WORKING ACROSS THE DITCH:

NEW ZEALANDERS IN AUSTRALIA

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Abstract

This paper investigates the skills and employment profile of prime aged New Zealand born people (aged 25-54) working in Australia, using information sourced from both the New Zealand and Australian Population Censuses conducted in 2006. This information contributes to an understanding of the labour market impact of the mix and movement of skills between New Zealand and Australia.

The results show that New Zealand born people working in Australia on average held a similar level of education to those in New Zealand. However, they were less well qualified on average than the Australian workforce. New Zealanders working in Australia also tended to be under-represented in higher skilled work. A relatively high proportion worked at the lower end of the skill spectrum, in jobs such as machinery operators and drivers. They were under-represented in professional occupations as well as fast growing service related occupations in sales and retailing. The paper shows that one of the contributing factors to this is the greater income gap between New Zealand and Australia in some lower skilled jobs, such as machinery and plant operators.

These findings partly counter the anecdotal suggestions of a 'brain drain' to Australia.

There is also evidence that the number of New Zealanders who return home after a spell in Australia is perhaps greater than sometimes assumed. New Zealand and Australian Census results show that between 2001 and 2006 more than four workers returned to New Zealand for every 10 going to Australia.

Introduction

This paper reports on the main findings from a study, (Haig 2010), that described the labour force characteristics of the large and growing New Zealand born workforce in Australia.

Flows of labour across the Tasman have a strong influence on the number and quality of skilled people in New Zealand. In terms of the workforces in both countries, New Zealand and Australia effectively share a 'borderless' labour market with no formal skill selection process affecting the movement of workers. This has created a long history of labour exchange at all skill levels.

At different times in the past, each country has achieved net gains in population from the other. However, since the 1960s, migration flows have moved strongly in Australia's favour. In 1966, there were around 52,000 New Zealand born living in Australia, which was only slightly more than the 43,000 Australia born living in New Zealand. Forty years later, by 2006, the number of New Zealand born people living in Australia had grown to 389,000, which was six times the number of Australia born people in New Zealand (63,000). Around three quarters of the total New Zealand born diaspora are now estimated to reside in Australia.[1]

Change in the relative economic conditions between the two countries over the past few decades has been the main determinant of stronger net migration losses to Australia, when combined with the geographic proximity, a natural affinity with Australia and a high degree of mobility amongst New Zealanders.[2]

Methodology

The information used in this study was based on the most recent five yearly Population Census run in New Zealand and Australia in March and August 2006 respectively. Country of birth was used to identify New Zealanders because it is the most easily identifiable marker of nationality available from the Population Census of both countries. It is also an internationally consistent method of identifying peoples' prior links to another country.

Commonly collected Census variables include occupation (ANZSCO 2006), industry (ANZSIC 2006), education qualifications and annual income. Other factors associated with a higher likelihood of migration among some groups of workers to Australia are also discussed.

Most of the analysis focussed on people in prime working age groups (aged 25–54). This accounts for a well-known age bias in New Zealand migration to Australia, with a lower proportion of the New Zealand workforce in Australia in younger and older age groups. A focus on prime working age groups also helps to minimise the effect of migration related to non-economic and employment reasons such as study, travel with parents and retirement.

This study used two different denominators in order to give different perspectives on the relative share of New Zealand born people working in Australia.

Firstly, the New Zealand born share of the total Australian workforce was used. This accounts for the effect of the different industry and occupational shares of workers in Australia. For instance, compared to New Zealand, Australia has a larger share of employment in government, health care and social assistance and in mining. New Zealand has a far larger share of employment in agriculture.

Secondly, Australia's share of the total pool of New Zealand born working throughout Australasia was examined. Counting New Zealanders in this way indicates the size of the trans-Tasman influence on the domestic New Zealand born workforce.

Total annual personal income was used to assess occupational income differences between New Zealand and Australia because this is collected from the Census in both countries. This includes annual gross income earned from all sources, not just from wages and salaries.

Purchasing power parity (PPPs) was used to convert incomes from both countries into a common currency unit and price. Using a Statistics New Zealand methodology the 2005 benchmark year results – the PPP indexes for final expenditure on household final consumption– were used. PPP adjustments to gross annual incomes do not account for inter-country differences in tax, social assistance and income support provisions, insurance levies and other deductions.

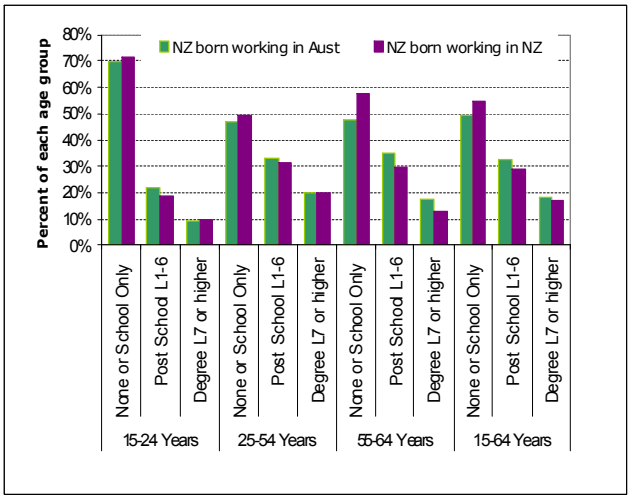
A Profile of Prime aged New Zealanders working in Australia

According to the 2006 Australian Population Census, there were 349,000 New Zealand born people resident in Australia, which was equivalent to 12% of the New Zealand born population resident in New Zealand. Out of this total, 249,000 were working.

Looking at only the prime aged workforce further reduces the number of New Zealand born in Australia to 186,000- nearly one in six (16.1%) of the New Zealand born workforce in both countries. Findings from the analysis of key features of the New Zealand born workforce in Australia in 2006 are summarised below:

- Overall, around 83% of New Zealand born men and 70% of New Zealand born women worked, compared with 72% and 62% for the comparable Australian groups.
- Many have been in Australia for a prolonged period. In 2006, 85% had been resident in Australia for over five years and two-thirds for over 10 years.
- About 55% of the New Zealand born workforce in Australia was male – with about 124 New Zealand males working in Australia for every 100 working females. This gender imbalance was greater than among the New Zealand born workforce in New Zealand (111) and the entire Australian workforce (117). The male bias was most apparent between the ages of 25–44 and in some older age groups.
- New Zealanders working in Australia held similar or slightly higher levels of post-school qualifications compared to those working in New Zealand, (see figure 1).
- They were, however, less well qualified on average than the Australian workforce.
- The relative difference in education attainment levels between New Zealanders working in Australia and New Zealand increases slightly with age.

Figure 1: Highest qualifications of the NZ born workforce by broad age group



Source: ABS and Statistics New Zealand

The occupation and industry of New Zealanders working in Australia

Broad Occupations

Appendix Table A1 shows prime aged New Zealanders working in Australia in 2006 in the eight broadest ANZSCO occupations. In total, they account for 3.0% of the total prime aged workforce in Australia and 16.1% of the same group of New Zealanders working across Australia and New Zealand combined. Even at this broad level, there are considerable differences in their share.

The relatively less skilled occupation group of machinery operators and drivers stands out as a popular occupation for New Zealanders in Australia. They comprised 4.4% of the occupation in Australia compared with an overall share of 3.0% of the total Australian workforce. One in four New Zealand born machinery operators and drivers working across Australasia worked in Australia, compared with one in six across all occupations.

The next most over-represented group in Australia was technicians and trade workers at 19.1% of the New Zealand born workforce working in Australia, and 3.2% of the whole Australian workforce. These require higher levels of educational qualifications, although usually below degree level.

In contrast, the occupation with the lowest proportion of New Zealand born workers resident in Australia was managers, with just 11.6% of the total working in Australasia. These include farm managers - a significant group in New Zealand- but even taking out this group, New Zealand managers were still under-represented in Australia. It is possible that self-employment – an important feature among New Zealand managers – may make them less mobile given their required links to a business. There is also a (partly unexplained) greater tendency for people recorded in the New Zealand Census to be coded as managers, but this does not explain their small (2.8%) share within the Australian workforce.

Professionals were the largest single occupation group of New Zealand workers in Australia, but they had a relatively low share (14.7% and 2.4% respectively). Even taking out teaching and legal professionals, New Zealand professionals were still under-represented. This may reflect barriers to people without Australian citizenship in the relatively large public administration sector in Australia.

Detailed occupations

Occupational differences were also examined at a more detailed (ANZSCO 2-digit) level. The 2-digit occupations in which prime aged New Zealanders were relatively most likely to be working were construction and mining labourers and mobile plant operators. These are both semi-skilled occupations and are relevant to the mining industry.

Apart from its association with Australia's buoyant mining industry and associated large income differentials, it is worth considering the variety of factors that might make such machinery related occupations more popular in Australia. One important feature for this kind of work is that job knowledge (such as understanding machinery) is mostly transferable and initial barriers to entry are likely to be low.

Whilst New Zealanders overall were relatively less likely to work as professionals in Australia, there were two professional occupations, health and ICT, where New Zealanders were slightly over-represented as a proportion of the total New Zealand born population in Australasia but under-represented in terms of their share of the Australian workforce.

The reasons for a lack of New Zealand representation in white collar law and teaching jobs in Australia are unclear. Formal barriers to New Zealanders tend to be limited, as most professions have a mutual recognition agreement, leading over time towards a growing alignment in the recognition of qualifications between most New Zealand and Australian professional and trade associations. Some informal barriers may exist.

In some occupations, the pattern of representation among New Zealanders varied by age. New Zealanders' share of professional occupations, although relatively low overall, were slightly skewed towards those aged over 35. This is consistent with the earlier finding that, at older age groups, New Zealanders in Australia were comparatively more likely to be degree or higher qualified than those at home. The risk of losing skilled staff to Australia, or having them not return, therefore applies to more experienced as well as younger workers.

Industries

Turning to industries, Table A2 shows the proportion of New Zealand people employed in each industry group in Australia. Numerically, the three largest industries employing prime aged New Zealanders in Australia were manufacturing (23,093), construction (19,712) and health care and social services (19,234).

Australia's mining industry contained the highest relative share of New Zealanders. New Zealanders accounted for 5.3% of the Australian workforce, and a very high 62.9% of all New Zealanders working in mining across Australasia. It was the only industry in which the number of New Zealand born working in Australia exceeded the number of New Zealand born working at home (4,478 versus 2,643). This is partly a reflection of the greater number of jobs in mining in Australia. Mining accounted for 8% of Australia's GDP and was beginning to move into a sustained period of growth in 2006 (MiningCareers.com). The strong involvement of New Zealand expatriates in mining is of particular interest given the recent focus on expanding New Zealand's domestic mining activity.

In contrast, New Zealanders were notably under-represented in industries like education, public administration and safety, and agriculture. The agriculture result is supported by earlier research showing fewer New Zealanders worked in this area (Carmichael, 1993), although the severe rural drought in Australia in this period would have been a factor. New Zealanders

also had a slightly smaller share of Australia's growing health care and social assistance workforce (2.8%). However, because this industry, along with public administration and safety and gas and electricity, is proportionately larger in Australia, it actually employs an above-average share of the total New Zealand born workforce (19.4%).

A more detailed industry breakdown showed some striking concentrations of New Zealanders working across the Tasman. For example, 734 New Zealand born people aged 25-54 years worked in coal mining in Australia. This was over 50% greater than the number working locally in this industry.

Occupational changes among New Zealanders since 1986

In 1986, a study based on Australian Census data compared the occupational distribution of the New Zealand born and the Australia born working in Australia and concluded that the differences were quite small. A comparison was made with 2006 Census data to see if this conclusion still stands. Some differences in the occupation codings meant that, to facilitate comparisons, some occupational groups were combined in two of the groupings, professionals and "service and sales workers".

Table 1 shows the change in the distribution of people working in each occupation over this 20 year period, for New Zealand and Australia born males and females. It shows some areas where the shift among New Zealand born towards some occupations has not been shared by their Australian counterparts (highlighted in bold). An area that stands out is New Zealand born males movement towards plant and machinery-related occupations. In addition, New Zealand born females have not moved as strongly towards service and sales occupations as Australian females.

Table 1: Percentage point change in occupational distribution of NZ born in Australia compared with Australia born at all ages 1986-2006

Occupation	Males		Females	
	NZ born	Australia-born	NZ born	Australia-born
Managers	+1.9	+0.7	**+4.7**	+2.2
Professionals	-2.4	-1.9	+0.3	+2.5
Technicians and	**-1.6**	+1.1	+1.0	+0.9
Clerical and	+0.8	-1.6	-7.1	-8.0
Service and Sales	**+1.1**	+4.4	**+3.8**	+7.3
Machinery	**+3.3**	-0.3	-0.3	-1.0
Labourers	-3.1	-2.3	-2.3	-3.9

Source: ABS data 1986 (via Carmichael) and 2006

The proportion of New Zealand born men in machinery operating roles, rose 3.3 percentage points between 1986 and 2006. In comparison, the proportion of Australia born male machinery operators fell slightly. In fact the proportion of Australia born males in this occupation in Australia in 2006 (11.2%) was only about two-thirds as high as the proportion of New Zealand born males (15.6%).

The male results possibly reflect the fact that the period of the late 1980s and 1990s coincided with restructuring and job losses in many New Zealand primary industries, dislodging many males in particular from lower skilled jobs. This process may have continued, as examination of the 2006 Census results showed that recent New Zealand arrivals (arriving in the 2001-2006 period) also showed a lower skilled job profile, similar to the profile of earlier arrivals.

Many reasons for what may have been a gradual pattern towards lower skilled, more manually based employment in Australia are likely. It is probable that higher skilled New Zealanders tend to have more choice of countries to migrate to, whereas the lower skilled, outside those in younger age groups, face more limited choices for long-term work in places like Europe and America.

Other reasons to consider may include the following:

- Legal, institutional or knowledge constraints that may make it harder for New Zealanders to enter high skilled white collar jobs like law and education in Australia which require locally acquired knowledge and skills.
- In contrast, in many low skilled occupations in Australia, local New Zealand knowledge is readily transferable and initial barriers to entry are likely to be low.
- Trans-Tasman income differences are greater in some lower skilled jobs, especially those associated with 'boom' industries like mining.
- The historic effect of large scale restructuring in the New Zealand manufacturing, agriculture and utilities sectors.
- Stronger signalling about the relative benefits, or more active recruitment among particular Australian employer groups.
- The continuation of an award system and union bargaining amongst particular groupings of lower skilled staff in Australia, which may favour groups who in New Zealand have (since the early 1990s) had relatively low bargaining power with employers.[4]

Occupational income differences between New Zealand and Australia

Census data was used to examine income differentials between New Zealand and Australia at an occupational

level, and possible links between these and the prevalence of New Zealanders in different occupations in Australia. [3]

The comparison was based on New Zealand and Australian annual incomes in 2006 at a 2-digit occupation level, and is shown in Appendix Table A4. On average, at prime ages Australian incomes exceeded (adjusted) incomes in New Zealand by 25.0%, but there was a wide occupational variation in the size of the income gap.

The five occupations with the greatest trans-Tasman income disparity (all in excess of 40%) were in lower skilled areas such as machinery and plant operators, carers and aides, health and welfare workers, cleaners and restaurant workers.

The greatest gap is in machinery and plant operators (ANZSCO 71) where prime aged workers in Australia earned on average almost a 60% higher income level than their counterparts in New Zealand. This is also an occupation linked to the cyclically buoyant mining industry, which, as noted earlier was beginning to prosper greatly in 2006 from a resources boom.

While none of the top five were highly skilled occupations, there was an above average income gap in some skilled occupation groups such as ICT technicians (39.8%) and chief executives, general managers and legislators (38.6%).

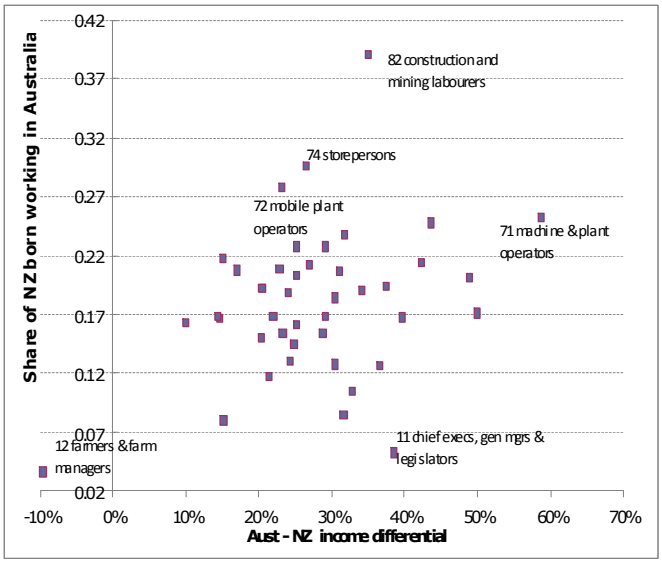
The occupations with the lowest income disparity (all less than 20%) were farmers and farm managers, (with lower incomes on average than in New Zealand); sales assistants and salespersons; sports and personal service workers; other technicians and trades workers; numerical clerks; farm, forestry and garden workers; and factory process workers. Again, these tend to be middle to lower skilled occupations. The relatively low average adjusted income for Australian farmers may reflect, as well as the drought, the greater prevalence of specialised high-value employment in New Zealand agriculture such as dairying.

In general, within the wide variations in income differential, the size of the income gap with Australia did not rise according to the skill level required. Some of the lowest skilled jobs showed the largest income gaps.

This raises the question, given the open-door migration policy between the two countries, do occupational income variations themselves help to explain the skewing among New Zealand expatriates towards lower skilled occupations in Australia?

To investigate this further, the relationship between income and the likelihood of emigration to Australia was examined. Figure 2 plots the adjusted income difference on the x axis against the proportion of prime aged New Zealand born people working in Australia on the y axis. This is identified and plotted for each 2-digit occupation group.

Figure 2: The average (unweighted) income differential compared with the share of NZ born (aged 25-44) by occupation group



Source: SNZ and ABS

There was a positive correlation between the two. In other words, a greater trans-Tasman income gap increases the incidence of New Zealanders in an Australian occupation, and a lower income gap decreases it. The correlation coefficient is, however, only moderate at +0.31, which suggests that income differentials are only fairly weakly associated with occupational shares in Australia. The correlation was still positive but lower for younger ages. Slightly different proportional measures of PPP-adjusted income difference and of the prevalence of New Zealanders in the Australian workforce were tested, but the results shown in Figure 2 gave the best fit.1

While the data in Figure 2 shows a positive correlation, the scatter plot reveals it is not a clean linear relationship. There is a stretched cluster of occupations where the share of New Zealand born prime aged people is around the average (16.4%) yet with an income gap varying from 10–50% (the average income gap is 25%). The three occupation groups that stand out with the highest proportion of New Zealand born working in Australia were construction and mining labourers, storepersons and mobile plant operators (labelled). All display an average or higher income differential, whilst the occupation with the fourth highest share of New Zealanders in Australia – machinery and plant operators – shows the largest (nearly 60%) income differential. All are medium to lower skilled occupations and characterised by the mining, utilities and infrastructure industries.

Looking at only these top four would suggest that people in lower skilled occupations have had a higher probability of emigration to Australia in response to the "pull effect" of higher income. However, the data also shows

anomalies. For example, there is a numerically very large lower skilled occupation – carers and aides – whose Australian workforce had a very high income differential (50.0%) yet contained a barely above average share of New Zealand born (17.1%). This result may possibly be due to the New Zealand workforce containing a high proportion of females working on a more casual part-time basis.

The point far on the lower left is farmers and farm managers, an occupation where average incomes were actually lower than in New Zealand and with a lower share of New Zealand born. It has been suggested that a lower proportion of New Zealanders work in agriculture in Australia due to historic links to the land making these workers relatively less mobile (Carmichael, 1993, p.102). These results suggest that lower incomes in Australia for farmers and farm managers are also a factor.

Census data (Appendix Table A4 column 3) also shows that, as well as earning more than those at home, New Zealanders in Australia earned more on average than their Australian counterparts. As noted earlier, this was not due to them being better qualified than Australians. The over-representation of males who tend to work longer hours and earn higher incomes is probably a factor.

Interestingly, the data reveals that the occupations where New Zealanders gained the largest income premium over Australian workers were again mostly lower skilled. For example, no professional occupation appeared in the top 10. If income reflects personal capability, productivity and best fit for the job, then the areas where New Zealanders in Australia do well in are more likely to be lower skilled blue collar or service-related occupations.

Of course income is not the only factor influencing occupational choice in Australia. Some groups such as younger workers are more internationally mobile than others. There may be hidden impediments to New Zealanders in areas such as education, where relatively higher entry requirements are needed or where Australian-based experience or qualifications are desirable. Further factors, such as the timing, transparency of wage signals and the working conditions, like remote locations, are also likely to be important.

Return flows among New Zealanders working in Australia

In both countries, the 2006 Population Census question asks people where they were residing five years earlier. This enables recent patterns in trans-Tasman movement to be broadly determined. An issue here is that while the New Zealand Census form does code the country that people lived in five years earlier, the Australian Census does not. New Zealanders in Australia living elsewhere five years earlier are therefore assumed to have been in New Zealand. This will slightly overstate movements from New Zealand to Australia between 2001–2006, given some New Zealanders will have moved there from countries such as the UK and USA.

In summary, comparing the two Census results to examine movement across the Tasman between 2001 and 2006 showed that:

- around four workers returned to New Zealand between 2001 and 2006 for every 10 going to Australia, (a return ratio of 4.2).
- people in management occupations stood out as being proportionately most likely to return to New Zealand.
- amongst medium to lower skilled occupations in Australia, especially machinery operators and drivers, there was a lower return ratio of New Zealanders from Australia.
- New Zealanders with degree level or higher qualifications were slightly less likely to return to New Zealand than those with lesser qualifications.

Appendix Table A3 shows some of the demographic features of New Zealand born migrants who have moved to and from Australia between 2001 and 2006. It shows that at higher ages there is a decline in the volume of trans-Tasman movements, and also a decline in net losses to Australia. For example, 675 females aged 55-64 working in New Zealand in 2006 had lived in Australia five years earlier, which was two thirds of the number working in Australia (1,032) who had been in New Zealand in 2001.

Conclusions

While New Zealanders worked in a wide range of jobs in Australia in 2006, they were more likely to be working in medium to lower skilled blue collar jobs, such as trades, technical and machinery workers, or as labourers. They were under-represented in professional occupations as well as fast growing service related occupations in sales and retailing.

These findings indicate that while losses of highly skilled workers are often cited as a major concern, there is also a need to promote the attraction and/or retention of the 'local' workforce at the lower end of the skills spectrum as well. Long-term losses to Australia among lower skilled male machinery operators appear particularly high.

Changes in relative income levels in Australia are one of the factors that draw New Zealanders in some of these occupations across the Tasman, but more detailed statistical analysis is required to more clearly examine the relationship for different occupation groups. It appears that high income differentials enhance Australia's attraction only for some New Zealand workers, such as those with arguably more easily transferable trade and machinery oriented skill sets.

Industries with strong economic growth prospects for New Zealand such as mineral extraction, utilities and transport infrastructure are sectors where Australia has gained a disproportionate share of New Zealand's labour resources.

It is notable that an occupationally lower skilled expatriate workforce in Australia is not associated with a low education profile. This over-representation in lower skilled occupations of average to higher skilled New Zealanders, suggests that some, even outside the more transient youth segment, are working in jobs in Australia that do not fully use their higher formal qualifications.

Some New Zealand graduates move into jobs like mining, construction or long-distance driving when they move to Australia because of the income, even if they are capable and qualified to do 'better' jobs. It is understandable that they may migrate for different types of opportunities, for a change of scene or to meet short-term earning and saving goals. Nonetheless, this finding highlights the importance of maintaining a suitable range of job choices for graduates to work in New Zealand.

Future Research

This study helps to build a more detailed picture of New Zealanders working in Australia by occupation, industry and educational achievement. To better inform research and workforce planning in New Zealand, further research would be valuable on:

- New Zealand citizens born outside New Zealand, who are not easily identifiable in Australia.
- exploring the longer term outcomes of New Zealand migrants when they enter the Australian labour market, using longitudinal data.
- the skills and occupations of New Zealand migrants working outside Australia, in order to compare and contrast them with those in Australia.

Notes

1. A recent OECD study identified 465,000 New Zealand born expatriates in 2001. Of these, no fewer than 355,000 lived in Australia (Dumont and Lemaître, 2004).
2. Economic factors are seen as important, and increase with the age of migrants (Green, Power and Jang, 2008)
3 For income comparisons, a narrower age grouping (25–44 years) was used rather than 25–54 to make use of available data. Comparative data on shares in Australia shown in Figure 2 and Table A4 have also been adjusted.
4 While Australia and New Zealand have a broadly similar union density rate, about 75% of the Australian wage and salary workforce are covered by collective bargaining agreements compared with about 25% in New Zealand.(OECD 2006).

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Appendices

Table A1: Main occupations of prime aged NZ born working in Australia 2006

Occupation	A	B	C	NZ born working in Australia as share of:	
ANZSCO 06	**NZ born work in Australia**	**NZ born work in NZ**	**All Australia**	**All NZ born working in Australasia (A/A+B)**	**All Australian workers (A/C)**
1 Managers	24,956	189,549	884,484	11.6%	2.8%
2 Professionals	33,862	196,719	1,397,122	14.7%	2.4%
3 Technicians and Trades Workers	27,935	118,113	881,297	19.1%	3.2%
4 Community and Personal Service Workers	15,337	71,559	514,052	17.6%	3.0%
5 Clerical & Admin Workers	28,007	127,164	974,474	18.0%	2.9%
6 Sales Workers	12,806	72,273	445,880	15.1%	2.9%
7 Machinery Operators and Drivers	18,848	58,284	432,192	24.4%	4.4%
8 Labourers	21,169	94,212	581,826	18.3%	3.6%
All occupations	**185,873**	**965,052**	**6,213,565**	**16.1%**	**3.0%**

Table A2: Main industries of the prime-aged NZ born working in Australia 2006

Industry	A	B	C	NZ born working in Australia as share of:	
	NZ born work in Australia	**NZ born work in NZ**	**All Australia**	**All NZ born working in Australasia (A/A+B)**	**All Australian workers (A/C)**
A Agriculture, Forestry	3,550	71,628	162,362	4.7%	2.2%
B Mining	4,478	2,643	83,915	62.9%	5.3%
C Manufacturing	23,093	110,070	688,575	17.3%	3.4%
D Electricity, Gas, Water	1,776	5,703	67,971	23.7%	2.6%
E Construction	19,712	81,783	494,323	19.4%	4.0%
F Wholesale Trade	9,761	51,843	286,765	15.8%	3.4%
G Retail Trade	15,314	78,414	563,304	16.3%	2.7%
H Accommodation and	9,707	34,140	282,487	22.1%	3.4%
I Transport, Postal and	11,325	43,746	311,366	20.6%	3.6%
J Information Media and	4,123	19,389	130,805	17.5%	3.2%
K Financial and Insurance	7,905	34,734	270,361	18.5%	2.9%
L Rental, Hiring and Real	3,460	26,565	98,671	11.5%	3.5%
M Professional, Scientific	12,537	79,713	437,660	13.6%	2.9%
N Administrative and	7,474	31,509	200,056	19.2%	3.7%
O Public Administration	9,558	47,676	472,339	16.7%	2.0%

P Education and Training	9,073	75,393	517,943	10.7%	1.8%
Q Health Care and Social	19,234	79,989	697,007	19.4%	2.8%
R Arts and Recreation	2,679	15,399	80,367	14.8%	3.3%
S Other Services	6,333	38,865	221,684	14.0%	2.9%
All industries	**185,866**	**965,040**	**6,213,573**	**16.1%**	**3.0%**

Table A3: Movement of NZ born workers to and from Australia by age and gender, 2001-2006

Gender	Age (in 2006)	Moved to Australia 2001-2006	Returned to NZ 2001-2006	% of NZ born in Australia in 2006 who moved 2001-06	Return ratio
	15–24	5,018	942	34.1%	0.19
	25–34	9,880	4,269	30.7%	0.43
	35–44	5,871	3,108	15.8%	0.53
	45–54	3,256	1,488	9.9%	0.46
	55–64	1,463	771	8.1%	0.53
	65+	171	147	5.6%	0.86
Male	**All ages**	**25,659**	**10,725**	**18.6%**	0.42
	15–24	4,890	915	35.5%	0.19
	25–34	7,454	3,456	29.9%	0.46
	35–44	4,207	2,331	14.0%	0.55
	45–54	2,868	1,359	10.0%	0.47
	55–64	1,032	675	8.2%	0.65
	65	76	63	5.2%	0.83
Female	**All ages**	**20,527**	**8,802**	**18.4%**	0.43
	15–24	9,908	1,863	34.8%	0.19
	25–34	17,334	7,722	30.3%	0.45
	35–44	10,078	5,436	15.0%	0.54
	45–54	6,124	2,847	9.9%	0.46
	55–64	2,495	1,449	8.2%	0.58
	65+	247	210	5.5%	0.85
All genders	**All ages**	**46,186**	**19,527**	**18.5%**	0.42

Table A4: New Zealand and Australian differences in Census income and share of NZ born working in Australia, by occupation, (aged 25-44) 2006

2-Digit ANZSCO Occupation group	Income all Australian residents (AUD)	Income all NZ born Australian residents (AUD)	Difference between all Australian and all NZ income (PPP adjusted)	NZ born Australian residents' share of all NZ born in Australasia
82 Construction and Mining Labourers	$46,316	$52,342	35.1%	39.0%
74 Storepersons	$35,650	$36,007	26.6%	29.6%
72 Mobile Plant Operators	$43,692	$46,457	23.1%	27.8%
71 Machine and Stationary Plant Operators	$52,255	$59,417	58.7%	25.2%
85 Food Preparation Assistants	$22,188	$25,897	43.6%	24.8%
54 Inquiry Clerks and Receptionists	$32,661	$34,000	31.8%	23.9%
43 Hospitality Workers	$25,614	$28,495	25.0%	22.8%
35 Food Trades Workers	$33,858	$37,455	29.0%	22.8%

55 Numerical Clerks	$39,439	$41,602	15.0%	21.9%
41 Health and Welfare Support Workers	$40,221	$38,894	42.3%	21.4%
34 Electrotechnology and Telecommunications Trades Workers	$55,024	$56,001	26.9%	21.3%
73 Road and Rail Drivers	$41,903	$46,115	22.8%	20.8%
83 Factory Process Workers	$33,496	$34,596	17.0%	20.8%
33 Construction Trades Workers	$48,408	$52,537	31.0%	20.7%
59 Other Clerical and Administrative Workers	$45,750	$45,375	25.1%	20.3%
81 Cleaners and Laundry Workers	$24,499	$26,659	48.8%	20.2%
63 Sales Support Workers	$29,782	$31,250	37.4%	19.4%
52 Personal Assistants and Secretaries	$39,520	$43,385	20.4%	19.2%
25 Health Professionals	$57,449	$57,842	20.6%	19.2%
51 Office Managers and Program Administrators	$51,166	$51,798	34.2%	19.0%
14 Hospitality, Retail and Service Managers	$47,525	$49,134	24.0%	18.9%
32 Automotive and Engineering Trades Workers	$50,796	$54,523	30.4%	18.3%
42 Carers and Aides	$25,379	$26,444	50.0%	17.1%
45 Sports and Personal Service Workers	$34,805	$37,588	14.3%	16.9%
26 ICT Professionals	$74,272	$79,445	29.1%	16.9%
22 Business, Human Resource and Marketing Professionals	$67,240	$69,566	21.9%	16.8%
31 Engineering, ICT and Science Technicians	$55,724	$59,626	39.8%	16.7%
39 Other Technicians and Trades Workers	$38,147	$41,453	14.6%	16.6%
62 Sales Assistants and Salespersons	$29,833	$32,509	9.8%	16.2%
56 Clerical and Office Support Workers	$34,303	$35,340	25.0%	16.1%
23 Design, Engineering, Science and Transport Professionals	$64,555	$65,820	28.8%	15.5%
36 Skilled Animal and Horticultural Workers	$33,106	$37,208	20.3%	15.2%
21 Arts and Media Professionals	$48,388	$46,134	24.8%	14.6%
53 General Clerical Workers	$34,650	$35,664	24.2%	13.1%
13 Specialist Managers	$74,525	$76,701	30.4%	12.8%
61 Sales Representatives and Agents	$54,738	$55,455	36.7%	12.6%
89 Other Labourers	$32,209	$35,236	21.5%	11.8%
27 Legal, Social and Welfare Professionals	$62,991	$65,931	32.7%	10.5%
24 Education Professionals	$48,153	$47,508	31.6%	8.5%
84 Farm, Forestry and Garden Workers	$29,469	$32,024	15.1%	8.0%
11 Chief Executives, Gen Mgrs & Legislators	$84,767	$88,871	38.6%	5.3%
12 Farmers and Farm Managers	$35,415	$39,886	-9.7%	3.7%
All occupations	**$47,910**	**$49,666**	**25.0%**	**16.4%**