for the purposes of this report which readers should be aware of. These limitations are spelled out in Appendix I.

DIMA has published detailed tables drawn from this information for the years 2004-05 and earlier in its *Settler Arrivals* and *Immigration Update* publication series. This report supplements these publications. Its purpose is to provide an interpretive framework for understanding the implications of these movements, particularly those affecting the make-up of Australia's skilled labour force. Details of movements for all four major occupation groups regarded as skilled occupations – that is managers and administrators, professionals, associate professionals and tradespersons – are provided. The report differentiates movers into three categories, each of which is analysed separately below.

The first is settlers; that is those who moved to Australia after gaining a permanent residence visa overseas. This group also includes New Zealand citizens who state on their passenger card when they arrive in Australia that they intend to stay in Australia permanently. Settler movement is treated as a one-way movement to Australia. After settlers arrive in Australia they are classified as Australian residents should they move in or out of Australia. Persons who obtain a permanent residence visa while in Australia on a temporary visa are not included in the settler counts. To do so would involve double counting, since such persons usually first enter Australia as long-term temporary visitors and as such would have already been counted in the visitor stream.

The second set of movers is residents. Residents are defined as persons with the right to live in Australia on a permanent basis. They include those born in Australia and those who were born overseas and who have obtained a permanent residence visa or taken out Australian Citizenship. This visa may have been obtained by the overseas-born resident either before moving to Australia as a settler or it may have been granted onshore after the person arrived as a visitor. As indicated, New Zealand citizens who have lived in Australia are also treated as Australian residents if they indicate that they are a resident when they move in and out of the Australia. For this report, resident departures include those who indicate on their passenger card when they leave Australia that they intend to move to an overseas destination on a long term (a year or more) or permanently and resident arrivals include those who when they return to Australia state that they been overseas for a year or more. In the case of residents moving overseas, the tables in this report do not usually differentiate between those indicating that their stay overseas will be long term or permanent. The reason for ignoring the distinction is that there is a great deal of category jumping between 'long term' and 'permanent' departures as residents often change their minds as to the duration of their stay overseas.

By the definition used in this report, Australia will always experience a gain from the settler flow because settlers are only recorded as they arrive in Australia. Any who later return home (or move to a third country) are recorded as residents departing.

The scale of the settler flow is largely determined by the size of the migration program (the annual statement by the Australian Government as to the number of permanent visas it proposes to issue). The only component of the settler intake outside the migration program is New Zealand citizens. Because the migration program has been enlarged in recent years, the number of settlers has also increased. There is no exact one-to-one relationship between the migration program and the settler inflow because some permanent resident visas are granted to persons already in Australia, particularly spouses and overseas students. In the case of the latter, the recent increase in the numbers of persons granted permanent residence under the onshore overseas student visa subclasses under the General Skilled Migration (GSM) program means that the numbers of settlers indicated in the tables below, which are based on arrival statistics, understate the impact of the overall migration program on Australia's workforce. The effect of the onshore overseas-student skilled visa programs is examined at the conclusion of this report.

As regards movements of residents, Australia will always experience a net loss, since it is inevitable that some residents will wish to move overseas on a permanent basis for employment or family reasons. It is also inevitable that a nation like Australia with its very high proportion of residents who are overseas-born (about 23 per cent) will lose some of these residents because of the strength of their social and economic ties overseas. At issue is the scale of the resident loss. Over the past decade the size of the loss has increased significantly, bringing with it fears that Australia may be losing some of its best and brightest.

The third set of movements is visitors. These are people who are not settlers or residents but who move to Australia on a temporary visa or, if they are a New Zealand citizen, indicate that they are visiting Australia. Only those visitors (including New Zealand citizens) who indicate on their passenger card on arrival in Australia that their visit is for a year or more are included in the visitor arrival data. On the departure side of the equation, only those visitors indicating that they had stayed in Australia for a year or more in duration are included as visitor departures.

The pattern for visitors is the reverse of residents. That is, some visitors (like some of the Australian residents going overseas) will decide to stay here for a number of years or, perhaps, permanently. Thus the number of skilled persons declaring themselves to be visitors on arrival in Australia will normally exceed those saying that they are leaving Australia after a long-term visit. In recent years the net gains of skilled visitors to Australia have grown rapidly. As will be shown below, their numbers roughly equilibrate the net losses of residents – thus in numerical terms the 'brain drain' from resident losses is similar to the 'brain gain' from visitor movements. In these terms, the settler inflow can be thought of as indicative of the overall net skill gain to Australia from international movements.

This introduction presents a highly simplified picture. Population movements as measured in a particular year (as in this report) may miss important changes in pattern. For example, a sudden upsurge in resident departures, as occurred in 1999-00 and 2000-01, generates very high net losses of residents in the years in question. The losses in these years helped to fuel concerns about a resident 'brain drain'. However, as shown in a previous report on international movement, this cross-sectional data was misleading since most of the residents leaving in these two years subsequently returned.<sup>1</sup> They did so in the two to three years following when, as it happened, the numbers of resident departures stabilised. As a consequence, the net loss of residents in these years dropped relative to 1999-00 and 2000-01 (see Table 4 below). It could be argued on the basis of these figures that the earlier concerns were unjustified. This conclusion, too, could be misleading unless founded on an understanding of the factors driving resident movement.

The first part of this report provides an overview of movements in the three movement streams by occupational skill level for the years 1995-96 to 2004-05. The purpose is to assess the impact of overseas movements on the size and make-up of the Australian skilled workforce. This is important in a context where skill shortages are evident and where the migration program is being expanded in order to cover these shortages. Subsequent sections of the report go into greater analysis of the movements within each of the three streams. This analysis is the basis for further probing into the factors shaping skill movements as well as some judgements about the significance of these movements, particularly as they concern the 'brain drain' issue.

### *The big picture*

Australia is a major net gainer as a result of overseas movements of skilled persons (defined as movers indicating that their occupation was as a manager, professional, associate professional or tradesperson). Figure 1 gives an overview of this gain. The net gain of persons with a skilled occupation in 2004-05 was 44,443, up marginally from 43,612 in 2003-04 but considerably higher than it was four to five years earlier when the net gain was around 30,000. It can be seen that the main driver in the total net flow is the professional component. As Figure 1 shows, the net flow of professionals by 2004-05 at 29,054 was double what it was five years earlier in 1999-00.

Figure 2 indicates the contribution of the three streams (settlers, residents and visitors) to this overall outcome for professionals. It illustrates the point made above about the similarity in the net losses of residents and net gains from the flow of visitors. Both are expanding, though it is notable that in the years since 2002-03 the net gains from visitor movements of professionals exceeded the net losses of similar residents. In the years prior to 2002-03 the reverse was the case.

In overall terms, Australia's net gain from international movement of skilled persons has nearly doubled since the end of the 20<sup>th</sup> Century, with the most rapid growth occurring amongst professionals. This growth continued in 2004-05, though not as rapidly as in the preceding few years.

Figure 1: Australia's gains from international movement: net movement of settlers, residents and visitors, total stating an occupation, and totals stating skilled and professional occupations, 1995-96 to 2004-05

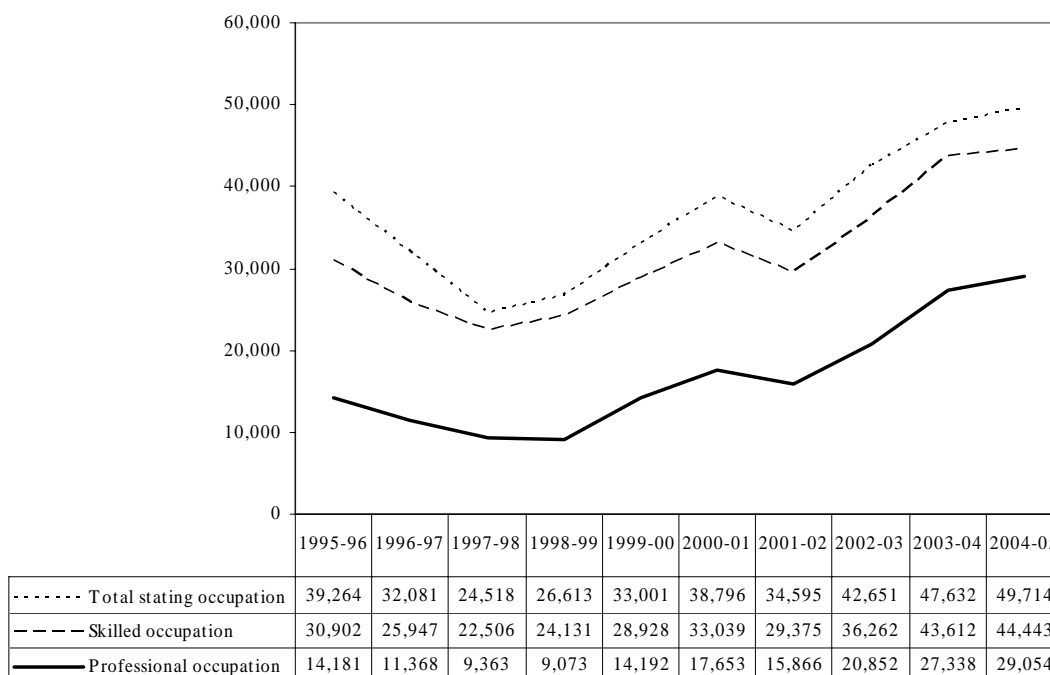
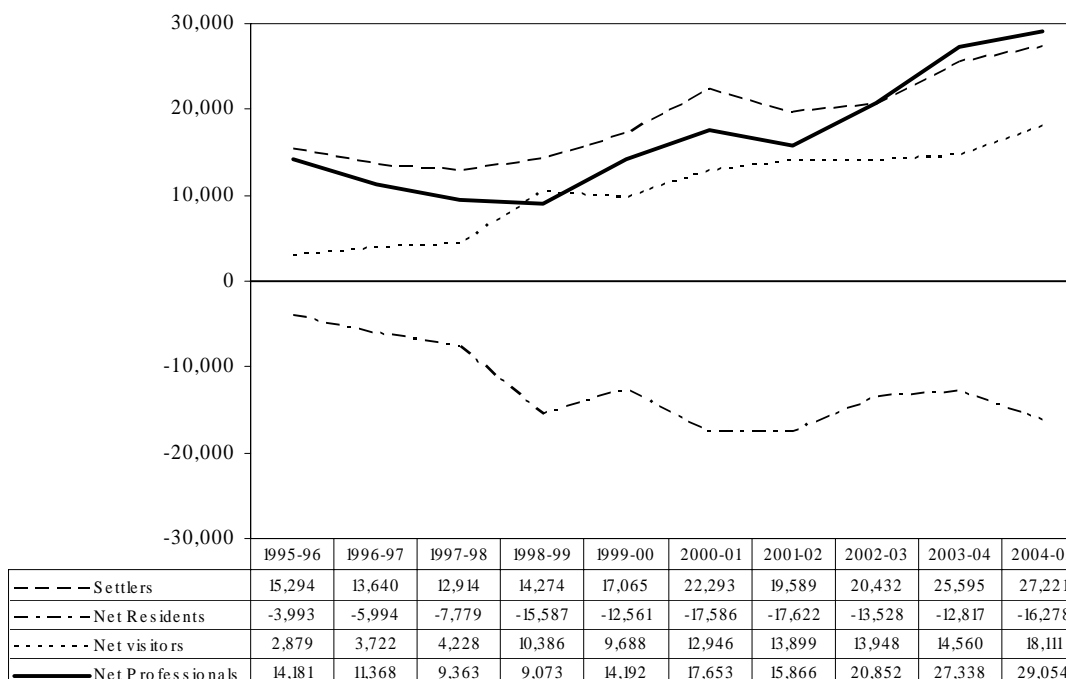


Figure 2: Professionals moving permanent and long-term by category, 1995-96 to 2004-05



The distribution of net gains by specified occupation is shown in Table 1. The occupations chosen for detailed analysis reflect choices made DIMA and Department of Education Science and Training (DEST) officers when the Centre for Population and Urban Research was first commissioned to analyse international skilled worker movement. The original list has been maintained because it can be used to provide a comparable record across the decade 1995-96 to 2004-05. For each occupation listed, the Appendix provides detail of the numbers of persons holding the occupation who moved in and out of Australia, as well as net movements for each of the three flows, by country of previous residence in the case of those arriving in Australia, and by intended residence in the case of those leaving Australia.

**Table 1: Net movement of settlers, residents and visitors stating an occupation, 1995-96 to 2004-05**

Occupation	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Finance Managers	535	476	548	662	692	616	563	491	563	503
Company Secretaries	43	38	18	74	93	76	61	69	121	83
IT Managers	115	93	42	104	399	537	411	478	429	329
Other Managers & Admin	6,653	6,046	6,609	7,783	7,396	7,322	6,758	6,784	5,787	5,697
<b>Total Managers &amp; Admin</b>	<b>7,346</b>	<b>6,653</b>	<b>7,217</b>	<b>8,623</b>	<b>8,580</b>	<b>8,551</b>	<b>7,793</b>	<b>7,822</b>	<b>6,900</b>	<b>6,612</b>
Chemists	176	174	64	144	164	151	128	102	70	125
Geologists and Geophysicists	133	132	135	146	260	127	64	136	103	234
Life Scientists	131	100	218	112	106	186	168	221	230	189
Environ & Agricultural Sci. Prof.	283	228	138	257	264	98	79	75	51	25
Medical Scientists	47	69	46	73	117	193	167	205	233	246
Other Nat. & Phys. Science Prof.	93	143	-184	-87	-177	-206	-312	-96	-26	-35
<i>Total Nat. &amp; Phys. Science Prof.</i>	<i>863</i>	<i>846</i>	<i>417</i>	<i>645</i>	<i>734</i>	<i>549</i>	<i>294</i>	<i>643</i>	<i>661</i>	<i>784</i>
Building & Surveying Professionals	231	190	200	179	285	325	322	567	609	576
Engineers	1,435	1,177	1,388	1,478	1,684	1,753	1,588	1,709	1,852	1,781
Other Building & Eng. Prof.	575	477	340	620	936	1,252	903	1,615	2,182	3,555
<i>Total Building &amp; Eng. Prof.</i>	<i>2,240</i>	<i>1,845</i>	<i>1,928</i>	<i>2,277</i>	<i>2,905</i>	<i>3,330</i>	<i>2,813</i>	<i>3,891</i>	<i>4,643</i>	<i>5,912</i>
Accountants	1,368	706	729	721	1,293	2,209	1,607	2,401	3,148	3,549
Auditors	101	52	16	82	80	156	172	259	358	455
Corporate Treasurers	11	8	-1	7	10	23	11	15	15	11
Computing Professionals	1,252	1,044	1,125	1,399	2,287	4,057	5,063	4,689	5,890	5,692
Mathematicians, Statisticians & Actuaries	61	60	57	65	58	37	2	61	76	65
Medical Practitioners	756	612	415	668	764	1,247	829	867	1,231	1,585
Nursing Professionals	703	421	350	379	470	697	1,094	1,974	2,483	2,418
School Teachers	1,817	1,405	970	-116	824	476	83	584	1,464	1,555
University Lecturers and Tutors	557	419	462	506	627	442	568	489	845	572
Economists	123	115	71	91	95	213	203	290	312	344
Other Professionals	4,328	3,834	2,824	2,349	4,045	4,217	3,127	4,689	6,212	6,112
<b>Total Professionals</b>	<b>14,181</b>	<b>11,368</b>	<b>9,363</b>	<b>9,073</b>	<b>14,192</b>	<b>17,653</b>	<b>15,866</b>	<b>20,852</b>	<b>27,338</b>	<b>29,054</b>
Building & Eng. Assoc Prof & Technical	785	606	298	587	548	614	431	425	456	659
Financial Dealers & Brokers, Ass. Prof	154	127	-2	115	178	96	29	105	79	120
Financial Investment Advisors, Ass. Prof	121	86	-8	28	231	89	110	80	116	76
Chefs	198	186	2	49	351	281	9	2	216	296
Other Associate Professionals	3,060	2,680	1,881	1,331	815	1,939	2,090	2,046	2,302	2,942
<b>Total Associate Professionals</b>	<b>4,319</b>	<b>3,684</b>	<b>2,171</b>	<b>2,110</b>	<b>2,123</b>	<b>3,019</b>	<b>2,669</b>	<b>2,658</b>	<b>3,169</b>	<b>4,093</b>
Mech Eng Tradespersons	796	495	448	550	548	543	467	676	855	886
Fabric Eng Tradespersons	225	152	167	186	236	198	130	205	327	336
Automotive Tradespersons	498	408	474	552	514	520	410	487	766	683
Elect & Elect Tradespersons	661	527	427	593	538	524	511	898	987	966
Construction Tradespersons	609	728	696	1,003	915	679	467	960	1,271	1,368
Other Tradespersons	2,267	1,932	1,543	1,441	1,282	1,352	1,062	1,704	1,999	1,859
<b>Total Tradespersons</b>	<b>5,056</b>	<b>4,242</b>	<b>3,755</b>	<b>4,325</b>	<b>4,033</b>	<b>3,816</b>	<b>3,047</b>	<b>4,930</b>	<b>6,205</b>	<b>6,098</b>
<b>Total Skilled Occupations</b>	<b>30,902</b>	<b>25,947</b>	<b>22,506</b>	<b>24,131</b>	<b>28,928</b>	<b>33,039</b>	<b>29,375</b>	<b>36,262</b>	<b>43,612</b>	<b>45,857</b>
<b>Other Occupations</b>	<b>8,362</b>	<b>6,134</b>	<b>2,012</b>	<b>2,482</b>	<b>4,073</b>	<b>5,757</b>	<b>5,220</b>	<b>6,389</b>	<b>4,020</b>	<b>5,271</b>
<b>Total</b>	<b>39,264</b>	<b>32,081</b>	<b>24,518</b>	<b>26,613</b>	<b>33,001</b>	<b>38,796</b>	<b>34,595</b>	<b>42,651</b>	<b>47,632</b>	<b>51,128</b>

There are net gains across every broad occupational category and for all the main occupations listed. Throughout the period since 1995-96 professionals have been by far the largest occupation group. However, in recent years their share of total skill gains has increased, from around 50 per cent in the late 1990s to 64 per cent in 2004-05. Within the professional category, by far the largest numerical net gains are currently amongst computing professionals, accountants and engineers.<sup>1</sup> There is also a notable increase in net gains amongst nurses and doctors. These gains reflect serious skill shortages in these fields in Australia and the keenness of employers to sponsor such professionals, either under the permanent-entry employer nomination visa or (in greater numbers) the temporary-entry business long-stay visa subclass (category 457), the overseas-trained doctor subclass (422) or occupational trainee subclass (442). Table 1 also shows that there have been consistent, and slightly increasing, net gains in scientific fields, including geologists and geophysicists, medical scientists and mathematicians. In the past there has been great concern about the possibility of losses in these fields. These concerns are allayed by the consistency of the net gains shown in Table 1.

The pattern for managers and administrators is notable because, unlike the other broad occupational categories, the net number of managers and administrators moving to Australia has declined after peaking in 1998-99. There have also been limited gains in the net numbers of associate professionals. The main reason for this outcome is that, since the reform of the immigration selection system implemented in mid-1999, the points test used for the skilled independent visa subclasses has favoured professionals and tradespersons over managers and associate professionals. Thus, as shown in Table 2, there has been little growth in the number of settler arrivals who were managers or associate professionals since the late 1990s (in sharp contrast to the trend for professionals).

The net gain of tradespersons has increased but not to the same extent as professionals. Also, the size of the net gain as a proportion of the stock of employed tradespersons in Australia is modest and well short of the same ratio when computed for professionals (data shown later). The net gain of tradespersons is likely to increase in the future, because of the wide range of trade occupations that have been placed on the Migration Occupations in Demand List in recent months.

Differences in the net gains by broad field and by occupation for the most part reflect the scale of the settler program. They do not reflect any sharp variation in the propensity of residents to leave Australia on a permanent or long-term basis. To document these points the three streams need to be analysed separately.

### *Settlers*

Table 2 shows the numbers of settlers arriving in Australia over the past few years by occupation. A comparison of the settler data with the net gains from movement in these occupations as a result of the three streams (shown in Table 1) indicates that the numbers are similar. Thus, as stated above, the losses from resident movement are roughly similar to the gains attributable to visitor movement and the key determinant of the overall skilled migration gains to Australia is settler movement.

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<sup>1</sup> The numbers for accountants and engineers for 2003-04 in this report vary from those supplied in the previous report – *Immigration in a Time of Domestic Skilled Shortages: Skilled Movements in 2003-04* – which reported incorrect figures for these two occupations as a result of errors in the original ABS data. These errors have been corrected and the revised figures are shown in the tables here.

**Table 2: Settler arrivals who stated an occupation, 1995-96 to 2004-05**

Occupation	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Finance Managers	314	264	286	285	269	304	240	223	277	317
Company Secretaries	26	22	16	63	73	63	47	66	112	82
Information Technology Managers	95	82	54	66	214	523	379	336	386	339
Other Managers & Administrators	4,673	4,971	4,191	4,967	5,658	6,255	5,766	5,967	6,445	7,032
<b>Total Managers &amp; Admin</b>	<b>5,108</b>	<b>5,339</b>	<b>4,547</b>	<b>5,381</b>	<b>6,214</b>	<b>7,145</b>	<b>6,432</b>	<b>6,592</b>	<b>7,220</b>	<b>7,770</b>
Chemists	190	182	128	157	195	167	124	96	110	112
Geologists and Geophysicists	151	158	128	130	179	106	62	80	58	90
Life Scientists	125	91	191	119	152	120	109	118	143	160
Environmental & Agricultural Sci. Prof.	267	199	86	190	198	94	40	34	39	29
Medical Scientists	61	60	49	52	82	158	130	182	178	200
Other Nat. & Phys. Science Prof.	115	118	123	131	131	163	118	119	135	135
<i>Total Nat. &amp; Phys. Science Prof.</i>	<i>908</i>	<i>809</i>	<i>705</i>	<i>779</i>	<i>937</i>	<i>808</i>	<i>583</i>	<i>629</i>	<i>663</i>	<i>726</i>
Building & Surveying Professionals	268	259	260	301	326	406	321	416	502	550
Engineers	1,333	1,144	1,190	1,221	1,327	1,365	1,055	1,079	1,336	1,462
Other Building & Eng. Prof.	390	276	472	674	978	1,636	1,121	1,163	1,570	1,946
<i>Total Building &amp; Eng. Prof.</i>	<i>1,991</i>	<i>1,679</i>	<i>1,922</i>	<i>2,196</i>	<i>2,631</i>	<i>3,407</i>	<i>2,497</i>	<i>2,658</i>	<i>3,408</i>	<i>3,958</i>
Accountants	1,546	1,210	1,320	1,312	1,696	2,800	2,231	2,568	3,234	3,807
Auditors	114	90	17	68	120	128	108	178	289	323
Corporate Treasurers	9	7	2	7	11	13	6	8	13	12
Computing Professionals	1,183	1,288	1,248	1,430	1,778	3,705	4,661	3,338	5,105	5,197
Mathematicians, Statisticians & Actuaries	70	53	54	59	71	54	40	63	68	53
Medical Practitioners	624	498	358	408	544	804	459	481	566	750
Nursing Professionals	1,095	907	938	1,042	1,119	1,206	1,091	1,502	1,748	1,833
School Teachers	1,610	1,371	1,449	1,566	1,903	2,030	1,811	2,020	2,378	2,513
University Lecturers and Tutors	537	443	378	486	624	473	342	278	381	375
Economists	140	121	117	119	130	184	205	203	233	213
Other Professionals	5,466	5,163	4,406	4,802	5,501	6,681	5,555	6,506	7,509	7,461
<b>Total Professionals</b>	<b>15,294</b>	<b>13,640</b>	<b>12,914</b>	<b>14,274</b>	<b>17,065</b>	<b>22,293</b>	<b>19,589</b>	<b>20,432</b>	<b>25,595</b>	<b>27,221</b>
Building & Eng. Assoc Prof & Technical	775	657	455	565	634	697	413	387	440	540
Financial Dealers & Brokers, Ass. Prof	157	154	50	139	202	212	151	171	177	186
Financial Investment Advisors, Ass. Prof	117	110	40	96	149	72	56	65	111	95
Chefs	288	294	212	432	498	629	457	481	546	607
Other Associate Professionals	2,984	2,746	2,186	2,107	2,610	2,740	2,076	2,211	3,237	3,819
<b>Total Associate Professionals</b>	<b>4,321</b>	<b>3,961</b>	<b>2,943</b>	<b>3,339</b>	<b>4,093</b>	<b>4,350</b>	<b>3,153</b>	<b>3,315</b>	<b>4,511</b>	<b>5,247</b>
Mech Eng Tradespersons	946	736	732	804	771	732	572	723	910	933
Fabric Eng Tradespersons	299	266	250	291	284	249	170	210	307	252
Automotive Tradespersons	576	451	560	656	658	616	491	564	747	714
Elect & Elect Tradespersons	758	650	625	766	743	713	661	844	1,084	992
Construction Tradespersons	1,106	1,008	1,033	1,343	1,469	1,487	1,064	1,228	1,625	1,658
Other Tradespersons	2,892	2,615	2,323	2,239	2,150	2,067	1,709	2,214	2,541	2,496
<b>Total Tradespersons</b>	<b>6,576</b>	<b>5,726</b>	<b>5,523</b>	<b>6,099</b>	<b>6,075</b>	<b>5,864</b>	<b>4,667</b>	<b>5,783</b>	<b>7,214</b>	<b>7,045</b>
<b>Total Skilled Occupations</b>	<b>31,299</b>	<b>28,665</b>	<b>25,927</b>	<b>29,093</b>	<b>33,447</b>	<b>39,652</b>	<b>33,841</b>	<b>36,122</b>	<b>44,540</b>	<b>47,283</b>
<b>Other Occupations</b>	<b>11,283</b>	<b>9,690</b>	<b>9,205</b>	<b>10,627</b>	<b>12,498</b>	<b>11,368</b>	<b>8,578</b>	<b>8,590</b>	<b>10,178</b>	<b>12,048</b>
<b>Total</b>	<b>42,582</b>	<b>38,355</b>	<b>35,132</b>	<b>39,720</b>	<b>45,945</b>	<b>51,020</b>	<b>42,419</b>	<b>44,712</b>	<b>54,718</b>	<b>59,219</b>

There is some variation around this theme. In the case of managers and administrators, the settler arrivals in 2004-05 exceed the total net permanent and long-term movements by more than one thousand. There is a similar pattern with tradespersons. By contrast the net flow of professionals is higher than the settler arrival numbers, indicating that there are more net gains from visitor flows of professionals than there are resident losses of professionals. As would be expected from the earlier commentary, the largest numbers of settlers arriving are in the fields of computing, accounting and building and engineering – in that order. The case of building and engineering professionals is also significant. For this group, the total net movement in 2004-05 was 5,912, whereas the settler arrival numbers in the same field in 2004-05 was 3,958. The explanation, as shown below, is that the net number of visitors stating their occupation as engineering has increased sharply in recent years.

Most of the settler arrivals are selected under the points-tested GSM categories. This is shown in Table 3 which details the visa categories for settler arrivals in 2004-05. By far the largest visa subclass in the GSM program is the Skilled - Independent visa subclass under which 17,646 persons stating a skilled occupation entered Australia in 2004-05. For the most part these skilled persons would have been principal applicants (PAs) who successfully sought a permanent resident visa under this visa subclass, although some would have been secondary applicants, such as spouses, accompanying the PAs. Table 3, also shows the breakdown into major occupations for each of the main groups of visa subclasses. In the case of the Skilled - Independent category, 13,498 of the 17,646 skilled arrivals, or 76 per cent, were professionals.

Other significant contributions in 2004-05 to the inflow of skilled settlers were New Zealand citizens and those visaed under the family category (mainly spouses sponsored by Australian residents). In the year 2000-01 the number of skilled settlers moving to Australia from New Zealand peaked at 13,792.<sup>2</sup> At that stage they constituted a major component of Australia's net skill gain on international movements. In the years that followed as Australia's migration program was increased the flow from New Zealand diminished. This was partly a consequence of legislation introduced in the latter half of 2001 designed to limit such movement to Australia, especially of former migrants to New Zealand who had gained New Zealand citizenship. Since 2000-01 the number of settlers arriving from New Zealand has fallen from 13,792 to 7,280 in 2001-02, 5,218 in 2002-03 to 5,709 in 2003-04. In 2004-05 there was a significant increase in the movement of skilled settlers from New Zealand to 7,064. This number is still way below the peak year of 2000-01. As is implied by Table 3, most of the 7,064 skilled settlers moving from New Zealand in 2004-05 would have been New Zealand citizens.

**Table 3: Settler arrivals by occupation group and major migration stream, 2004-05**

Occupation	Major migration stream							Total*
	New Zealand citizen	Family	Humanitarian	Skilled			Other Skilled/Business	
				Australian Sponsored	Independent points assessed	State-specific and Regional		
Managers & Administrators	1,318	2,345	57	378	1,113	461	1,961	7,658
Natural & Physical Science Professionals	71	98	2	90	289	135	40	726
Building & Engineering Professionals	392	654	26	257	2,151	431	41	3,958
Accountants, Auditors & Corporate Treasurers	247	551	9	246	2,770	260	54	4,142
Computing Professionals	213	433	4	258	3,986	279	17	5,197
Medical Practitioners	103	284	8	30	245	47	31	750
Nursing Professionals	319	225	20	45	1,039	144	39	1,833
School Teachers	345	898	73	161	740	234	56	2,513
Other Professionals	1,244	2,093	86	1,020	2,278	1,032	330	8,102
<b>Total Professionals</b>	<b>2,934</b>	<b>5,236</b>	<b>228</b>	<b>2,107</b>	<b>13,498</b>	<b>2,562</b>	<b>608</b>	<b>27,221</b>
Associate Professionals	1,195	1,640	49	445	826	931	143	5,247
Tradespersons	1,387	1,656	109	466	2,209	1,115	82	7,045
<b>Total skilled</b>	<b>6,834</b>	<b>10,877</b>	<b>443</b>	<b>3,396</b>	<b>17,646</b>	<b>5,069</b>	<b>2,794</b>	<b>47,171</b>
Not skilled	4,700	4,355	349	384	1,384	641	179	12,048
<b>Total giving occupation</b>	<b>11,534</b>	<b>15,232</b>	<b>792</b>	<b>3,780</b>	<b>19,030</b>	<b>5,710</b>	<b>2,973</b>	<b>59,219</b>

Skilled - Australian Sponsored includes subclasses 105 and 138; Skilled - Independent points assessed includes subclasses 126 and 136; State-specific and Regional includes subclasses 106, 119, 134, 135, 137, 139, 495. \* Total includes others, mainly former Australian residents returning.

The dominance of professionals in the Independent points-assessed visa category reflects the selection priorities driving the reforms to the skill selection system in 1999. There is also a demand factor operating. Most of demand for entry as permanent residents to Australia on the part of skilled persons comes from the ranks of professionals, especially those living in China, the sub-continent of India and some other developing countries. This is because of the rapid growth in the number of tertiary graduates in these countries where there are relatively few career opportunities which would offer anything like the salary levels that are available to professionals in Australia.

### *Residents*

Resident loss has been the source of much concern in Australia. These worries originally surfaced in the late 1990s when, as Table 4 shows, there was a sharp jump in the losses attributable to the net movement of skilled residents. This loss increased from 12,627 in 1997-98 to 25,953 in 1998-99. It subsequently peaked at 31,210 in 2000-01. Since most of the movement out of Australia was amongst professionals, it was feared that Australia was losing many of its locally trained 'best and brightest'. The exodus coincided with increased public awareness of the growing global competition for talent. There were fears that more dynamic nations (including the United States and some Asian nations) might be cannibalising Australia's talent. The net loss of residents was widely referred to in emotive terms as a 'brain drain'.

Worries about a resident 'brain drain' have lost some of their bite since the early years of the new century because the net losses of skilled residents fell after 2000-01. As Table 4 indicates, the net loss of skilled residents of 28,956 in 2004-05 is lower than that of the peak loss year of 2000-01. Nonetheless, as the discussion of the 'brain drain' below indicates, there has been a recent renewal of interest in the issue, along with some alarmist claims as to the size of the phenomenon. These claims are examined later.

It was pointed out earlier that cross-sectional analysis of resident loss can be misleading. The surge in the net loss of skilled residents in 2000-01 was cited as an important example of how such movements could prompt unwarranted concerns. The detail provided in Tables 4 and 5 help illuminate this point. Table 4 shows that in the years after 2000-01 the net loss of skilled residents actually fell - at the very time when worries about a brain drain of residents were being widely aired. Table 5 indicates why this happened. It shows that departures of skilled Australian residents stabilised in the years 2000-01 and 2003-04. This stabilisation reflected the strength of the Australian economy at the time and the resulting strong domestic demand for skilled labour market. Meanwhile the number of skilled Australian residents returning increased sharply - from 51,819 in 2000-01 to 64,769 in 2003-04. The expansion in the number of returnees was a function of the growth in the stock of Australian residents who were overseas as a result of the upsurge in resident departures in the late 1990s. As documented in an earlier report, the average length of stay overseas of residents returning to Australia is a little over two years.<sup>3</sup> When the stock of residents overseas increases (as a result of increased departures), so too do the number of returnees - a couple of years later.

Table 5 shows that there was a significant increase in departures of skilled residents between the years 2003-04 and 2004-05, from 74,830 to 80,989. This increase requires close attention. Perhaps some new departure pattern is emerging amongst residents. One possibility is that the rising stock of overseas-born residents (consequent on the expansion of Australia's immigration program) is generating a subsequent outflow. Previous evaluation of this possibility for the period up to 2002-03 did not find any evidence of high net losses amongst this group.<sup>4</sup> Nevertheless, it is an issue worth re-examining given that the rapid economic growth occurring in China and India, two of the major sources of expansion in Australia's immigration intake. In order to analyse the resident outflow, recent resident movement patterns were disaggregated so as to allow further exploration of resident movements.

**Table 4: Net flow of employed residents from Australia (permanent and long-term), 1995-96 to 2004-05**

Occupation	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Finance Managers	-89	-93	-78	-163	-133	-189	-169	-142	-152	-204
Company Secretaries	-7	-8	-1	-2	-3	-1	3	0	9	0
Information Technology Managers	-21	-20	-95	-182	-277	-670	-258	-129	-172	-126
Other Managers & Administrators	-2,389	-2,914	-2,363	-5,308	-6,598	-7,695	-7,388	-6,245	-6,971	-7,396
<b>Total Managers &amp; Admin</b>	<b>-2,507</b>	<b>-3,035</b>	<b>-2,537</b>	<b>-5,655</b>	<b>-7,011</b>	<b>-8,555</b>	<b>-7,812</b>	<b>-6,516</b>	<b>-7,286</b>	<b>-7,726</b>
Chemists	-19	-43	-66	-69	-59	-62	-57	-44	-54	-38
Geologists and Geophysicists	-84	-136	-146	-218	-130	-138	-163	-121	-116	-133
Life Scientists	-8	-12	-5	-48	-66	-17	0	-7	-15	-20
Environmental & Agricultural Sci. Prof.	-25	-24	-13	-16	-28	-58	-19	-17	-40	-37
Medical Scientists	-22	4	-15	-32	-15	-28	-11	-8	-11	5
Other Nat. & Phys. Science Prof.	-31	-15	-249	-386	-359	-475	-534	-275	-247	-380
<i>Total Nat. &amp; Phys. Science Prof.</i>	<i>-189</i>	<i>-226</i>	<i>-494</i>	<i>-769</i>	<i>-657</i>	<i>-778</i>	<i>-784</i>	<i>-472</i>	<i>-483</i>	<i>-603</i>
Building & Surveying Professionals	-60	-98	-83	-267	-145	-215	-160	-97	-102	-258
Engineers	-135	-236	-422	-354	-168	-194	-41	100	-6	14
Other Building & Engineering Prof.	-9	-3	-522	-1,376	-1,315	-1,902	-1,906	-1,279	-1,195	-1,396
<i>Total Building &amp; Engineering Prof.</i>	<i>-205</i>	<i>-337</i>	<i>-1,027</i>	<i>-1,997</i>	<i>-1,628</i>	<i>-2,311</i>	<i>-2,107</i>	<i>-1,276</i>	<i>-1,303</i>	<i>-1,640</i>
Accountants	-412	-722	-990	-1,455	-1,253	-1,660	-1,474	-942	-981	-1,514
Auditors	-30	-53	-49	-56	-91	-55	-25	-5	-29	-43
Corporate Treasurers	-2	-3	-6	-9	-9	0	1	0	0	-1
Computing Professionals	-293	-580	-693	-1,564	-816	-1,162	-1,031	-192	-458	-792
Mathematicians, Statisticians & Actuaries	-24	-8	-17	-34	-46	-50	-73	-34	-60	-38
Medical Practitioners	-49	-140	-115	-356	-358	-349	-382	-403	-335	-428
Nursing Professionals	-482	-586	-681	-1,012	-911	-982	-1,038	-846	-680	-965
School Teachers	36	-53	-772	-2,418	-1,863	-2,616	-3,075	-2,699	-2,287	-2,321
University Lecturers and Tutors	-96	-133	-194	-483	-544	-623	-449	-442	-357	-563
Economists	-32	-25	-38	-49	-76	-66	-72	2	-28	-20
Other Professionals	-2,214	-3,128	-2,703	-5,385	-4,309	-6,934	-7,113	-6,219	-5,816	-7,350
<b>Total Professionals</b>	<b>-3,993</b>	<b>-5,994</b>	<b>-7,779</b>	<b>-15,587</b>	<b>-12,561</b>	<b>-17,586</b>	<b>-17,622</b>	<b>-13,528</b>	<b>-12,817</b>	<b>-16,278</b>
Building & Eng. Assoc Prof & Technical	-21	-65	-143	-194	-219	-294	-219	-167	-209	-216
Financial Dealers & Brokers, Ass. Prof	-50	-77	-132	-216	-180	-318	-258	-196	-240	-230
Financial Investment Advisors, Ass. Prof	-31	-56	-87	-227	-204	-32	-19	-61	-82	-110
Chefs	-76	-64	-195	-295	-200	-371	-294	-246	-207	-286
Other Associate Professionals	-976	-882	-572	-2,025	-2,375	-2,269	-1,947	-1,690	-1,963	-2,440
<b>Total Associate Professionals</b>	<b>-1,154</b>	<b>-1,144</b>	<b>-1,129</b>	<b>-2,957</b>	<b>-3,178</b>	<b>-3,284</b>	<b>-2,737</b>	<b>-2,360</b>	<b>-2,701</b>	<b>-3,282</b>
Mech Eng Tradespersons	-116	-199	-257	-268	-176	-150	-143	-84	-113	-150
Fabric Eng Tradespersons	-61	-84	-48	-83	-20	-41	-42	-12	-24	-7
Automotive Tradespersons	-60	-14	-43	-85	-102	-99	-116	-81	-25	-135
Elect & Elect Tradespersons	-101	-112	-155	-246	-174	-223	-239	-28	-188	-169
Construction Tradespersons	-276	-93	-129	-239	-239	-505	-394	-108	-107	-339
Other Tradespersons	-485	-468	-550	-833	-740	-767	-886	-832	-818	-870
<b>Total Tradespersons</b>	<b>-1,100</b>	<b>-969</b>	<b>-1,182</b>	<b>-1,754</b>	<b>-1,451</b>	<b>-1,785</b>	<b>-1,820</b>	<b>-1,145</b>	<b>-1,275</b>	<b>-1,670</b>
<b>Total Skilled Occupations</b>	<b>-8,753</b>	<b>-11,142</b>	<b>-12,627</b>	<b>-25,953</b>	<b>-24,201</b>	<b>-31,210</b>	<b>-29,991</b>	<b>-23,549</b>	<b>-24,079</b>	<b>-28,956</b>
Other Occupations	-3,404	-3,765	-5,349	-8,838	-8,078	-9,054	-9,139	-7,800	-9,237	-11,706
<b>Total</b>	<b>-12,157</b>	<b>-14,907</b>	<b>-17,976</b>	<b>-34,791</b>	<b>-32,279</b>	<b>-40,264</b>	<b>-39,130</b>	<b>-31,349</b>	<b>-33,316</b>	<b>-40,662</b>

**Table 5: Movements of employed residents, permanent and long-term departures, arrivals and net movements, Australia, 1995-96 to 2004-05**

Occupation	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
	<b>Departing</b>									
Managers & Administrators	9,336	10,334	8,722	10,667	13,244	15,466	15,165	14,532	15,389	15,792
Professionals	25,632	28,132	31,274	34,699	35,326	41,634	44,482	43,406	44,122	48,302
Associate Professionals	5,229	5,678	6,273	7,189	8,207	8,117	8,113	8,021	8,977	10,205
Tradespersons	5,390	5,263	5,852	5,233	5,607	5,779	6,093	5,983	6,342	6,690
Skilled Occupations	45,587	49,408	52,121	57,788	62,384	70,996	73,853	71,942	74,830	80,989
Other Occupations	12,983	14,195	18,256	20,191	22,255	21,115	22,074	21,275	23,255	26,080
<b>Total</b>	<b>58,570</b>	<b>63,603</b>	<b>70,377</b>	<b>77,979</b>	<b>84,639</b>	<b>92,111</b>	<b>95,927</b>	<b>93,217</b>	<b>98,085</b>	<b>107,069</b>
	<b>Returning</b>									
Managers & Administrators	6,829	7,299	6,185	5,012	6,233	6,911	7,353	8,016	8,103	8,066
Professionals	21,640	22,138	23,495	19,112	22,765	24,048	26,860	29,878	31,305	32,024
Associate Professionals	4,075	4,535	5,144	4,232	5,029	4,833	5,376	5,661	6,276	6,923
Tradespersons	4,291	4,294	4,670	3,479	4,156	3,994	4,273	4,838	5,067	5,020
Skilled Occupations	36,834	38,266	39,494	31,835	38,183	39,786	43,862	48,393	50,751	52,033
Other Occupations	9,579	10,430	12,907	11,353	14,177	12,061	12,935	13,475	14,018	14,374
<b>Total</b>	<b>46,413</b>	<b>48,696</b>	<b>52,401</b>	<b>43,188</b>	<b>52,360</b>	<b>51,847</b>	<b>56,797</b>	<b>61,868</b>	<b>64,769</b>	<b>66,407</b>
	<b>Net</b>									
Managers & Administrators	-2,507	-3,035	-2,537	-5,655	-7,011	-8,555	-7,812	-6,516	-7,286	-7,726
Professionals	-3,993	-5,994	-7,779	-15,587	-12,561	-17,586	-17,622	-13,528	-12,817	-16,278
Associate Professionals	-1,154	-1,144	-1,129	-2,957	-3,178	-3,284	-2,737	-2,360	-2,701	-3,282
Tradespersons	-1,100	-969	-1,182	-1,754	-1,451	-1,785	-1,820	-1,145	-1,275	-1,670
Skilled Occupations	-8,753	-11,142	-12,627	-25,953	-24,201	-31,210	-29,991	-23,549	-24,079	-28,956
Other Occupations	-3,404	-3,765	-5,349	-8,838	-8,078	-9,054	-9,139	-7,800	-9,237	-11,706
<b>Total</b>	<b>-12,157</b>	<b>-14,907</b>	<b>-17,976</b>	<b>-34,791</b>	<b>-32,279</b>	<b>-40,264</b>	<b>-39,130</b>	<b>-31,349</b>	<b>-33,316</b>	<b>-40,662</b>

## Destination of skilled residents leaving Australia

The United Kingdom and Ireland has been the main destination of skilled Australian residents for a long time. Its share has been increasing and, as Table 6 shows, there was a particularly sharp rise in the number of skilled residents leaving for this area in 2004-05. It accounted for 43 per cent of the growth in the number of skilled resident departures over the period 2000-01 to 2004-05. The other locations attracting significantly increased numbers of skilled Australian residents were New Zealand, China, Singapore, Canada and the Middle Eastern countries of Saudi Arabia and United Arab Emirates. By contrast, the level of departures to the United States, which is the second largest destination, fell between 2001 and 2005.

Previous analysis has shown that most of the resident professionals moving to the UK and Ireland are young (aged less than 30), and were born in Australia.<sup>5</sup> They are best described as 'seeing the world'. While they often work in the UK and Ireland if they can obtain a working holiday visa or if they are patrials (with work rights), the main purpose of their visit is travel. (Around 19,000 to 23,000 Australian working holiday makers have been admitted to the UK over each of the last four years.<sup>6</sup>) The great majority subsequently return to Australia. UK data on the numbers of Australian nationals who seek leave to remain as a work permit holder or trainee constitute only a small fraction of the number Australians residents visiting the UK on a long-term basis. In 2003 the number was about 4,800.<sup>7</sup> This compares with the annual number of skilled Australian residents indicating that they will locate in the UK (and Ireland) of about 25,000 to 29,000 over the last five years (see Table 6).

The pattern in 2004-05 fits this characterisation. As shown in Table 7, most of the skilled residents indicating that the UK and Ireland was their destination were aged less than 30. Past experience would indicate that an increased outflow of residents to the United Kingdom and Ireland does not presage a new 'brain drain', because the majority of this age group return to Australia within two or three years. For example, one UK study estimates that 57 per cent of all Australian immigrants to the UK leave within five years of arrival.<sup>8</sup>

**Table 6: Resident departures, skilled persons by destination 2000-01 to 2004-05**

Next residence	2001	2002	2003	2004	2005	Change 2001- 2005	% of total change
New Zealand	5,389	5,649	6,137	7,131	7,628	2,239	22
Papua New Guinea	1,523	1,370	1,201	926	988	-535	-5
United Kingdom and Republic of Ireland	24,269	26,043	24,601	25,674	28,593	4,324	43
Saudi Arabia & United Arab Emirates	1,052	1,155	1,349	1,339	1,444	392	4
Singapore	3,560	3,879	3,574	3,538	3,917	357	4
South-East Asia	4,582	4,868	4,763	5,205	5,441	859	9
China	1,556	1,936	2,016	2,588	3,061	1,505	15
Hong Kong	5,273	5,012	4,868	4,758	5,140	-133	-1
Japan	2,387	2,601	2,489	2,332	2,403	16	0
Other North-East Asia	1,167	1,269	1,393	1,514	1,528	361	4
Canada	1,826	1,904	1,980	2,063	2,260	434	4
USA	8,698	7,946	7,545	7,601	7,777	-921	-9
Other	9,714	10,221	10,026	10,161	10,809	1,095	11
<b>Total</b>	<b>70,996</b>	<b>73,853</b>	<b>71,942</b>	<b>74,830</b>	<b>80,989</b>	<b>9,993</b>	<b>100</b>

**Table 7: Departures of skilled residents by age group, selected destination countries, 2004-05**

Age	Last/next residence							Total
	New Zealand	UK and Ireland	Singapore	China	Hong Kong	USA	Other	
Number of departures								
< 30	2,103	16,240	660	440	819	1,897	5,763	27,922
30-44	3,730	10,045	2,267	1,554	2,679	4,225	11,629	36,129
45-64	1,750	2,243	972	1,040	1,581	1,616	7,192	16,394
65+	45	65	18	27	61	39	289	544
<b>Total</b>	<b>7,628</b>	<b>28,593</b>	<b>3,917</b>	<b>3,061</b>	<b>5,140</b>	<b>7,777</b>	<b>24,873</b>	<b>80,989</b>
Age distribution of departures (%)								
< 30	28	57	17	14	16	24	23	34
30-44	49	35	58	51	52	54	47	45
45-64	23	8	25	34	31	21	29	20
65+	1	0	0	1	1	1	1	1
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The age distribution of the skilled resident outflow to the other destination countries listed was quite different. The majority of movers to New Zealand, Singapore, China, Hong Kong and the USA were aged 30-44. Their motive is likely to be employment related and thus probably involve a relatively long stay, even a permanent departure if their work involves a career move.

The pattern of departures between the Australia-born and overseas-born skilled residents differs. Australia-born residents dominate the flow to the UK and Ireland, Singapore and the USA (Table 8). They are also playing a growing role in the movement of residents to New Zealand. Table 8 shows that most of the growth in the number of residents leaving Australia for New Zealand is in the Australia-born and the 'Other Australian resident' categories. This movement probably reflects the increased Australian corporate presence in New Zealand. Another striking feature of the departing Australia-born skilled residents is that, with the exception of the UK movement described above, most movers are in the 30-44 age bracket; that is, they are in the age group in which employment is the main motive for movement. Again, with the exception of those moving to the UK and Ireland, the numbers leaving Australia greatly exceed those returning, implying that many are semi-permanent expatriates. For example, as shown in Table 8, the numbers leaving Australia for Singapore over the years 2000-01 to 2004-05 were five to six times larger than the number of Australia-born residents returning.

This movement of Australia-born skilled residents does appear to constitute a long term 'brain drain'. The numbers involved are not large and are not increasing much. Also, as shown below, the losses are at least equalled by the inflow of skilled overseas visitors. These small movements are indicative of increasing involvement of Australian residents in the international skilled workforce. Nevertheless, most of the Australia-born skilled residents remain, as in the past, travellers seeing the world before they settle down back home.

In the case of the overseas-born residents, Table 8 shows that (excluding the New Zealand-born) they constitute about a third of the skilled departures. They are more likely to move to Asia than the Australia-born, as is evident from the figures shown in Table 8 for China and Hong Kong. But, unlike the Australia-born pattern just described, the overseas-born show much less inclination to stay overseas. The numbers returning to Australia are trending up in parallel with the departures. These data imply that relatively few of the recent Asia-born permanent residents are using their residence status as a basis for movements elsewhere. On this evidence the recent upsurge in Australia's migration program does not presage a subsequent escalation in settler losses.

One additional piece of evidence relevant to this proposition that can be gleaned from the DIMA overseas arrivals and departures database concerns the statements made by residents when they depart as to whether their departure is permanent or long term. As indicated earlier, this statement is an unreliable guide to subsequent behaviour. Nonetheless, it may be significant that only a tiny proportion of overseas-born residents departing for an Asian destination indicated that their departure in each of the years 2000-01 to 2004-05 was permanent. As the Table 9 shows, a much higher proportion of the Australia-born residents intending to locate in an Asian destination indicated that their proposed move was permanent.

**Table 8: Permanent long-term movements of skilled Australian residents by birthplace, selected**

Last/next residence Birthplace/citizenship	Movement									
	Departures					Arrivals (returns)				
	Financial year of movement					Financial year of movement				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
<b>Total moves</b>										
Australia-born	44,051	46,116	45,195	46,072	50,184	22,952	24,544	27,553	29,009	29,292
New Zealand citizen	3,208	3,599	3,707	3,875	3,819	612	590	889	919	876
Other Australian resident	23,737	24,138	23,040	24,883	26,986	16,222	18,728	19,951	20,823	21,865
<b>Total</b>	<b>70,996</b>	<b>73,853</b>	<b>71,942</b>	<b>74,830</b>	<b>80,989</b>	<b>39,786</b>	<b>43,862</b>	<b>48,393</b>	<b>50,751</b>	<b>52,033</b>
<b>New Zealand</b>										
Australia-born	2,535	2,467	2,605	3,164	3,511	615	444	591	601	558
New Zealand citizen	1,940	2,283	2,551	2,748	2,640	245	163	378	407	411
Other Australian resident	914	899	981	1,219	1,477	231	249	319	314	356
<b>Total</b>	<b>5,389</b>	<b>5,649</b>	<b>6,137</b>	<b>7,131</b>	<b>7,628</b>	<b>1,091</b>	<b>856</b>	<b>1,288</b>	<b>1,322</b>	<b>1,325</b>
<b>UK &amp; Republic of Ireland</b>										
Australia-born	18,394	19,874	18,817	19,586	22,059	12,053	13,252	15,593	16,405	16,191
Overseas-born resident										
to/from country of birth*	3,219	3,258	3,063	3,232	3,256	2,455	2,556	2,798	2,740	2,739
to/from elsewhere	2,656	2,911	2,721	2,856	3,278	1,516	1,746	2,030	2,133	2,168
<b>Total</b>	<b>24,269</b>	<b>26,043</b>	<b>24,601</b>	<b>25,674</b>	<b>28,593</b>	<b>16,024</b>	<b>17,554</b>	<b>20,421</b>	<b>21,278</b>	<b>21,098</b>
<b>Singapore</b>										
Australia-born	1,840	1,999	1,874	1,803	2,033	308	231	305	251	271
Overseas-born resident										
to/from country of birth	261	317	290	322	329	178	298	270	338	377
to/from elsewhere	1,459	1,563	1,410	1,413	1,555	549	902	967	989	960
<b>Total</b>	<b>3,560</b>	<b>3,879</b>	<b>3,574</b>	<b>3,538</b>	<b>3,917</b>	<b>1,035</b>	<b>1,431</b>	<b>1,542</b>	<b>1,578</b>	<b>1,608</b>
<b>China</b>										
Australia-born	476	648	758	835	967	133	156	228	228	320
Overseas-born resident										
to/from country of birth	772	914	843	1,226	1,514	451	653	720	897	1,134
to/from elsewhere	308	374	415	527	580	167	225	228	255	357
<b>Total</b>	<b>1,556</b>	<b>1,936</b>	<b>2,016</b>	<b>2,588</b>	<b>3,061</b>	<b>751</b>	<b>1,034</b>	<b>1,176</b>	<b>1,380</b>	<b>1,811</b>
<b>Hong Kong</b>										
Australia-born	1,651	1,619	1,726	1,541	1,692	221	273	213	207	259
Overseas-born resident										
to/from country of birth	2,101	2,014	1,821	1,927	2,002	2,284	2,259	2,372	2,440	2,334
to/from elsewhere	1,521	1,379	1,321	1,290	1,446	836	980	1,011	977	1,127
<b>Total</b>	<b>5,273</b>	<b>5,012</b>	<b>4,868</b>	<b>4,758</b>	<b>5,140</b>	<b>3,341</b>	<b>3,512</b>	<b>3,596</b>	<b>3,624</b>	<b>3,720</b>
<b>USA</b>										
Australia-born	5,888	5,589	5,346	5,502	5,532	3,020	3,187	3,233	3,372	3,468
Overseas-born resident										
to/from country of birth	492	407	397	364	387	250	293	301	301	314
to/from elsewhere	2,318	1,950	1,802	1,735	1,858	1,110	1,321	1,382	1,333	1,344
<b>Total</b>	<b>8,698</b>	<b>7,946</b>	<b>7,545</b>	<b>7,601</b>	<b>7,777</b>	<b>4,380</b>	<b>4,801</b>	<b>4,916</b>	<b>5,006</b>	<b>5,126</b>

\* Ireland is treated as separate country of birth from UK but UK countries treated as one. So if someone born in Wales cites England as their last/next residence, they are regarded as moving to their country of birth in this table.

**Table 9: Per cent of skilled residents departing PLT for selected Asian destinations by birthplace and intended duration of stay, 2000-01 to 2004-05**

Destination, birthplace and intended duration	2000-01	2001-02	2002-03	2003-04	2004-05
<b>Singapore</b>					
<b>Australia-born</b>					
Permanent dep.	39	42	43	50	50
Long-term dep.	61	58	57	50	50
Total departures	100	100	100	100	100
Number	1,840	1,999	1,874	1,803	2,033
<b>Overseas born</b>					
Permanent dep.	2	3	3	2	2
Long-term dep.	98	97	97	98	98
Total departures	100	100	100	100	100
Number	1,720	1,880	1,700	1,735	1,884
<b>China</b>					
<b>Australia-born</b>					
Permanent dep.	33	34	36	33	32
Long-term dep.	67	66	64	67	68
Total departures	100	100	100	100	100
Number	476	648	758	835	967
<b>Overseas born</b>					
Permanent dep.	8	4	5	6	6
Long-term dep.	92	96	95	94	94
Total departures	100	100	100	100	100
Number	1,080	1,288	1,258	1,753	2,094
<b>Hong Kong</b>					
<b>Australia-born</b>					
Permanent dep.	42	47	53	53	52
Long-term dep.	58	53	47	47	48
Total departures	100	100	100	100	100
Number	1,651	1,619	1,726	1,541	1,692
<b>Overseas born</b>					
Permanent dep.	4	3	3	3	2
Long-term dep.	96	97	97	97	98
Total departures	100	100	100	100	100
Number	3,622	3,393	3,142	3,217	3,448

## *Visitors*

The increased net outflow of residents between 2003-04 and 2004-05, discussed above, closely matches the increase in net inflows of skilled visitors shown in Table 10. Both increased by 4,500 to 5,000. This situation continues the pattern of recent years where the net losses of skilled residents parallel the net gains from visitors. Though the numbers in the two streams match, it is doubtful whether the quality or relevance to Australian employers is the same. For the most part, skilled visitors are selected because they are needed to fill employment vacancies in Australia. There is no such selectivity in the case of skilled residents who depart, since most are not sponsored by employers to particular jobs overseas.

The net gain of skilled visitors is particularly striking for professionals. As Table 10 shows, their numbers have increased dramatically over the past decade, from 2,879 in 1995-96 to 9,688 in 1999-00, 14,560 in 2003-04 and 18,111 in 2004-05. In 2004-05 the net gain of professional visitors exceeded the net loss of resident professionals (16,278) by 1,833. By contrast, the net number of visitors who are tradespersons is quite small, only 723 in 2004-05. The relatively low number of net moves for tradespersons reflects employer reluctance to sponsor persons with such skills because of the costs involved in such sponsorship relative to the returns from their prospective work while in Australia. Tradespersons, if drawn from non-western source countries, also have difficulty transferring their skills to the Australian setting.

The net number of visitors with 'other occupations' is small (4,929). This is largely because the main visa category for visitors intending to work in Australia is the business long-stay visa (subclass 457). With the exception of some persons sponsored to employment locations in regional areas, this category is limited to persons sponsored to fill trade, associate professional, professional or managerial positions.

The rapid growth in skilled visitor numbers is an outcome of the severity of the skill shortage in Australia. Because it is an expensive business recruiting and transporting sponsored workers to Australia, employers are only likely to take up the option if they cannot find locals with the skills they need. Table 10 shows that there have been sharp increases in the net flows of visitors who are geologists and geophysicists, engineers, accountants, medical practitioners and nurses. In each case, these are professions marked by large numbers of vacancies for experienced personnel. By contrast, the net flows of visitors who are information technology managers and computing professionals have declined since the early 2000-01. This decline reflects the relatively subdued state of the job market in these fields in Australia.

As indicated, employers have the option of bringing skilled visitors to Australia under the business long-stay visa (subclass 457). There is no limit to the number an employer can sponsor as long as they are approved as sponsors by DIMA and as long as the sponsored person has a specific job to go to. As Table 11 shows, most of the growth in skilled visitor numbers is attributable to increased employer sponsorship under the 457 visa subclass. This visa subclass accounted for more than half of the 52,820 skilled visitors arriving in Australia in 2004-05. In the case of medical doctors, most of the sharp increase in the net visitor numbers in recent years shown in Table 10 is attributable to employer sponsorship under the temporary-resident visa subclass 422 and the occupation trainee visa subclass 442 (not shown separately in Table 11).

The dominance of the business long-stay visa subclass amongst visitor arrivals helps explain another distinctive feature of the skilled visitor inflow (see Table 12). This is that, relative to the settler movement, it is predominantly drawn from highly developed countries, including Japan. This is partly explained by the role inter-company transfer plays in visitor movements. The multinationals based in Europe, Japan or the United States with branches in Australia draw on their own nationals for these transfers. It also reflects longstanding preferences for experts drawn from western countries. One exception to this pattern concerns doctors where the UK remains the main single birthplace country but the share of non-Western-born doctors is growing, particularly those born in India.

**Table 10: Net movement of visitors to Australia (long-term temporary residents) stating an occupation, 1995-96 to 2004-05**

Occupation	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Finance Managers	310	304	340	540	556	501	492	410	438	390
Company Secretaries	25	24	3	13	23	14	11	3	0	1
Information Technology Managers	42	31	83	220	462	684	290	271	215	116
Other Managers & Administrators	4,369	3,989	4,781	8,124	8,336	8,762	8,380	7,062	6,313	6,173
<b>Total Managers &amp; Administrators</b>	<b>4,745</b>	<b>4,349</b>	<b>5,207</b>	<b>8,897</b>	<b>9,377</b>	<b>9,961</b>	<b>9,173</b>	<b>7,746</b>	<b>6,966</b>	<b>6,680</b>
Chemists	5	35	2	56	28	46	61	50	14	51
Geologists and Geophysicists	66	110	153	234	211	159	165	177	161	277
Life Scientists	15	21	32	41	20	83	59	110	102	49
Environmental & Agricultural Sci. Prof.	41	53	65	83	94	62	58	58	52	33
Medical Scientists	8	5	12	53	50	63	48	31	66	41
Other Nat. & Phys. Science Prof.	9	39	-58	168	51	106	104	60	86	210
<i>Total Nat. &amp; Phys. Science Prof.</i>	<i>144</i>	<i>263</i>	<i>206</i>	<i>635</i>	<i>454</i>	<i>519</i>	<i>495</i>	<i>486</i>	<i>481</i>	<i>661</i>
Building & Surveying Professionals	23	29	23	145	104	134	161	248	209	284
Engineers	237	270	620	611	525	582	574	530	522	305
Other Building & Engineering Prof.	193	204	390	1,322	1,273	1,518	1,688	1,731	1,807	3,005
<i>Total Building &amp; Engineering Prof.</i>	<i>454</i>	<i>503</i>	<i>1,033</i>	<i>2,078</i>	<i>1,902</i>	<i>2,234</i>	<i>2,423</i>	<i>2,509</i>	<i>2,538</i>	<i>3,594</i>
Accountants	234	218	399	864	850	1,069	850	775	895	1,256
Auditors	17	16	48	70	51	83	89	86	98	175
Corporate Treasurers	5	4	3	9	8	10	4	7	2	0
Computing Professionals	362	337	570	1,533	1,325	1,514	1,433	1,543	1,243	1,287
Mathematicians, Statisticians & Actuaries	15	15	20	40	33	33	35	32	68	50
Medical Practitioners	181	254	172	616	578	792	752	789	1,000	1,263
Nursing Professionals	90	100	93	349	262	473	1,041	1,318	1,415	1,550
School Teachers	171	88	293	736	784	1,062	1,347	1,263	1,373	1,363
University Lecturers and Tutors	116	108	278	503	547	592	675	653	821	760
Economists	15	19	-8	21	41	95	70	85	107	151
Other Professionals	1,076	1,798	1,121	2,932	2,853	4,470	4,685	4,402	4,519	6,001
<b>Total Professionals</b>	<b>2,879</b>	<b>3,722</b>	<b>4,228</b>	<b>10,386</b>	<b>9,688</b>	<b>12,946</b>	<b>13,899</b>	<b>13,948</b>	<b>14,560</b>	<b>18,111</b>
Building & Eng. Assoc Prof & Technical	31	14	-14	216	133	211	237	205	225	335
Financial Dealers & Brokers, Ass. Prof	47	50	80	192	156	202	136	130	142	164
Financial Investment Advisors, Ass. Prof	34	32	39	159	286	49	73	76	87	91
Chefs	-13	-44	-15	-88	53	23	-154	-233	-123	-25
Other Associate Professionals	1,052	816	267	1,249	580	1,468	1,961	1,525	1,028	1,563
<b>Total Associate Professionals</b>	<b>1,152</b>	<b>867</b>	<b>357</b>	<b>1,728</b>	<b>1,208</b>	<b>1,953</b>	<b>2,253</b>	<b>1,703</b>	<b>1,359</b>	<b>2,128</b>
Mech Eng Tradespersons	-33	-42	-27	14	-47	-39	38	37	58	103
Fabric Eng Tradespersons	-13	-31	-35	-22	-28	-10	2	7	44	91
Automotive Tradespersons	-17	-29	-43	-19	-42	3	35	4	44	104
Elect & Elect Tradespersons	4	-11	-43	73	-31	34	89	82	91	143
Construction Tradespersons	-221	-187	-208	-101	-315	-303	-203	-160	-247	49
Other Tradespersons	-140	-215	-230	35	-128	52	239	322	276	233
<b>Total Tradespersons</b>	<b>-420</b>	<b>-515</b>	<b>-586</b>	<b>-20</b>	<b>-591</b>	<b>-263</b>	<b>200</b>	<b>292</b>	<b>266</b>	<b>723</b>
<b>Total Skilled Occupations</b>	<b>8,356</b>	<b>8,424</b>	<b>9,206</b>	<b>20,991</b>	<b>19,682</b>	<b>24,597</b>	<b>25,525</b>	<b>23,689</b>	<b>23,151</b>	<b>27,642</b>
<b>Other Occupations</b>	<b>483</b>	<b>209</b>	<b>-1,844</b>	<b>693</b>	<b>-347</b>	<b>3,443</b>	<b>5,781</b>	<b>5,599</b>	<b>3,079</b>	<b>4,929</b>
<b>Total</b>	<b>8,839</b>	<b>8,633</b>	<b>7,362</b>	<b>21,684</b>	<b>19,335</b>	<b>28,040</b>	<b>31,306</b>	<b>29,288</b>	<b>26,230</b>	<b>32,571</b>

**Table 11: Skilled long-term visitor arrivals by broad occupational group and visa subclass, 2004-05**

Broad skill occupations	New Zealand citizen	Temporary business entry 457	Medical Practitioner 422	Working holiday maker	Student	Other	Total
Managers & Administrators	612	6,583	19	473	760	2,359	10,806
Professionals	1,740	16,551	1380	2,149	5,047	4,795	31,662
Associate Professionals	630	2,810	14	907	705	1,113	6,179
Tradespersons	801	1,344	5	1,116	258	649	4,173
Total skilled 2004-05	3,783	27,288	1,418	4,645	6,770	8,916	52,820
Total skilled 2000-01	3,619	23,086	579	4,404	4,998	10,126	46,812
Change 2000-01 to 2004-05	164	4,202	839	241	1,772	-1,210	6,008

Note: Includes both primary and secondary applicants stating a skilled occupation.

**Table 12: Birthplace of skilled long-term visitors arriving under subclass 457 in 2000-01 and 2004-05 (includes primary and secondary applicants)**

Birthplace	Number of visitors			Per cent of total (only shows those >2%)		
	2000-01	2004-05	Change	2000-01	2004-05	Change
Oceania and Antarctica total	135	173	38	1	1	1
UK (inc Nth Ireland)	7,866	10,511	2,645	34	39	63
Ireland	724	1,060	336	3	4	8
France	542	492	-50	2	2	-1
Germany	743	998	255	3	4	6
Netherlands	406	350	-56	2	1	-1
Sweden	195	245	50	1	1	1
Other Europe	1,022	1,311	289	4	5	7
Europe total	11,498	14,967	3,469	50	55	83
North Africa and the Middle East total	224	290	66	1	1	2
Thailand	153	222	69	1	1	2
Indonesia	267	208	-59	1	1	-1
Malaysia	412	510	98	2	2	2
Philippines	305	536	231	1	2	5
Singapore	322	442	120	1	2	3
Other SE Asia	78	109	31	0	0	1
South-East Asia total	1,537	2,027	490	7	7	12
China (excl SARs & Taiwan Province)	780	886	106	3	3	3
Hong Kong (SAR of China)	138	183	45	1	1	1
Japan	1,498	1,333	-165	6	5	-4
Korea, Republic of (South)	490	511	21	2	2	0
Other NE Asia	109	92	-17	0	0	0
North-East Asia total	3,015	3,005	-10	13	11	0
India	1,162	1,280	118	5	5	3
Sri Lanka	111	81	-30	0	0	-1
Other S & C Asia	103	101	-2	0	0	0
Southern and Central Asia total	1,376	1,462	86	6	5	2
Canada	695	724	29	3	3	1
United States of America	2,660	1,947	-713	12	7	-17
Brazil	56	87	31	0	0	1
Other Americas	145	277	132	1	1	3
Americas total	3,556	3,035	-521	15	11	-12
Kenya	48	36	-12	0	0	0
South Africa	1,376	1,523	147	6	6	3
Zimbabwe	122	457	335	1	2	8
Other Sub-Saharan Africa	99	201	102	0	1	2
Sub-Saharan Africa total	1,645	2,217	572	7	8	14
<b>Total<sup>(a)</sup></b>	<b>23,086</b>	<b>27,288</b>	<b>4,202</b>	<b>100</b>	<b>100</b>	<b>100</b>

(a) Total includes not stated birthplace

*The brain drain issue*

The 'brain drain' issue deserves close attention because there has been a plethora of recent books, academic articles and journalistic commentary on the subject, some of which are cited below. The tone of this commentary is often alarmist, yet, as the following commentary indicates, is not justified by the movement evidence.

For the most part, the public discussion focuses on the numbers of Australian expatriates living abroad and claims that these numbers are escalating. The term 'brain drain' is normally limited to movements of Australian residents. Most people who use the term currently do not imply (as was often the case a few years ago) that the net losses of skilled residents are greater than Australia's net gains of skilled migrants or visitors. This is acknowledged by Professor Graeme Hugo, the most prolific academic commentator on Australia's expatriate population. He concedes that Australia is experiencing 'heavy net migration gains' in almost all occupational categories. He also notes, correctly, that the growth in the skilled migration program, including the introduction of a range of temporary migration schemes has contributed to an expansion of these overall gains.<sup>9</sup>

What is at issue is the size of the Australian expatriate community and its significance for Australia's skilled workforce. Recent commentary is emphatic that it is very large and highly skilled. According to Nobel Laureate Professor Peter Doherty, 'The situation has now changed dramatically, as the relatively minor drain from the scientific and academic communities has broadened to a flood of people with a diversity of technical and business expertise'.<sup>10</sup> Some prominent business commentators also believe that business and legal professionals, too, have been departing in large numbers. Robert Gottliebsen, for example, asserts that 'Vast areas of the job market are now global and young Australians, particularly those on higher incomes, are being enticed overseas by higher pay, greater opportunities and lower taxes. Accountants, teachers, nurses and other professional are leading the exodus, but more recently blue-collar people are finding it attractive to leave.'<sup>11</sup>

As to the size of the expatriate population, it is commonly asserted that there are a million or so Australians overseas. Ryan Heath, in a recently published book on the subject which was prominently reviewed in the Australian press, states that he is 'one of 1.2 million members of Generation eXpat'.<sup>12</sup> According to Hugo, there are 'more than 850,000 mainly highly trained professional Australians' have chosen to live overseas.<sup>13</sup>

It is the size, occupational make-up and, most importantly, the extent to which expatriates are engaged in skilled careers (as distinct from temporary sojourns) that is the focus of the following inquiry. It is important that policy makers have an accurate picture of the situation because of the number of important public policy issues related to it. If there really are nearly one million highly trained expatriates living and working overseas it would be a serious matter indeed. It would imply, for example, that advocates of higher public investment in research (like Professor Doherty) have a case, since, if scientists are leaving in great numbers, the implication is that there are limited research opportunities available for them in Australia. Likewise, business commentators like Robert Gottliebsen sometimes advocate higher skilled migration intakes (or lower tax regimes) on the basis of fears about the scale of resident loss.

*Expatriate numbers – the evidence*

The origin of the one million figure for 'Australians travelling, working and living overseas' is an assessment by the Department of Foreign Affairs and Trade (DFAT).<sup>14</sup> That number has now become the rock on which commentators base their views about the expatriate issue. For example, *The Australian* feature writer, Carol Overington, in responding to Ryan Heath's book informs her readers that 'According to the Department of Foreign Affairs and Trade there are about one million Australians living and working overseas'.<sup>15</sup>

DFAT's estimate covered all Australians overseas, whether they were adults, children, career business persons, backpackers or tourists and as such is plausible. However, it was not an indication of the number of expatriates 'living and working' overseas. DFAT has reported that 'At any one time there are approximately 800,000 Australians *living and working* [authors' italics] overseas'.<sup>16</sup>

This is a crucial issue. At any time, around one million Australian residents may be overseas. But, of these, the proportion in the working ages would be not more than 85 per cent (judging by the ages of the residents moving in and out of Australia). Also many of those in the working ages, including most of those in the United Kingdom, were 'on the move'. They may seek work from time-to-time, but cannot be considered serious expatriates engaged in career-oriented employment with foreign companies.

A new and significant contribution to knowledge on this issue is an OECD study published in 2005 which provides counts of expatriates from OECD countries located in other OECD countries.<sup>17</sup> The study was based on census counts in 29 OECD receiving countries (most taken around the year 2000). It draws together information on the number of overseas-born persons enumerated in these censuses, as well as information on the education level of such persons.

According to the study, there were 328,405 Australia-born persons enumerated throughout in the censuses of OECD member countries, 267, 314 of whom were aged 15 and over. The study notes that according to DFAT estimates there were 562, 668 Australian nationals in the OECD countries at the time.<sup>18</sup> It should be noted that the OECD study does not include overseas-born nationals with permanent residence status who would have been included in the DFAT estimates.

Over the last five year period, around one third of the net loss of Australian residents to the OECD countries comprised overseas-born residents. If this proportion is applied to the DFAT estimate of the number of Australian nationals in the OECD, it implies that about of these 375,000 were Australia-born. This is somewhat higher, but, not inconsistent with the number in the OECD census counts.

Hugo, in his discussion of the OECD study, speculates that many Australians located overseas do not fill in the census forms documents because they do not have full working rights and therefore avoid filling in the form (perhaps because of fears about illegal working) or because they do not see the census as relevant to them (as would be the case for many who are temporary sojourners).<sup>19</sup>

It is possible that some Censuses do not record the detailed characteristics of overseas persons who are on a short visit. For example, in Australia the detailed characteristics (including place of birth) of visitors from overseas who indicated that they were resident in Australia for less than one year were not included in the 2001 Census tables.<sup>20</sup>

## Tertiary-educated expatriates

The OECD study also counts the number of expatriates (of native birth) who are highly skilled (defined as those possessing tertiary-level qualifications), and compares this number with the stock of native-born highly skilled persons at home. This calculation is done on the same basis for each OECD country. Any tendency for an undercount of native-born expatriate numbers should be similar regardless of the country of birth. Thus the OECD's calculations offer an invaluable comparative assessment of the scale of skilled resident losses by country. These calculations are of direct relevance to the issues pursued in this report.

Table 13 records the percentage of native-born tertiary-educated expatriates in OECD countries, relative to the tertiary-educated native stock in the home country. This shows that New Zealand and Ireland rank the highest at 32 per cent followed by the UK at 17 per cent. By contrast, Australia, with only three per cent of its tertiary-trained native-born in OECD countries is at the low end of the spectrum. This rate is half the level of Canada (seven per cent). Indeed, according to the OECD paper, only four out of the 29 OECD countries studied, including the United States and Korea, show lower tertiary-educated expatriate rates than Australia.

**Table 13: Tertiary-educated native-born living overseas in an OECD country as a percentage of the stock of tertiary-educated native-born at home**

	Native-born tertiary stock at home	Highly skilled native-born in other OECD country	Percentage of expatriates in OECD country to stock at home
Australia	3,610,692	116,513	3
Canada	5,834,055	417,750	7
Ireland	584,325	186,554	32
New Zealand	521,349	166,854	32
UK	7,232,100	1,265,863	17
USA	50,983,357	390,244	1
Germany	10,675,988	865,255	8
Korea	9,703,531	134,926	1

Source: Calculated from OECD, 2005, p. 12 and p. 32.<sup>21</sup>

Every country has a diaspora if it is defined as the stock of native-born living or travelling outside their country of birth. It is inevitable that the size of this diaspora will grow given the increased economic interpenetration of nations consequent on globalisation. There are many benefits both for the individuals involved and their country if they return. As Prime Minister John Howard has recently remarked, 'You're always going to have a diaspora and I think that is a good thing... It's part of globalisation and Australia can be both a contributor to and a beneficiary of that process.'<sup>22</sup> The diaspora becomes a domestic problem if it involves a major proportion of the country's skilled workforce (as with New Zealand) and if it is a predominantly one-way flow in favour of other countries, as is the case between New Zealand and Australia. Australia does not have this problem. Elsewhere in the Prime Minister's remarks he says that 'We now have an Australian diaspora of over a million, which for a nation of 20 million is a very high percentage'. In fact, as the OECD study confirms, Australia's expatriate (Australia-born) percentage is not high at all. Moreover, it is offset by the many times higher presence in Australia of skilled persons born in other countries. According to the OECD data, there are around four times as many tertiary-trained persons from OECD countries in Australia as there are Australia-born counterparts in OECD countries. No other OECD country has such a favourable balance.<sup>23</sup>

## Implications

An appropriate way of appreciating the current significance of the net flows of skilled persons in Australia's favour is to compare these flows with the stock of employed persons in Australia. To make this comparison meaningful it is necessary to add into the calculation the numbers of persons who became permanent residents through the onshore skilled overseas student visa subclasses. The numbers visaed under these visa subclasses (categories 880, 881 and 882) have increased from 5,480 in 2001-02 (the first year they were available) to 14,441 in 2004-05. By 2004-05 the number of principal applicants visaed under these visa subclasses exceeded the number visaed offshore in the skilled independent subclass 136 (11,826).

Most of those visaed in the former overseas student visa subclasses are not included in the net movement and settler tables detailed above. This is because the great majority would have originally entered Australia as a long-term visitor on a student visa and most would not have stated an occupation. Over the past five years only seven per cent of the net flow of all such students gave a skilled occupation (5,047 out of the 77,357 in 2004-05). As a result there will very little double counting involved in incorporating them into the following analysis.

Table 14 provides the basis for an assessment of the overall potential contribution of international movement of skilled persons to the stock of employed persons in Australia as of 2004-05 (detailed on the left-hand side of the table). It also details the numbers granted onshore skilled overseas student visas during 2004-05. These student numbers are then expressed as a per cent of the stock. In addition the movements of settlers, net residents and net visitors are detailed as a per cent of the stock. These figures derive from the earlier tables showing the numbers of such movements (Tables 1, 2, 4 and 10).

In the case of professionals, the total of the net flow of movers and students adds the equivalent of 2.3 per cent of the stock of professionals in 2004-05 (see far right column of Table 14). In the case of all skilled movers, the impact of the movers plus the students in 2004-05 was equivalent to almost one per cent of the stock.

The contribution from the international movement of skilled workers to Australia's skilled workforce in 2004-05 is substantial and increasing. The 2004-05 contribution is equivalent to about one third of the overall growth in the employment of skilled persons in Australia over that year. In some key occupations, such as accountants, engineering and building professionals and computing professionals, the migration contribution was six to seven per cent.

This is not to say that all of the settlers arriving during 2004-05, or all those visaed under the overseas student visa subclasses, necessarily found employment in their field. The point is rather to indicate the scale of net international movement of skilled persons in Australia's favour.

**Table 14: Employed stock and contribution of permanent long-term migration flows and overseas students granted permanent residence onshore to the Australian workforce, 2004-05**

	Stock <sup>^</sup>	Overseas students granted permanent residence onshore	Loss/gain per cent of stock					Total Net PLT <sup>†</sup>	Total Net PLT and students
			Overseas students onshore	Offshore movements					
				Settlers <sup>*</sup>	Net Residents <sup>*</sup>	Net visitors <sup>*</sup>			
<b>Total Managers &amp; Administrators</b>	<b>817,567</b>	<b>61</b>	<b>0.0</b>	<b>1.0</b>	<b>-0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	
Chemists	7,100	22	0.3	1.6	-0.5	0.7	1.8	2.1	
Geologists and Geophysicists	7,233	3	0.0	1.2	-1.8	3.8	3.2	3.2	
Life Scientists	6,733	75	1.1	2.4	-0.3	0.7	2.8	3.9	
Environmental & Agricultural Sci. Prof.	23,467	1	0.0	0.1	-0.2	0.1	0.1	0.0	
Medical Scientists	15,733	110	0.7	1.3	0.0	0.3	1.6	2.3	
Other Natural & Physical Science Prof.	7,967	9	0.1	1.7	-4.8	2.6	-0.4	-0.4	
<i>Total Natural &amp; Physical Science Prof.</i>	<i>68,233</i>	<i>220</i>	<i>0.3</i>	<i>1.1</i>	<i>-0.9</i>	<i>1.0</i>	<i>1.1</i>	<i>1.5</i>	
<i>Total Building &amp; Engineering Prof.</i>	<i>128,100</i>	<i>1,895</i>	<i>1.5</i>	<i>3.1</i>	<i>-1.3</i>	<i>2.8</i>	<i>4.6</i>	<i>6.1</i>	
Accountants	135,467	4,074	3.0	2.8	-1.1	0.9	2.6	5.6	
Auditors	8,033	23	0.3	4.0	-0.5	2.2	5.7	6.0	
Corporate Treasurers	1,933	3	0.2	0.6	-0.1	0.0	0.6	0.7	
Computing Professionals	153,433	5,267	3.4	3.4	-0.5	0.8	3.7	7.1	
Mathematicians, Statisticians & Actuaries	5,033	31	0.6	1.1	-0.8	1.0	1.3	1.9	
Medical Practitioners	54,767	2	0.0	1.4	-0.8	2.3	2.9	2.9	
Nursing Professionals	188,833	197	0.1	1.0	-0.5	0.8	1.3	1.4	
School Teachers	305,700	221	0.1	0.8	-0.8	0.4	0.5	0.5	
University Lecturers and Tutors	32,800	0	0.0	1.1	-1.7	2.3	1.7	1.7	
Economists	2,533	56	2.2	8.4	-0.8	6.0	13.6	15.8	
Other Professionals	729,433	1,280	0.2	1.0	-1.0	0.8	0.8	1.0	
<b>Total Professionals</b>	<b>1,814,300</b>	<b>13,269</b>	<b>0.7</b>	<b>1.5</b>	<b>-0.9</b>	<b>1.0</b>	<b>1.6</b>	<b>2.3</b>	
Building & Eng. Assoc & Technical	104,033	8	0.0	0.5	-0.2	0.3	0.6	0.6	
Financial Dealers and Brokers, Assoc Prof	59,367	5	0.0	0.3	-0.4	0.3	0.2	0.2	
Financial Investment Advisors, Assoc Prof	27,967	6	0.0	0.3	-0.4	0.3	0.3	0.2	
Chefs	53,233	4	0.0	1.1	-0.5	0.0	0.6	0.6	
Other Associate Professionals	979,867	253	0.0	0.4	-0.2	0.2	0.3	0.4	
<b>Total Associate Professionals</b>	<b>1,224,467</b>	<b>276</b>	<b>0.0</b>	<b>0.4</b>	<b>-0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	
Mech Eng Tradespersons	117,767	7	0.0	0.8	-0.1	0.1	0.8	0.8	
Fabric Eng Tradespersons	87,200	2	0.0	0.3	0.0	0.1	0.4	0.4	
Automotive Tradespersons	136,733	6	0.0	0.5	-0.1	0.1	0.5	0.5	
Elect & Elect Tradespersons	180,567	86	0.0	0.5	-0.1	0.1	0.5	0.5	
Construction Tradespersons	322,900	1	0.0	0.5	-0.1	0.0	0.4	0.4	
Other Tradespersons	386,433	671	0.2	0.6	-0.2	0.1	0.5	0.7	
<b>Total Tradespersons</b>	<b>1,231,600</b>	<b>773</b>	<b>0.1</b>	<b>0.6</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.5</b>	<b>0.7</b>	
<b>Total Skilled Occupations</b>	<b>5,087,933</b>	<b>14,379</b>	<b>0.3</b>	<b>0.9</b>	<b>-0.6</b>	<b>0.5</b>	<b>0.9</b>	<b>1.1</b>	
<b>Other Occupations</b>	<b>4,655,533</b>	<b>62</b>	<b>0.0</b>	<b>0.3</b>	<b>-0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	
<b>Total</b>	<b>9,743,467</b>	<b>14,441</b>	<b>0.1</b>	<b>0.6</b>	<b>-0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>0.6</b>	

<sup>^</sup> Stock is the number employed and is derived from ABS Labour Force Survey. The numbers in the table are the average of the three quarters (August, November and February) for the 2004-05 financial year.

<sup>\*</sup> The numbers of settlers, net residents, net visitors and total net PLT used for the calculation of rates per 1000 are shown in the far right columns of Tables 1, 2, 4 and 10.

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## References

- <sup>1</sup> Bob Birrell, Virginia Rapson, Ian R. Dobson and T. Fred Smith, *Skilled Movement in the New Century: Outcomes for Australia*, DIMIA, 2004, p. 6
- <sup>2</sup> *ibid.*, p. 36
- <sup>3</sup> *ibid.*, pp. 6-8. (This does not take account of those who do not return to Australia. Other work has shown that of the residents who say they are leaving permanently, 24 per cent in fact return within four to five years [David Osborne, 'Analysing traveller movement patterns: stated intentions and subsequent behaviour' *People and Place*, vol. 12, no. 4, 2004, pp. 38-41]).
- <sup>4</sup> *ibid.*, pp. 23-24
- <sup>5</sup> *ibid.*, p. 22
- <sup>6</sup> *UK Visas Global Statistics Booklets*, financial years 2001-02 to 2004-05
- <sup>7</sup> Calculated from 'Control of Immigration: Statistics United Kingdom, 2003 Home Office Statistical Bulletin, 2004, Table 1.5. The data in the Table are for Oceania but other UK analysis (Vicki Robinson, *Migrant Workers in the UK*, Labour Market Trends, Directorate for Work and Pensions, September 2002, p. 470-1) shows that around three in four of the 34,000 migrant workers who applied for a National Insurance number) after arrival in the UK from the Oceania region in 2000-01 were Australians
- <sup>8</sup> Michael S. Rendall and Deborah J. Ball, 'Immigration, Emigration and Ageing of the Overseas-born Population in the United Kingdom', *Population Trends*, Office for National Statistics, 2004, p. 24
- <sup>9</sup> Graeme Hugo, 'An Australian Diaspora?' *International Migration*, Vol 44 (1) 2006, p 110
- <sup>10</sup> Peter Doherty, 'Opening Address; the Australian Diaspora', in Fiona Wood, Ed. *Beyond Brain Drain, Mobility, Competitiveness and Scientific Excellence*, University of New England, 2004, p. 1
- <sup>11</sup> Robert Gottlieb, 'No use dwelling on falling prices', *The Australian*, 27 February, 2006, p. 28
- <sup>12</sup> Ryan Heath, 'Running the boomer Blockade', *The Age*, Saturday Feb. 18 2006, A2, pl 12
- <sup>13</sup> Quoted in Peter Roberts, 'Alarm bells ring as white-collar jobs go offshore', *AFR*, 14 March 2006, p. 60
- <sup>14</sup> See, for example, DFAT, *Advancing the National Interest*, Australia's Foreign and Trade Policy White Paper, Commonwealth of Australia, 2003, p. 119 <[http://www.dfat.gov.au/ani/dfat\\_white\\_paper.pdf](http://www.dfat.gov.au/ani/dfat_white_paper.pdf)>
- <sup>15</sup> Caroline Overington, 'Home again, naturally', *The Weekend Australian*, March 11-12 2006, p. 30
- <sup>16</sup> DFAT, Living and working overseas, <[http://www.smartraveller.gov.au/tips/working\\_os.html](http://www.smartraveller.gov.au/tips/working_os.html)>
- <sup>17</sup> Jean-Christophe Dumonte and Georges Lemaitre, 'Counting immigrant and expatriates in OECD countries: a new perspective', *Trends in International Migration*, OECD, Paris, 2005, p. 10
- <sup>18</sup> *ibid.*, p. 10
- <sup>19</sup> Hugo, *op cit.*, p. 114
- <sup>20</sup> ABS, *Census Dictionary*, Cat. No. 2901.0, 2001, p. 263
- <sup>21</sup> The percentages have been calculated from data drawn from the tables in the OECD report. Calculations for some countries do not match the percentages they report. For instance, the OECD paper reports that percentage for the highly skilled expatriates from Ireland and New Zealand are both 24 per cent, not the 32 per cent derived from the data in the OECD tables and shown here. Likewise the OECD reported percentage for the United Kingdom is 15 per cent, not 17 per cent. However, the percentages shown for Australia and the other countries shown in Table 13 do match the percentages for the highly skilled depicted in Chart 2 on page 10 of the OECD report.
- <sup>22</sup> Hon John Howard MP. *Address to the Australia/UK Leadership Forum*, Parliament House, Canberra, 27 March 2006
- <sup>23</sup> Dumonte and Lemaitre, *op cit.*, p. 13