Fiscal Impacts of Immigration in 2013

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M4KING SEN5E OF
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Authors: Dr Ganesh Nana and Hugh Dixon

Making sense of the numbers

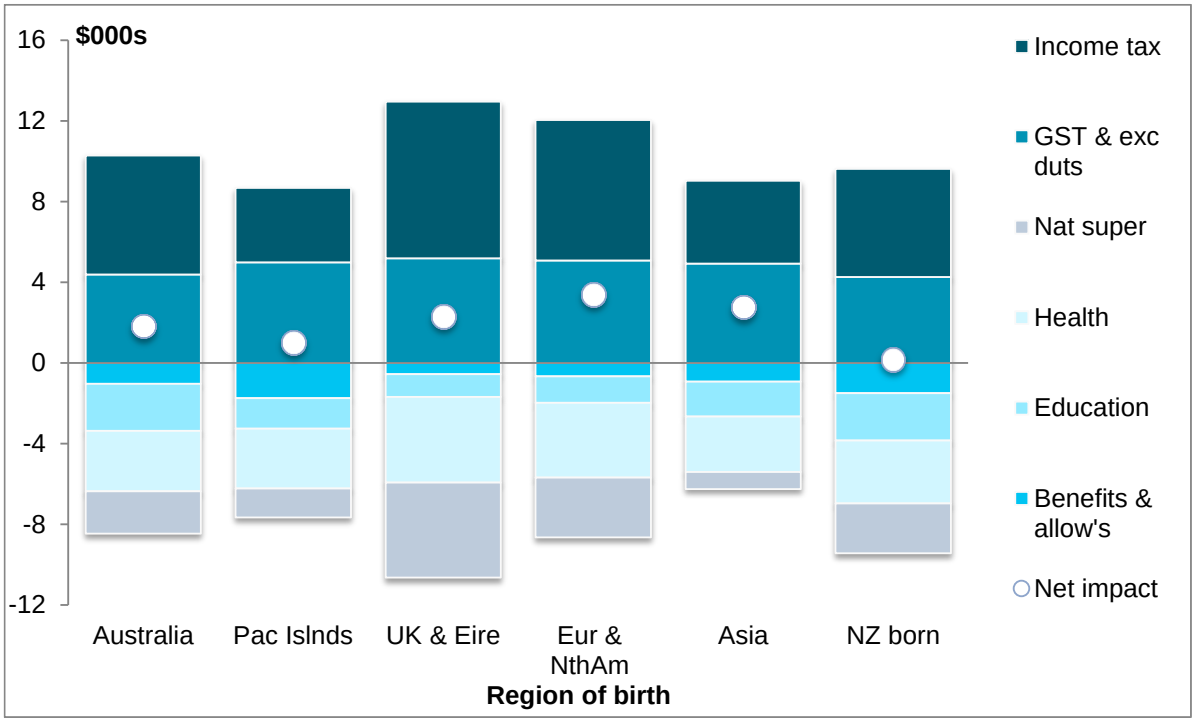
The study provides a picture of the impact of migrants on government revenue and spending. This picture of the fiscal impact of migrants is limited in that it does not examine the wider economic or social impacts of migrants arriving in New Zealand. In line with earlier reports, this study includes the impact on the main items of tax revenue, as well as government spending on education, health, superannuation, benefit and allowances. Migrants are defined as all persons not born in New Zealand.

- Migrants' impact on the central government accounts in 2013 totalled a positive $2,912 million; that is, their collective impact on government revenue was greater than their impact on spending.
- This impact was the equivalent of $2,653 per migrant.
- In comparison, the New Zealand born population in 2013 totalled a net fiscal impact of $540 million; which was the equivalent of $172 per New Zealand born person.

The calculated positive net fiscal impact from the overseas born population was consistent across length of stay in New Zealand, regions of birth and regions of residence.

The migrant population has grown from 927,000 to 1,098,000 over the 2006 to 2013 period, with substantial growth in the key 26 to 64 years age groups. The age group is key due to its contribution to the workforce. Consequently, this age group provides the highest net fiscal impact. Substantial population growth in this age group from either migrants or New Zealand born will be beneficial to the central government accounts. In 2013 60 percent of the migrant population was part of the 26 to 64 years age groups. For the New Zealand born population this age group comprised 47 percent.

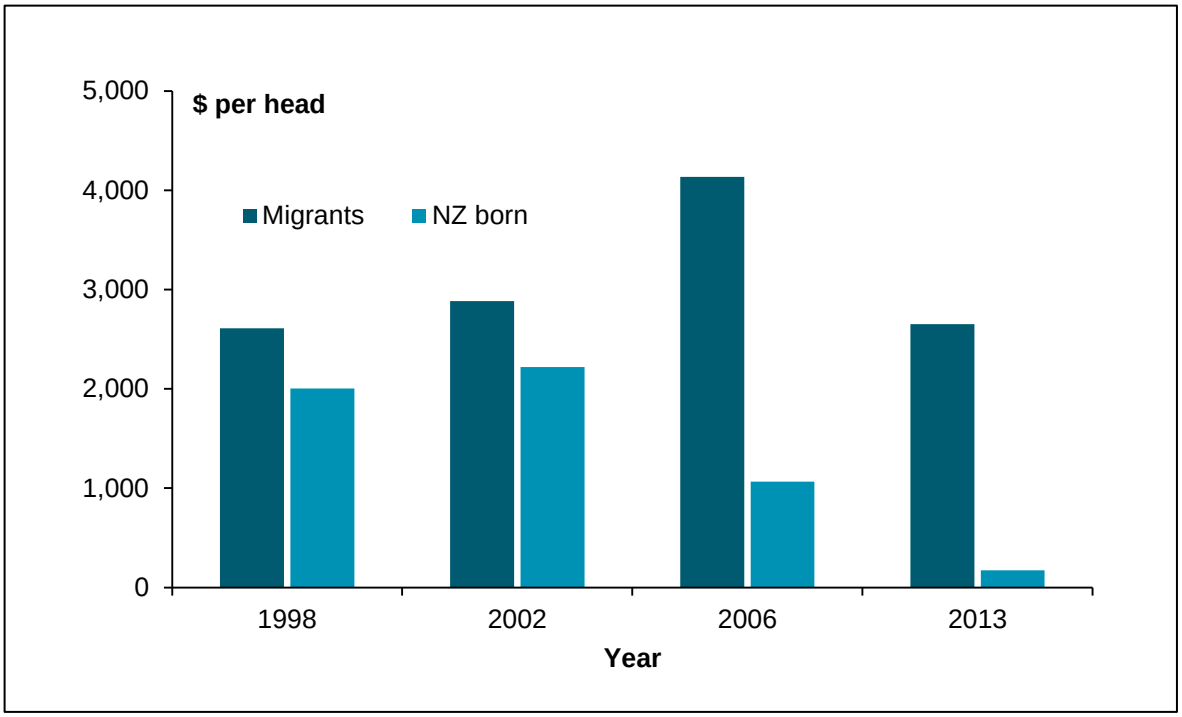
Fiscal impact in 2013, $ per head



In contrast, the 2006 to 2013 period saw the New Zealand born population increase by just 44,000. Further, this period saw an overall decrease in the number of New Zealand born 26 to 64.

It is the growth in numbers in this 26 to 64 age group that has helped government revenue attributable to all migrants to increase in real terms by $485 per person over the 2006 to 2013 period. Over the same period, growth in the number of overseas born aged over 65 is one of the reasons behind government spending attributable to all migrants rising by $1,966 per person between 2006 and 2013.

Net fiscal impact per head, in real 2013 $s



The increase in government spending on national superannuation and health was also reflected in the impact of the New Zealand born population. The ageing composition of the population saw government expenditure attributable to the New Zealand born population increase by $1,202 per person between 2006 and 2013. Over the same period, government revenue attributable to the New Zealand born population rose by $307 per person.

- The net fiscal impact of migrants declined by $1,481 per migrant over the 2006 and 2013 period.
- In comparison, the net fiscal impact of the New Zealand born population declined by $895 per person over this period.

Contents

Calculations within this report are derived from a range of data sources, including those provided by:

- Census 1981, 1996, 2001, 2006 and 2013
- Ministry of Social Development
- The Treasury
- Ministry of Education
- BERL.

For further details on the method used in our analysis provided in this report, please see section 11. This section contains a brief run-down of the method and the data used. For a more detailed method and data requirements, please see the separate technical appendix report.

Tables

Figures

1 Introduction

This report presents our findings on the fiscal impact of migrants to New Zealand in the year to 30 June 2013. The fiscal impact of migrants is defined as the contribution migrants make to central government revenue less government expenditure attributable to the migrant population. This picture of the fiscal impact of migrants is limited in that it does not examine the wider economic or social impacts of migrants arriving in New Zealand.

This research compares central government expenditure on the resident migrant population with the New Zealand-born population. This comparison focuses on a subset of components that respond to changes in the migrant and New Zealand-born population sizes and that can be sensibly related to such population changes.

Census and government administrative data was used to identify the characteristics of overseas-born migrants and determine their contribution to components of government receipts and government spending.

The study does not cover all components of the government accounts. On the revenue side we have only captured income tax, GST and excise duty payments; while on the expenditure side we have only included education, health care, superannuation, benefits, and student allowance payments. These revenue and expenditure items have been included as they can be clearly matched to a population group or household, migrant or otherwise. Revenue from company tax, or expenditure on areas such as defence, police and conservation are not included, as these cannot be easily or clearly allocated to a population group or household.

The findings of this report represent a snapshot of the fiscal impact of migrants in New Zealand as at 2013. As noted in section 11.1, limitations of the data used means that we are limited in our analysis of the causes of differences between migrant groups. This study and its previous studies report on general trends in both migrant profiles and fiscal impacts. These studies do not allow for analysis of the fiscal impact of a particular migrant over the time period between 1998 and 2013.

This research updates similar exercises undertaken by BERL for the Department of Labour in 1999, 2003 and 2006 (BERL references #3452, #4195, and #4497). These projects estimated the fiscal impact of migrants for the years ended June 1998, June 2002, and June 2006, respectively.

1.1 Structure of report

The report begins with Section 2, which provides a narrative of the findings of this study. This is followed by Section 3, which contains a demographic analysis of the migrant and New Zealand-born populations in New Zealand.

Section 4 presents the principal findings of the study, including analyses of the fiscal impacts of migrants' length of residence in New Zealand, as well as by region of birth. Section 5 compares the 2013 fiscal impact with the fiscal impact determined in earlier studies. Section 6 disaggregates the fiscal impacts of migrants according to their region of residence in New Zealand.

Section 7 discusses aspects of migrants' participation in the labour force and section 8 examines the qualifications of migrants. Section 9 examines migrants' occupations, while section 10 analyses migrants' participation in post-compulsory education.

A summary of the method used in our analysis is documented in section 11, along with definitions of groupings used in the report. A full methodology is included in the accompanying technical appendix.

Summary tables are appended in Section 12. The separate technical appendix contains more detailed tables.

1.2 Summary tables

Section 12 aims to provide quick reference tables on the fiscal impact of migrants. Each table has a set of three summary impacts.

The upper-left-hand figure shows the total contribution to government revenue; the upper-right-hand figure shows the contribution to government expenditure; and the bolded figure shows the net fiscal impact (i.e. the impact on government revenue less that on government expenditure).

The four summary tables have two sets of two different measures:

- The first set (i.e. Summary Table 1 and 2) summarises the figures relating to migrants (by duration of residence in New Zealand) and the New Zealand-born population
- The second set (i.e. Summary Table 3 and 4) summarises the fiscal impact of migrants by region of residence in New Zealand.

Each set of tables provides the following measures:

- The absolute dollar ($million) calculation of the fiscal impact
- The per capita fiscal impact.

These measures are defined in the technical appendix of this report.

2 Overview of study

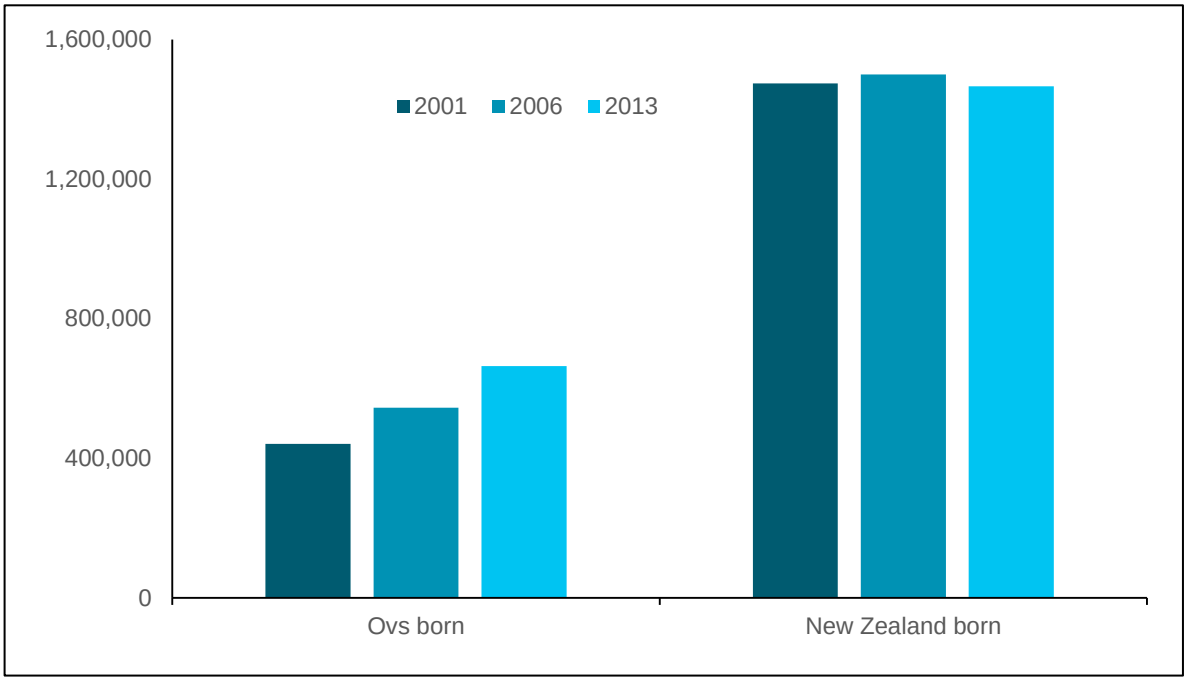
Population change 2001 to 2013

The New Zealand-born and overseas born populations have both increased across the twelve years that cover the period between the 2002 study, the 2006 study and this latest study in 2013. For the New Zealand-born population the rise has been a modest 92,000. The overseas born population has risen by a noticeably larger 357,000.

Population change in both the New Zealand-born and overseas born populations has an effect on the fiscal impact of these population groups. The focus of our studies has been on those revenue and expenditure items that can be either directly linked or at least attributable to population change.

The overall population change seen in both the New Zealand and overseas born population groups has not been even across all age groups. The largest difference in population change has occurred in the 26 to 64 year age group. Figure 2.1 shows the population totals for both New Zealand-born and overseas born people aged 26 to 64, the prime working age population, across the 2001, 2006 and 2013 Censuses.

Figure 2.1 New Zealand-born and overseas born 26-64 year old population counts, 2001, 2006 and 2013



The figure shows that for overseas born the count of population aged 26 to 64 has continued to grow across the three Census years. This age group grew by 222,000 people over the 12 years. On the other hand the New Zealand-born population within this age group has fractionally declined over the 12 years. More precisely, this age group grew between 2001 and 2006 by 26,000, but fell by 34,000 between 2006 and 2013.

These changes in the 26 to 64 year age groups has seen the overseas born share of the age group rise from 23 percent in 2001 to 31 percent in 2013. As this is the main tax revenue raising age group this rise in the share of the population will have an effect on the amount of revenue being raised from the overseas born group. The New Zealand-born population, with a decline in the share of the population, will see a smaller growth in revenue.

Since 2006 the average age of the New Zealand population both those New Zealand-born and overseas born has been getting older. A larger proportion of the overall population is now aged over 65, when compared to 2006.

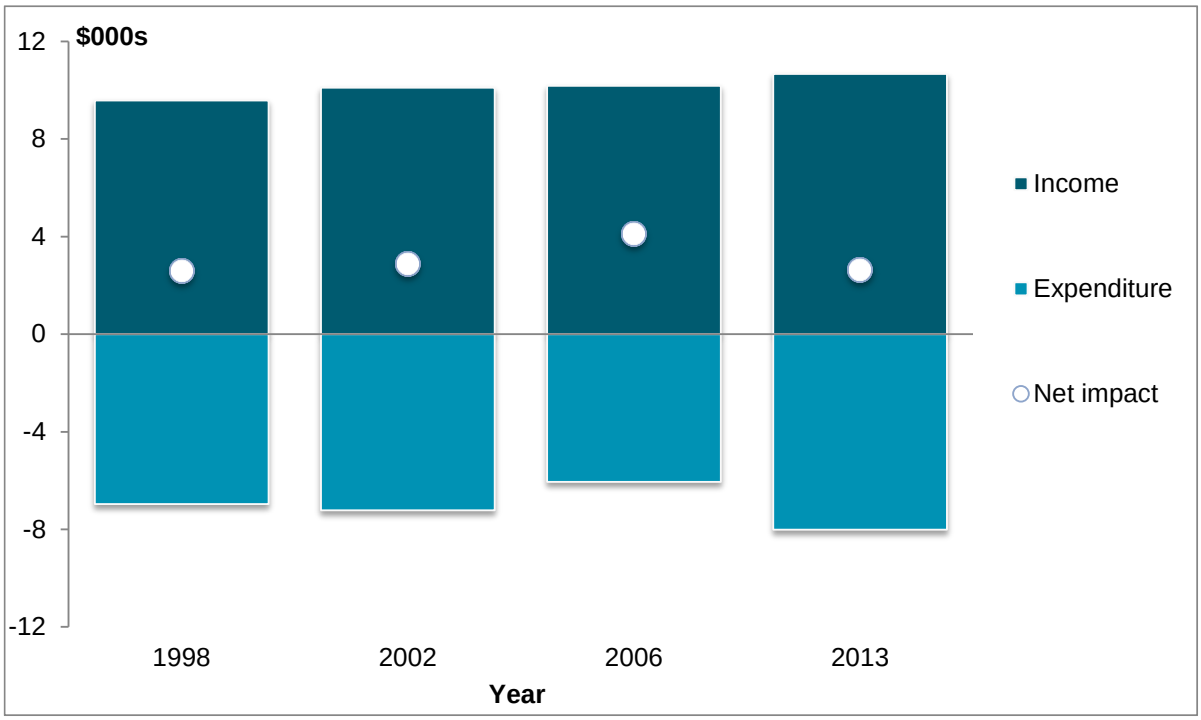
- For New Zealand-born 16 percent are now 65 and older, while in 2006 it was 12 percent.
- For overseas born 16 percent are now 65 and older, while in 2006 it was 15 percent.

The increase in the number of people aged 65 and older is having a noticeable fiscal impact. This impact can be seen in the increasing cost of health and superannuation payments for both the New Zealand-born and overseas born populations.

Fiscal impact of migrants

For the overseas born this change in the overall population and the structure of their population has an effect on their fiscal impacts. This is on both revenue and expenditure, and through these on their net fiscal impact. Figure 2.2 shows the per capita overall fiscal revenue, expenditure, and the net fiscal impact of the overseas born population across our four studies.

Figure 2.2 Overseas born per capita fiscal impacts ($2013), 1998, 2002, 2006 and 2013



Between 1998 and 2006 the net fiscal impact of migrants rose. This is due to the government expenditure attributable to migrants decreasing across the period. At the same time income raised from migrants remained steady.

From 2006 to 2013 there has been an increase in both the income raised from the overseas born and in the expenditure attributable to the overseas born. This has resulted in just a small drop in the per capita net fiscal impact of migrants. The increase in per capita income has come from a rise in all three government revenue sources, income tax, GST and exercise duties. Part of the increase in government revenue from migrants is due to the labour force structure of both the migrants and New Zealand-born, as shown by:

- The fact that migrants since the 1998 study have and continue to have higher proportions of their working age population with degree qualifications compared to New Zealand-born.
- That migrants from Europe and North America, the UK and Asia regions saw an increase in their labour force participation rates compared to New Zealand-born between 2006 and 2013. For migrants from Australia and other regions, though their labour force participation rates decline between 2006 and 2013, their rates are still higher than those for New Zealand-born.
- That in 2013, 24 percent of employed overseas migrants are employed as managers and professionals compared to 22 percent of New Zealand-born. This is a rise from 2006 when 20 percent of overseas born and 19 percent of New Zealand-born were employed as managers and professionals.

On the expenditure side the rise is coming from increases in payments for health, superannuation, education, work and income, as well as student allowances. The increase in superannuation and health are linked to the increasing number and proportion of overseas born now aged 65 and over in this group. The increases in education and student allowances are linked to increasing rates of newer migrants studying at both the secondary and tertiary levels. A more detailed analysis of the migrants studying shows that:

- Overall, migrants had a higher rate of participation in study than the New Zealand-born population. This difference was most obvious in the new and recent migrant populations.
- The study participation rates for those aged 15 and over shows that migrants from Asia had significantly higher rates of study than any other group. Australia and 'Other' migrant groups also had higher rates of study than their New Zealand-born counterparts.

Regional impact of migrants

The positive net fiscal impact of the overseas born at the national level remains positive when dividing this impact into groups by their region of residence. In particular, the net fiscal impact for the overseas born residing in each of Auckland, Wellington, Christchurch, rest of the North Island, and rest of the South Island regions was positive. The rest of the South Island had the largest per capita net impact, while Auckland had the lowest.

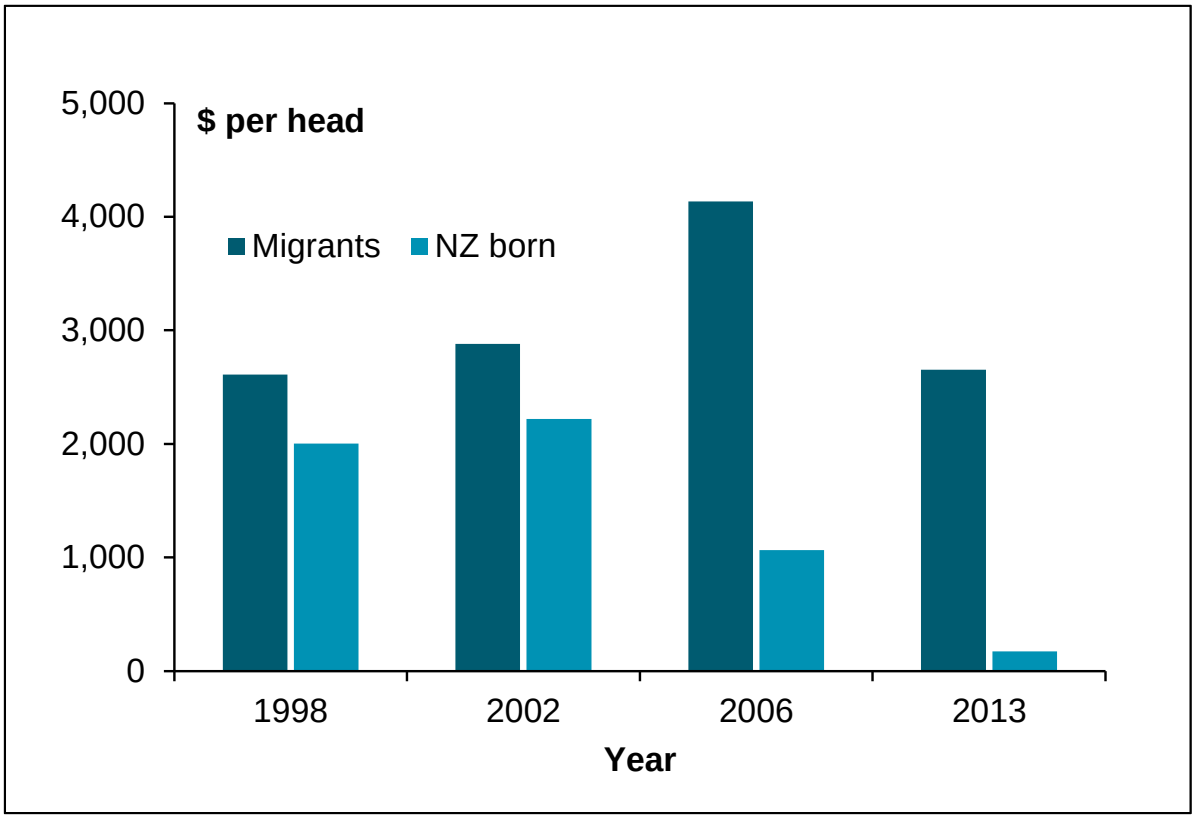
In addition to the net positive per capita fiscal impact of the overseas born throughout the country, the fiscal impact of all the migrant groups from each of the six migrant regions of birth was positive. Migrants from the 'other' region had the highest per capita net fiscal impact. While those from the Pacific Island had the lowest per capita net fiscal impact in 2013.

Fiscal impact comparison to New Zealand-born

The changes in the government revenue and expenditure and the net fiscal impact for the overseas born population, are subtly different to those for the New Zealand-born. For the overseas born the per capita government revenue rose almost as quickly as government expenditure.

For the New Zealand-born population government expenditure has outpaced government revenue between 2006 and 2013. This has resulted in a decline in the per capita net fiscal impact of the New Zealand-born population. These changes in the overseas born and New Zealand-born population groups can be seen in Figure 2.3. This figure shows the per capita net fiscal impact across the four study periods.

Figure 2.3 New Zealand-born and overseas born per capita net fiscal impacts ($2013), 1998, 2002, 2006 and 2013



Across the four studies completed, the gap between the net fiscal impact of the New Zealand-born compared to the overseas born has diverged in real per capita terms. The net fiscal impact of both groups rose by around 10 percent between 1998 and 2002. After which there has been a continued decline in the net fiscal impact of the New Zealand-born group. There has been a drop of around $1,150 per capita between 2001 and 2006 and now a further decline of $895 between 2006 and 2013.

At the same time the overseas born population saw a substantial increase between 2002 and 2006 of $1,250 per capita. Before a decline of $1,480 per capita between 2006 and 2013. For the overseas born and New Zealand-born populations it has been the rapidly increasing government expenditure which is behind the decline in the net fiscal impact in 2013.

For the New Zealand-born population there have been government expenditure increases in all areas except for work and income benefits, where expenditure has declined. The largest government expenditure increases have come from education, health and superannuation. For education the increase has come mainly from early childhood education.

Health and superannuation increases are coming from the increasing percentage of New Zealand-born who in 2013 are aged 65 and over. There has been an increase of almost 100,000 people in the 65 and over age group between 2006 and 2013.

3 The migrant and New Zealand-born populations

This section provides an overview of the changes in the usually resident New Zealand population between 2006 and 2013. The usually resident population includes people born in New Zealand and those born overseas. It is defined as those people who usually live in New Zealand. It should be noted that the usually resident population is different to the resident population. The resident population consists of those who have rights to permanent residence in New Zealand, but may include a number of people not currently residing in New Zealand.

Further, the usually resident New Zealand population will not include any migrants temporarily living in New Zealand, such as working holidaymakers or international students.

3.1 Population overview

The 2013 Census of Population and Dwellings recorded that at March 2013:

- There were 1,097,600 overseas-born New Zealand residents and over 3,144,400 New Zealand-born residents in New Zealand.
- The migrant population was equivalent to 26 percent of the total population.
- Between the 2006 and 2013 Census, the migrant population increased by 18%.

Changes in the resident population between the Census periods are shown in Table 3.1. In this table the resident population is split into overseas-born and New Zealand-born.

Table 3.1 The 2001, 2006 and 2013 New Zealand resident population

NZ resident population		2001 Number	2001 % of population	2006 Number	2006 % of population	2013 Number	2013 % of population	Net change 06 - 13 Number
Overseas born		740,965	20%	927,176	23%	1,097,637	26%	170,461
NZ born		3,052,749	80%	3,100,771	77%	3,144,414	74%	43,643
Total resident population		3,793,714		4,027,947		4,242,051		214,104
Overseas born	Years in NZ							
New migrants	< 5	182,259	5%	273,243	7%	222,885	5%	-50,358
Recent migrants	5 - 14	170,736	5%	226,266	6%	342,927	8%	116,661
Established migrants	15 +	308,913	8%	347,463	9%	406,764	10%	59,301

NB: Figures do not sum to the totals because of significant numbers of 'not specified' Census returns.

New Zealand experienced moderate population growth between 2006 and 2013. The population grew by 5.3% over the seven years, or approximately 0.7% per annum. Reviewing Statistics New Zealand population and migration data over the time period revealed several items of note. These are that the overall rate of population growth was pulled down by a relatively low rate of natural increase (the excess of births over deaths) and a high rate of emigration by the New Zealand-born. Also overall between 2007 and 2013 almost all years had positive net migration (more people coming then leaving). The only exception here was in the 2012 year (ending June), when net migration was negative.

The 2013 Census recorded 223,000 new migrants (overseas-born residents who had been in New Zealand for less than five years). Over the same period, Statistics New Zealand recorded a gross inflow of 519,800 permanent and long term (PLT) migrants. Of these migrants, 78 percent (406,000) were overseas-born, with the remainder being New Zealand-born. This suggests that approximately 55 percent of the overseas-born PLT migrants who arrived during this period stayed in New Zealand, while the remaining 45 percent moved away.

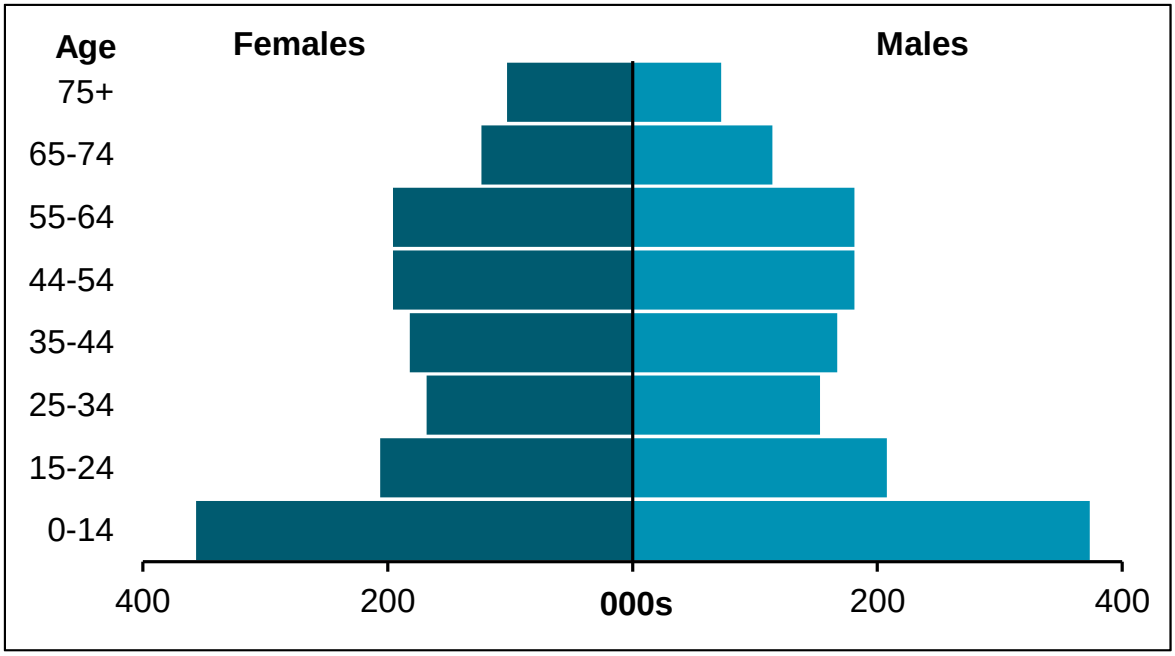
This study reflects a snapshot of the migrant and New Zealand-born populations. It is therefore important to provide an idea of the total number of migrants who arrived between Census periods, and the actual growth in

the migrant population. With the population growing at just 55 percent of total migrants who arrived between 2006 and 2013, this is much lower than the 90 percent achieved in 2006.

3.2 Population demographics

In total the New Zealand-born population is almost three times the size of the migrant born population. Comparing Figure 3.1 and Figure 3.2, it is apparent that the New Zealand-born population contains a large number of people who are 14 and younger. There were almost 400,000 males and 400,000 females in this group. The New Zealand-born population in addition has a much more even spread of people across the remaining age groups. Lastly, there are larger numbers of females than males in the over 24 year old age groups.

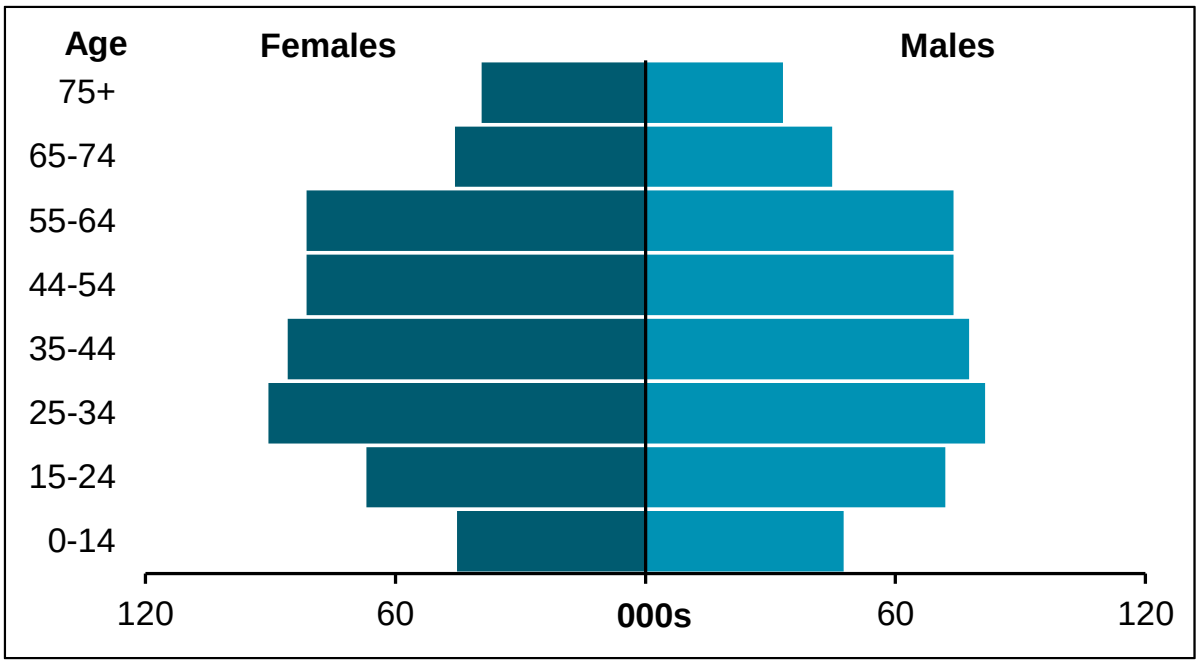
Figure 3.1 The New Zealand-born New Zealand resident population 2013



n=2,980,824

Figure 3.2 indicates that the migrant population has a relatively small proportion of people in the younger age groups. It also has a larger proportion of people in the conventional working age groups, notably 25 to 64 years old. While also containing substantial numbers of people aged 65 and older.

Figure 3.2 The migrant population resident in New Zealand, 2013



n=1,040,541

The observations above suggest that the migrant population could have a higher per capita impact on government expenditure due to its age profile. In particular, the migrant population had less than half the number of people in the younger age groups, compared to the New Zealand-born population in 2013. This is the age groups where education costs are concentrated.

The proportion of the population aged 65 and over was very slightly higher in the migrant population. This age group can increase per capita expenditure. This is because this age group tends to have much higher health expenditure per capita.

The age profile of the migrant population has led to the higher per capita income tax revenues seen in section 4. Due to the proportion of the migrant population in the conventional working age groups being higher than the New Zealand-born population in 2013. In particular, over 70 percent of the migrant population was in the 18 to 64 year old age group, while the comparable figure for the New Zealand-born population was just under 60 percent.

Combining the migrant and New Zealand-born populations together, we end up with a relatively well-balanced overall New Zealand population; with 20 percent of the total population under the age of 15 and 14 percent over the age of 65. There are more males in each age group up to 25 years old, while there are more females in each age group over 25 years old.

3.3 Migrant profiles by age

The age profile of a population is a key determinant of its fiscal revenue and expenditure. Age is strongly correlated with earnings, and influences income tax contribution and consumption patterns, which in turn

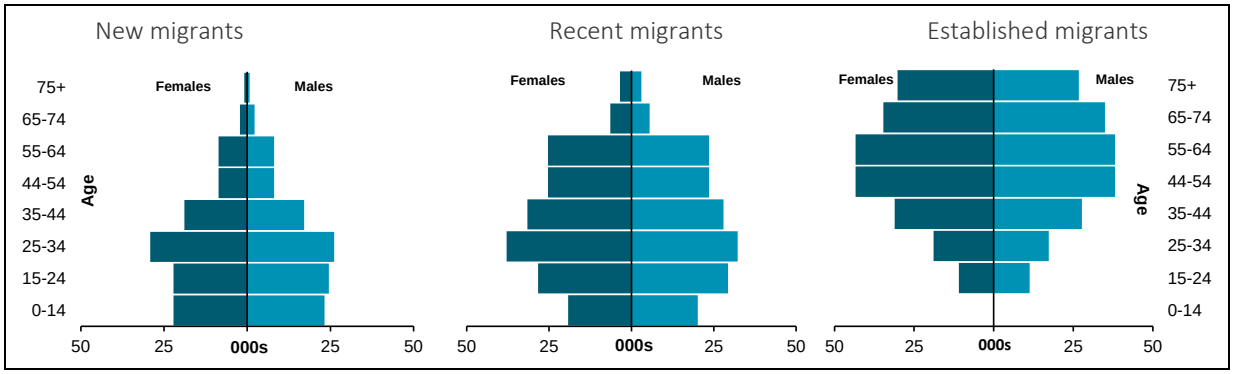
influence consumption taxes. The age profile of a population also determines the demand for health services, education and benefits such as student allowances and New Zealand Superannuation.

Migrants are categorised according to the number of years since their arrival, as at Census night on 5 March 2013

- New migrants arrived in New Zealand between 2008 and 2013.
- Recent migrants arrived in New Zealand between 1999 and 2007.
- Established migrants arrived in New Zealand in 1998 or before.

Figure 3.3 shows the age profile of these migrant populations. Overall, the new migrants group had a relatively well-balanced age profile, compared to the other groups. This migrant groups was the most similar to the New Zealand-born population (as shown in Figure 3.1). There were also more females than males in the 25 to 64 year old age ranges in 2013. Significant numbers of these new migrants have children, indicating the relocation of families.

Figure 3.3 Composition of overseas-born population groups 2013



n=222,879 n=342,918 n=406,758

The recent migrants group had an older age profile than that of new migrants, with only 11 percent of this group aged under 15 in 2013 compared to 20 percent of new migrants and 24 percent of the New Zealand-born population. However, this migrant group is likely to have a larger proportion of children born in New Zealand (and therefore not counted as migrants) than the new migrant group.

Just over one-third of recent migrants were in the 25 to 44 year old age range, while almost 30 percent were aged between 45 and 64 years old. This relatively equal distribution contrasts to the New Zealand-born population where the number of people in the 25 to 44 year old age group was slightly less than the number of people in the 45 to 64 year old age group, as shown in Figure 3.1. Approximately one in 20 in this group of migrants was over the age of 65, compared to one in seven for the New Zealand-born population

From a fiscal viewpoint, the recent migrants group are more likely to have a large positive net impact because this group has a relatively high proportion of working-aged people. The lower number of people in the younger and older age groups is likely to mean lower education, health and superannuation expenditure on this group of migrants, and higher tax revenue.

The established migrant group is the largest and oldest migrant group, with just five percent under the age of 25. Again, established migrant families are likely to have a larger proportion of New Zealand-born children. The large proportion of people in the 44 to 64 year old age groups reflects the profile of migration in earlier years, and that these migrants were generally young adults rather than children when they arrived in New Zealand.

From a fiscal viewpoint, the established migrants group are more likely to have a small positive net impact because this group has a relatively high proportion of people aged over 65 years of age. The higher number of people in the older age groups is likely to mean lower education, but higher health and superannuation expenditure. At the same time this established migrant group has large numbers of people in 44 to 64 age groups. People in this prime working age group will provide the highest levels of income tax and GST, as shown in Table 4.2.

3.4 Migrant profiles by region of birth

In this section we summarise the migrant profiles by their region of birth as defined in section 11.2. This includes Australia, the Pacific Islands, UK and Ireland, Europe and North America, Asia and Other. The length of residence in New Zealand, age, labour force status, qualification levels, and occupation of migrants is summarised by their region of birth.

By summarising this information by region of birth we can see how each migrant population differs from each other. We can also understand how changes in where migrants are coming from, can affect the overall migrant population's age, employment, and qualification levels, and therefore how the fiscal impact of migrants can be changed.

3.4.1 Length of residence by region of birth

Table 3.2 and Figure 3.4 shows the demographic profiles for each of the six regions of birth and the length of stay in New Zealand.

The largest number of new migrants are people born in Asia. This sub-group of new migrants has a 'bottom-heavy' profile with over 35 percent of new migrants from Asia being between 12 and 25 years old. Because of the age of these migrants, it is likely they are coming from Asia to New Zealand for education purposes.

Table 3.2 Migrant population by group and region of birth 2013

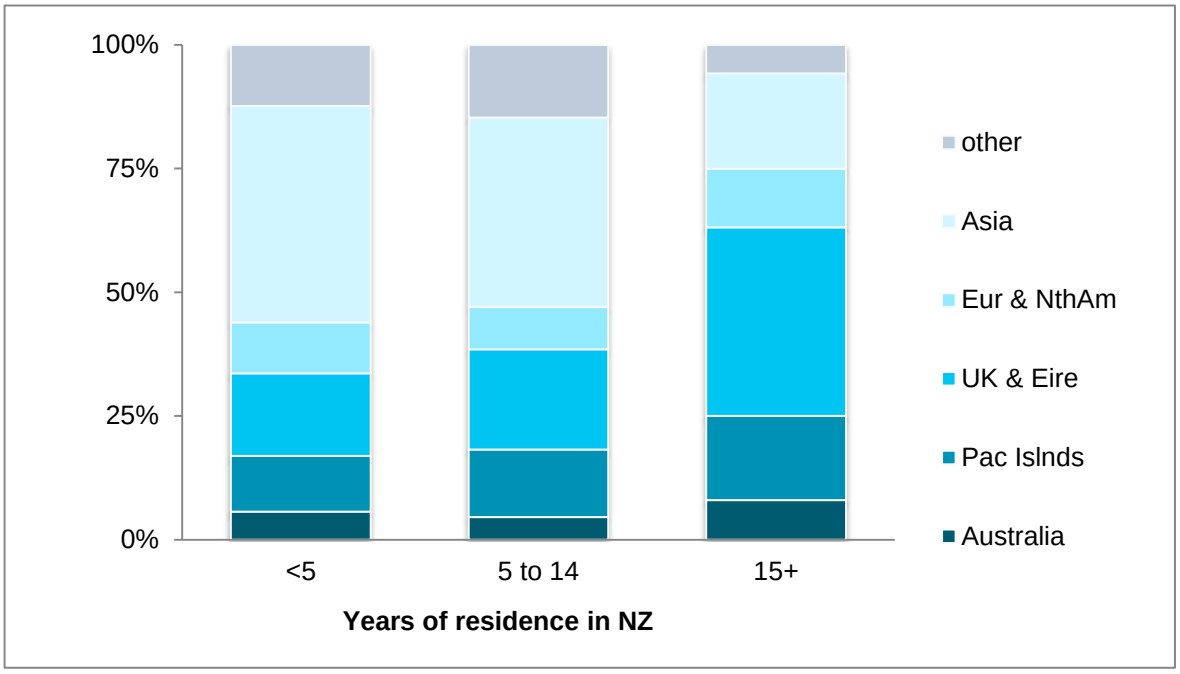
Region of Birth	Migrant group			Total
	<5	5 to 14	15+	
Australia	12,570	15,465	32,157	60,192
Pacific Islands	24,885	46,479	68,616	139,980
UK & Ireland	36,870	68,811	153,366	259,047
Eur & NthAm	22,719	28,980	47,712	99,411
Asia	96,651	130,053	77,430	304,134
Other	27,300	49,779	23,205	100,284
All OSB	220,995	339,567	402,486	963,048

Similar to new migrants, the largest number of recent migrants are people born in Asia. As shown in Figure 3.5, these migrants from Asia are also predominantly between the ages of 25 and 40 years old.

Most established migrants come from the UK and Ireland, with the next largest group coming from Asia. The UK and Ireland is still the second largest source of recent and new migrants.

This indicates that either these regions represent the main source of New Zealand migrants or that migrants from these regions are likely to settle and stay longer than migrants born in other regions. The majority of established migrants in 2013 were in the 41 to 64 year old age group, as shown in Figure 3.3. This group also contains a significant proportion of people over the age of 65, at 31 percent.

Figure 3.4 Composition of migrant group by region of birth 2013

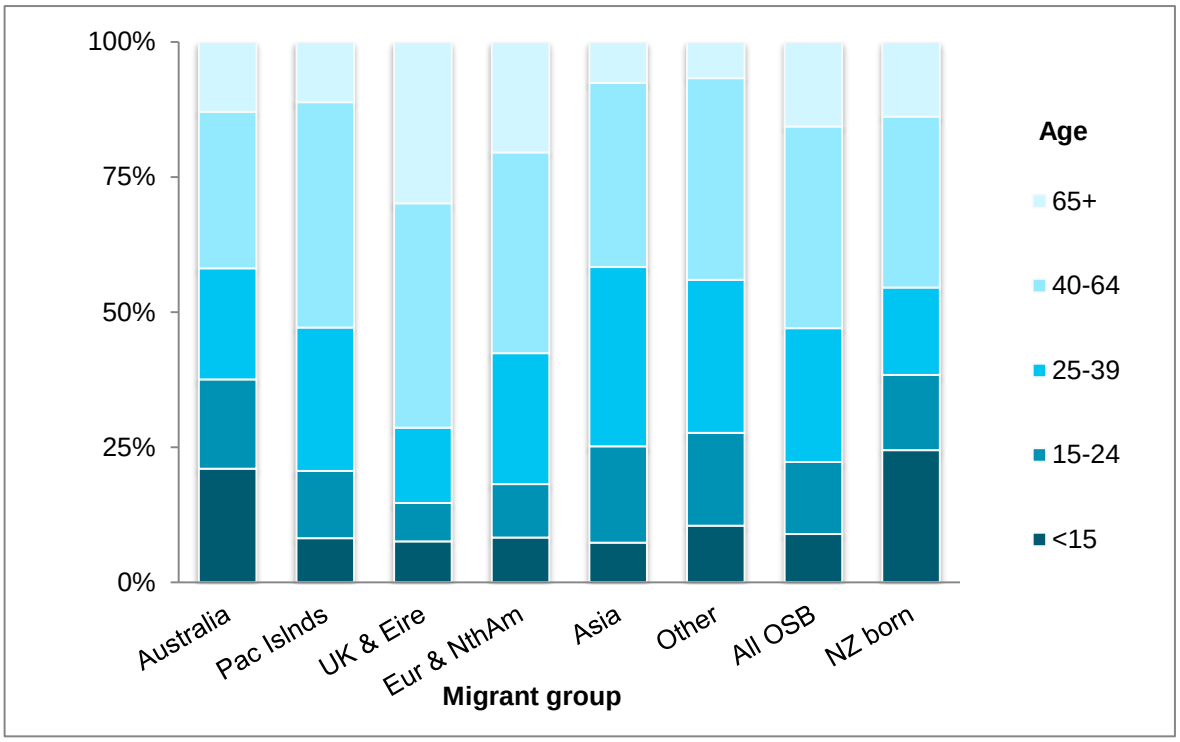


3.4.2 Age by region of birth

Figure 3.5 shows the age profile of each region of birth and all migrants (represented in the figure as All OSB). The New Zealand-born population (represented in the figure as NZ born) is included as a comparison.

Overall migrants from all six of the regions are predominantly in the 40 to 64 years old age range, as shown in Figure 3.5. It is apparent from the figure that only Australian migrants have a similar proportion of people aged younger than 15 to the New Zealand-born. This is because migrants who start families once they arrive in New Zealand have their children defined as New Zealand-born. Australian migrants are different because of the larger numbers of New Zealanders returning from Australia with children born in Australia.

Figure 3.5 Age profile, all migrant groups and New Zealand-born, 2013



Looking at the other end of the age spectrum the figure shows that the migrants from the UK and Ireland have the largest percentage of the population aged over 65. Most migrant groups have a similar proportion as the New Zealand-born population at around 14 percent of the population group. UK and Ireland have 30 percent of their population group aged 65 and over. Europe and North America also have a slightly larger proportion than New Zealand-born in this age group with 20 percent aged 65 and over.

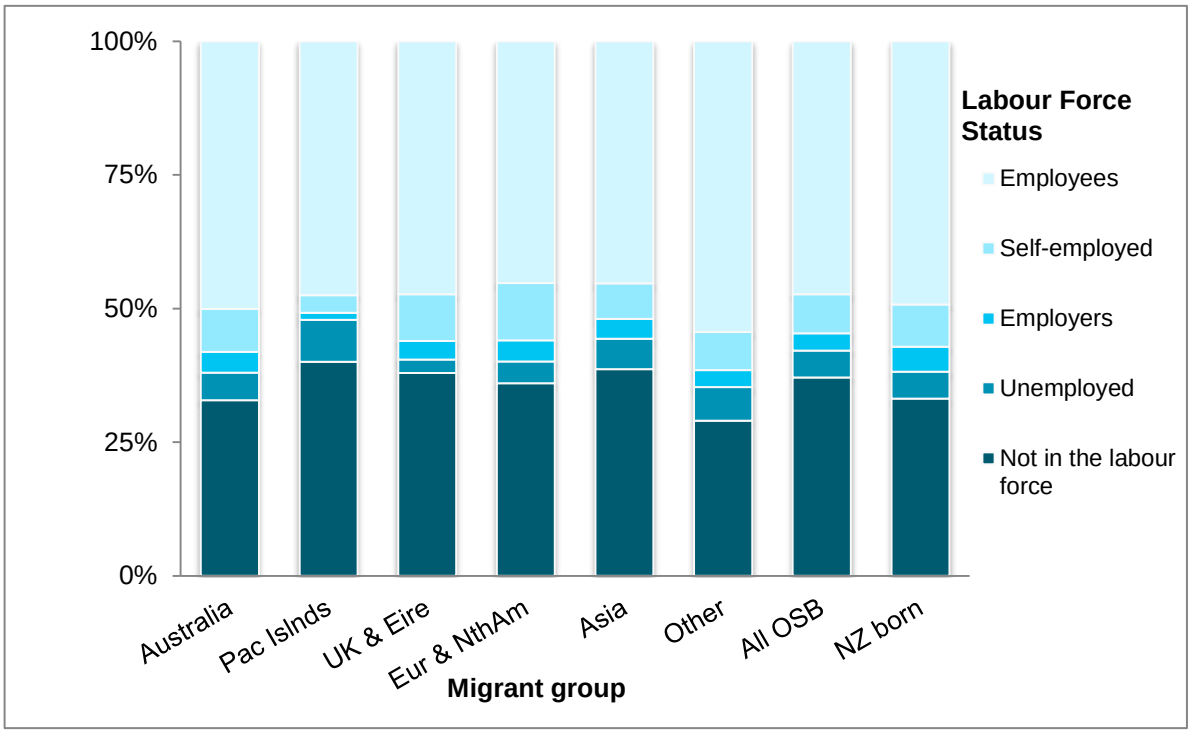
3.4.3 Labour force status by region of birth

Labour force status categories used in this section are defined in section 11.2 of this report. For a more detailed analysis of the labour force status of migrants, see section 7 of this report. Figure 3.6 shows the labour force status of migrants aged 15 and over by region of birth in five categories, also included is the New Zealand-born population as a comparison. The labour force status categories included in the figure are employees (Full-time, part-time and casual), self-employed, employers, unemployed and not in the labour force (retired, studying, at home).

For each region of birth the largest labour force status is employees with at least 45 percent of the migrant population in each group. The region of birth with the largest percentage of employees is the 'Other' group with 54 percent of people is this category. This is higher than for the New Zealand-born group which has 49 percent of its population in this category.

The second largest labour force status for each regional group is not in the labour force, with each region having between 29 and 40 percent of their population in this category. Migrants from the 'Other' region of birth have the smallest percentage of people in this category, due to the larger percentage of employees compared to other regions of birth. Migrants from the Pacific Islands have the largest percent in this category, just ahead of those migrants from Asia (39 percent) and UK and Ireland (38 percent).

Figure 3.6 Labour Force status profile, all migrant groups and New Zealand-born, 2013

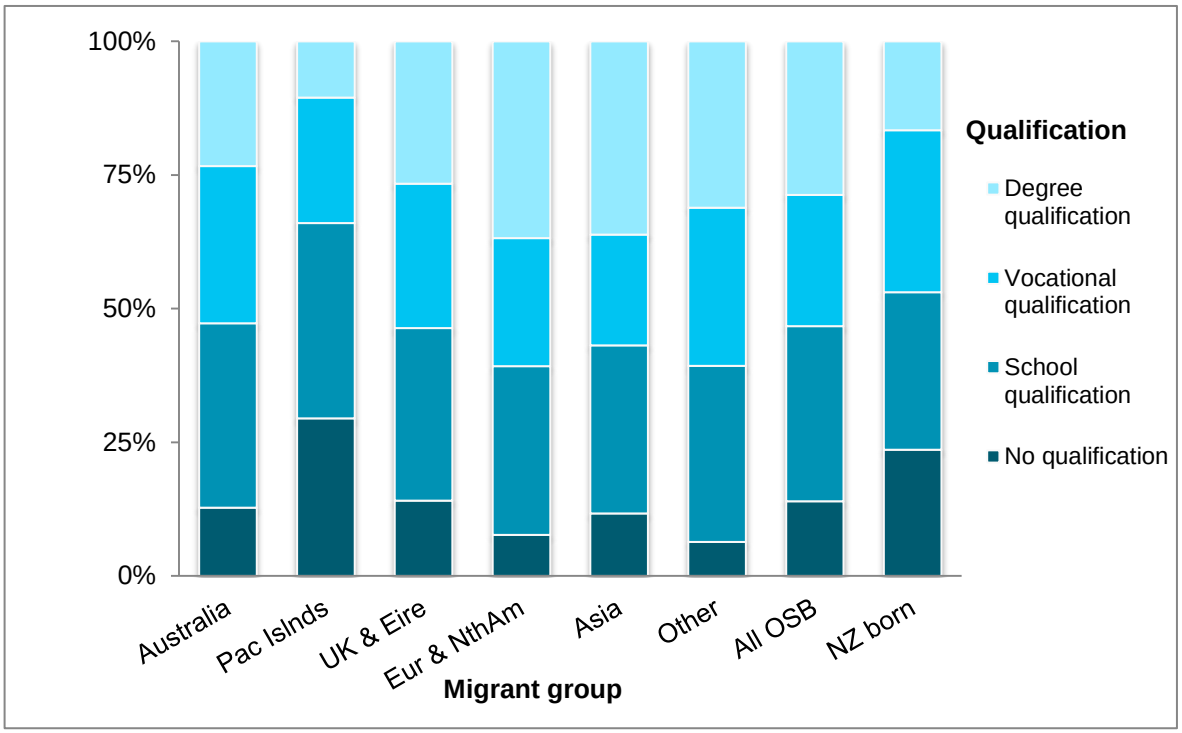


Apart from those migrants from the Pacific Islands, the other migrant groups and New Zealand-born have around 4 percent as employers, and around 8 percent as self-employed. Migrants from the Pacific Island have just 1 percent of their labour force working as employers and 3 percent being self-employed.

3.4.4 Qualification by region of birth

Figure 3.7 provides a summary of the qualification profile of migrants by their region of birth.

Figure 3.7 Qualification profile, all migrant groups and New Zealand-born, 2013



Qualification categories used in the figure are defined in section 11.2 of this report. For a more detailed analysis of the qualification profile of migrants, see section 8 of this report.

Migrants from Europe and North America, and migrants from Asia have the highest percentage of people with Degree qualifications, with 37 and 36 percent, respectively. With Asia in 2013 being the largest regional group of migrants, this represents a large number of highly educated people who are able to earn higher levels of income and be provide New Zealand with a highly skilled workforce.

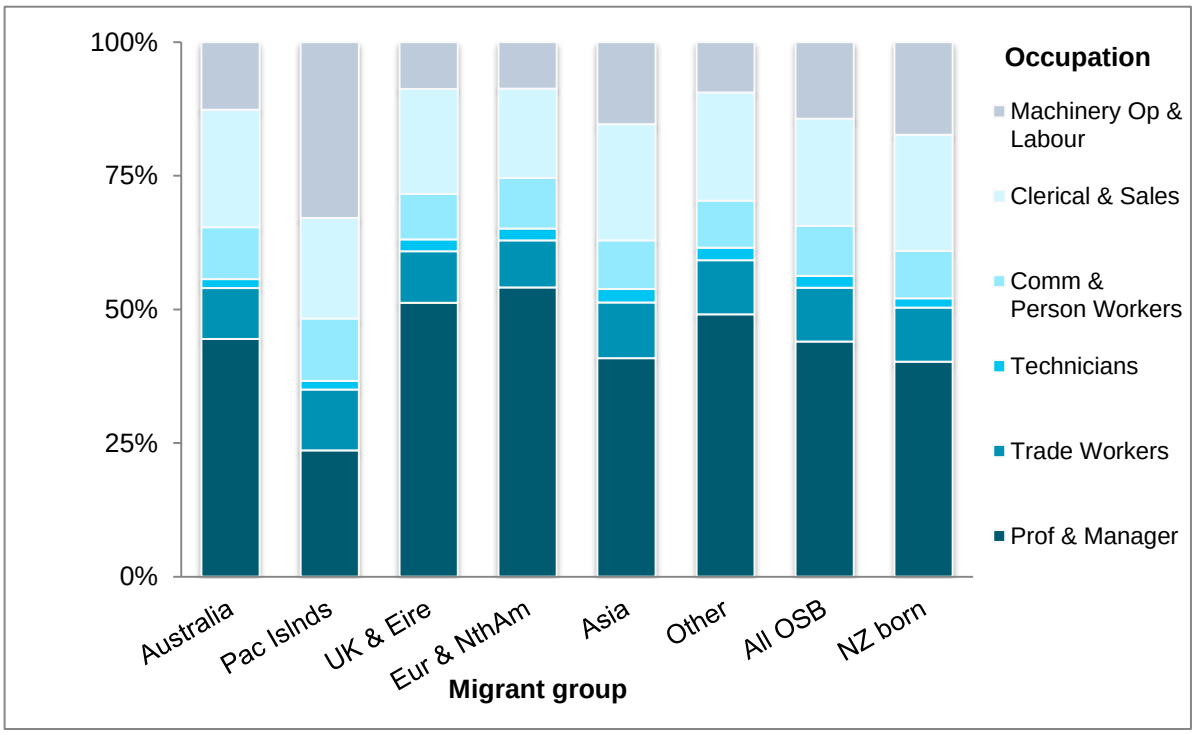
In comparison the New Zealand-born population has just 17 percent of its population with a degree qualification. This is the second smallest proportion with a degree qualification. Only those migrants from the Pacific Islands have a smaller proportion with degree qualifications. The New Zealand-born population does though have the largest proportion of people with vocational qualifications with 30 percent. Migrants from Asia have the smallest share of people with vocational qualifications with just 21 percent, though this is likely smaller than other groups because of the numbers with higher degree qualifications.

All the regional groups have between 29 percent and 37 percent of their population with school qualifications. While Pacific Island migrants have 29 percent of their population group with no qualifications, European and North America and Other migrants have less than 10 percent of their population with no qualifications.

3.4.5 Occupation by region of birth

Occupation categories used in this section are defined in section 11.2 of this report. For a more detailed analysis of the occupation of migrants, see section 9 of this report. Figure 3.8 shows the occupation of employed migrants aged 15 and over by region of birth in six categories, also included is the New Zealand-born population as a comparison. The occupation categories included in the figure are professionals and managers; trade workers; technicians; community and personal service workers; clerical and sales workers; and machinery operators and labourers.

Figure 3.8 Occupation profile, all migrant groups and New Zealand-born, 2013



Professionals and managers are the largest occupation grouping for all regional and New Zealand-born, except for the Pacific Island migrants. For Pacific Island migrants machinery operations and labourers comprise the largest occupation with 33 percent of the employed population working in this occupation, while professionals and managers make up 24 percent of the Pacific Island migrant employment.

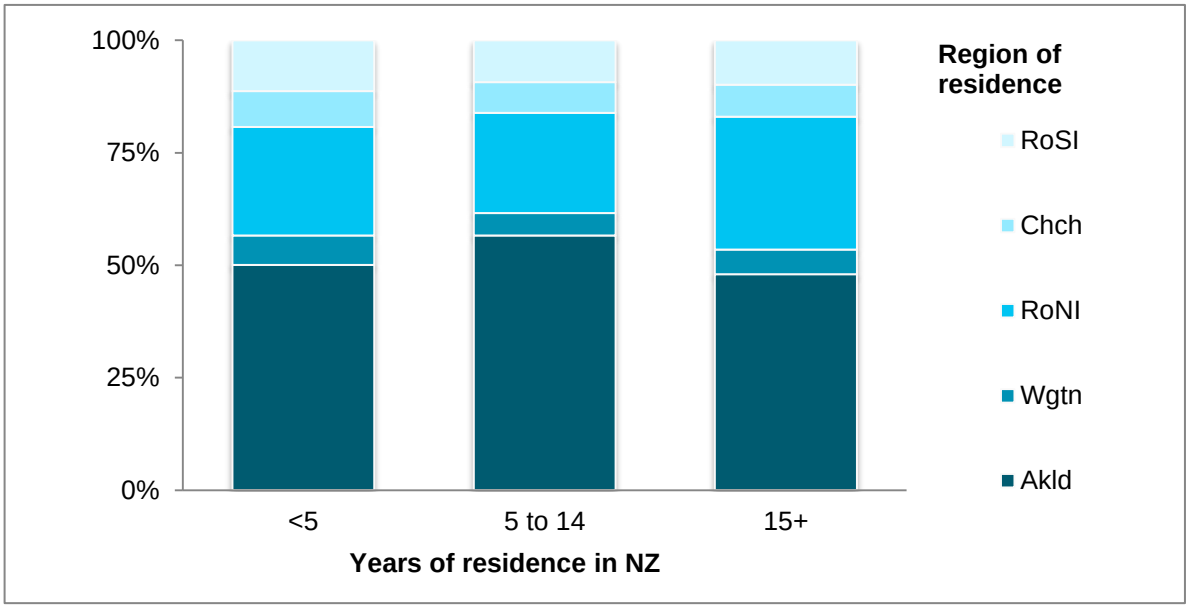
Apart from Pacific Island migrants the remaining regional groups follow a similar pattern of occupation as the New Zealand-born population. Professionals and mangers comprise the largest occupation grouping, followed by clerical and sales workers. Trade Workers comprise around 10 percent, community and personal service workers comprise around 9 percent, and technicians comprise around 2 percent, of each regional groupings employed workforce.

3.5 Migrant profiles by region of residence

Most new migrants arrive and settle in urban and metropolitan areas of New Zealand, with the majority living in Auckland, as shown in Figure 3.9. This trend is even more pronounced for recent migrants. However, Auckland has the lowest net decrease in migrants as duration of residence increases. This may indicate that migrants settle and remain in Auckland more easily than other regions, or it may indicate that some migrants shift to Auckland as they become more established. Ultimately, however, migrants tend to shift away from Auckland and Christchurch to other parts of New Zealand as they become established.

As demand for services and revenue change with age, which is closely correlated with duration of residence, migration is likely to have different fiscal impacts across New Zealand.

Figure 3.9 Migrant population by group and region of residence 2013



3.6 Summary

Overall the migrant population has a relatively small proportion of people in the younger age groups and a larger proportion of people in the conventional working age groups, notably 25 to 64 years old. The new migrants group had a relatively well-balanced age profile and were the most similar to the New Zealand-born population. Most new migrants when they arrive, settle in the urban and metropolitan areas of New Zealand, with the majority living in Auckland.

The recent migrants group had an older age profile than that of new migrants, with only 11 percent of this group aged under 15 in 2013 compared to 20 percent of new migrants. However, this migrant group is likely to have a larger proportion of children born in New Zealand (and therefore not counted as migrants) than the new migrant group.

The established migrant group is the largest migrant group and also the oldest age group, with just five percent under the age of 25. Again, established migrant families are likely to have a larger proportion of New Zealand-born children. The large proportion of people in the 44 to 64 year old age groups reflects the profile of migration in earlier years, and that these migrants were generally young adults rather than children when they arrived in New Zealand.

Combined migrants have a similar labour force participation as the New Zealand-born population. In 2013 migrants have a higher proportion of people with degree qualifications. They also have a greater proportion of their employed population working as professionals and managers. Migrants from the Pacific Islands are the odd one out here with much lower rates of degree qualifications and much higher proportion working as machinery operators and labourers. As shown in Table 12.2 Pacific Island migrants have the lowest per capita net fiscal impact. Though as shown in Table 5.3 it is still higher than net fiscal impact of the New Zealand-born population.

4 The fiscal impact of migrants

This section of our report summarises the key findings on the fiscal impact of migrants to New Zealand.

The summary is broken down by the contribution that migrants make to government revenue, and the impact migrants have on government expenditure. This picture of the fiscal impact of migrants is limited in that it does not examine the wider economic or social impacts of migrants arriving in New Zealand.

4.1 Summary

The net fiscal impact of migrants in the year to June 2013 was $2,912 million.

This compares to a net fiscal impact of $540 million for the New Zealand-born population.

The total contribution of the migrant population to government revenue was $11,711 million.

The migrant population contributed:

- Income tax revenue of $6,269 million, when income tax revenue for New Zealand-born was $16,816 million
- GST revenue of $4,390 million
- Petrol, alcohol and tobacco excise revenue of $1,052 million.

The total impact of migrants on government expenditure was $8,798 million.

Government expenditure on the migrant population included:

- Education spending of $1,698 million, of which 51 percent was for primary and secondary education
- Health spending of $3,619 million
- New Zealand Superannuation spending of $2,457 million
- Work and Income benefit payments of $843 million, including $166 million for unemployment benefits, $280 million for domestic purposes benefits, $191 million for sickness benefits and $163 million for invalids' benefits. Supplementary benefits amounted to $43 million.
- Student allowances of $182 million.

Table 4.1 summarises the fiscal impact of the migrant population and compares this with the impact of the New Zealand-born population. The three right-hand columns of the table split the total migrant fiscal impacts into length of residence in New Zealand.

Table 4.1 Summary of fiscal impacts, 2013 ($m)

NZ born	Overseas born total				Overseas born: yrs in NZ		
					less than 5	between 5 and 14	15 or more
		2012/13 $m					
	GOVERNMENT REVENUE						
16,816	Income tax		6,269		975	2,133	3,161
10,815	GST		4,390		841	1,451	2,098
2,595	Petrol, alcohol & tobacco excises		1,052		199	343	510
30,226	Income tax, GST & excises			11,711	2,016	3,926	5,769
	GOVERNMENT EXPENDITURE						
1,534	Early childhood educ	89			89	0	0
3,978	Prim'y & sec'y schools	864			310	512	42
1,876	Tertiary institutions	744			244	292	208
7,387	Education Total		1,698		644	804	250
9,798	Health		3,619		588	999	2,032
7,778	National Super		2,457		0	191	2,266
640	Unemployment benefit	166			25	86	55
3,215	Other main benefits	634			49	328	257
459	Supplementary benefits	43			3	22	18
4,314	Work and Income		843		77	436	330
410	Student Allowances		182		36	95	51
29,687	Education, Health, NS, Stdt allows, Benefits			8,798	1,345	2,524	4,929
540	NET IMPACT (*)			2,912	671	1,402	839

* The Net Impact refers to the revenue and expenditure categories explicitly identified in the table only.

Income tax was the largest component of the fiscal impact of migrants in the year to June 2013.

Migrants paid approximately $5,712 per capita in income tax in the year to June 2013, while the New Zealand-born population paid approximately $5,348 per capita. This means income tax revenue alone would have covered a large portion (over 70 percent) of total government expenditure on the migrant population in the year to June 2013.

Notably, while the migrant population's per capita income tax revenue (in real dollar terms) increased between the 2006 and 2013 studies, GST revenue per capita has increased by more than 60%. This has been partly influenced by the increase in GST from 12.5 percent to 15 percent in 2011. However, the GST contribution has only climbed from 34 percent in our previous study, to 37 percent of migrants' contribution to government revenue.

Table 4.2 summarises the per capita fiscal impact of the migrant population and compares this with the impact of the New Zealand-born population. Table 4.2 shows a similar picture to the total fiscal impact estimates, but takes into account the differences in size between the population groups.

Table 4.2 Per capita fiscal impact, 2013 ($pc)

NZ born	Overseas born total				Overseas born: yrs in NZ		
					less than 5	between 5 and 14	15 or more
		2012/13 $ per head					
	GOVERNMENT REVENUE						
5,348	Income tax		5,712		3,877	5,511	6,886
3,439	GST		3,999		3,345	3,748	4,570
825	Petrol, alcohol & tobacco excises		958		791	886	1,110
9,613	Income tax, GST & excises			10,669	8,013	10,145	12,566
	GOVERNMENT EXPENDITURE						
488	Early childhood educ	81			355	0	0
1,265	Prim'y & sec'y schools	788			1,234	1,324	91
597	Tertiary institutions	678			970	754	454
2,349	Education Total		1,547		2,559	2,077	545
3,116	Health		3,297		2,336	2,582	4,426
2,474	National Super		2,238		0	493	4,936
203	Unemployment benefit	151			101	221	120
1,023	Other main benefits	577			194	847	561
146	Supplementary benefits	39			12	58	38
1,372	Work and Income		768		307	1,125	719
130	Student Allowances		166		144	244	112
9,441	Education, Health, NS, Stdt allows, Benefits			8,016	5,346	6,522	10,738
172	NET IMPACT (*)			2,653	2,667	3,623	1,828
3,144	Population (000)			1,098	252	387	459

Migrants had a positive net fiscal impact in the year to June 2013, regardless of the duration of residence.

The net fiscal impact per head for new migrants was $2,667 in the year to June 2013. New migrants are migrants who have been in New Zealand for less than five years.

For recent migrants the net fiscal impact was $3,623 in the year to June 2013, while for established migrants the impact fell to $1,828. Recent migrants have been in New Zealand between five and 14 years, while established migrants have been in New Zealand for 15 years or more.

The comparative net fiscal impact for the New Zealand-born population was much smaller, at $172 per person in the year to June 2013. This difference reflects differences in demography and benefit entitlement.

For example, the proportion of the New Zealand-born population under the age of 18 was more than twice as large as the migrant population in 2013 (29 percent versus 12 percent of the migrant population).

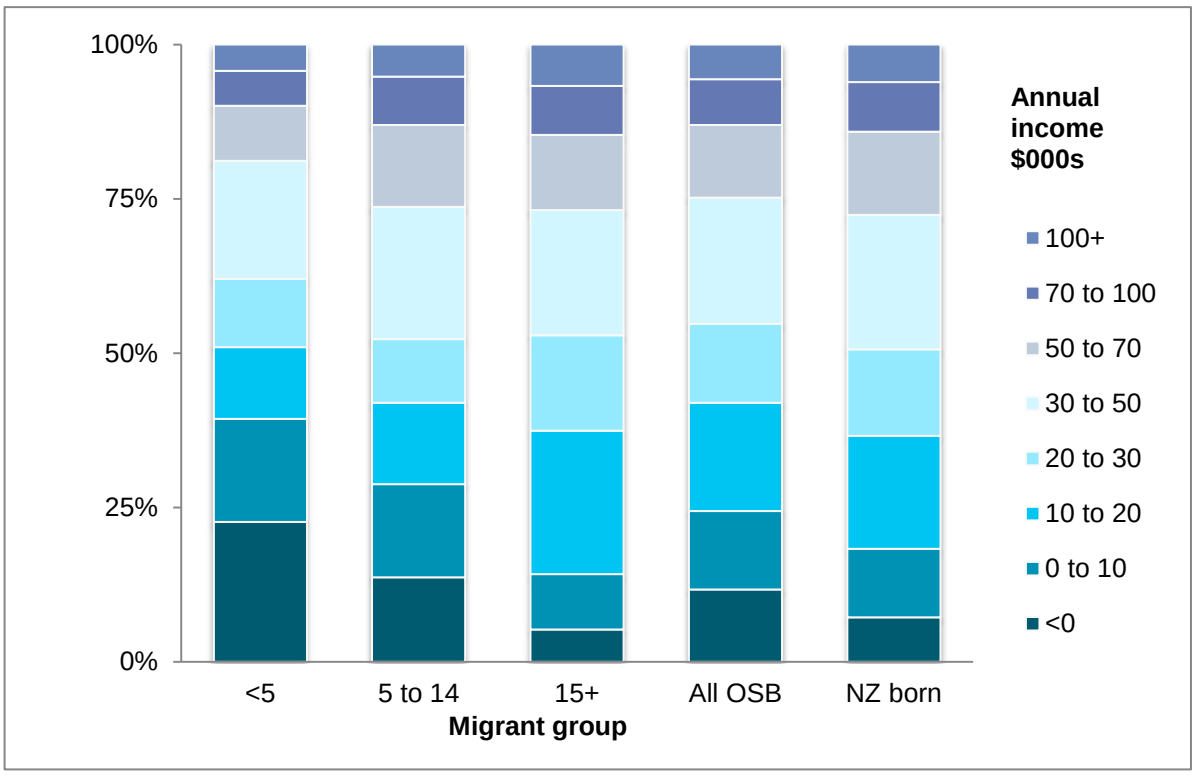
4.2 The contribution of migrants to government revenue

4.2.1 The contribution of migrants to income tax revenue

Figure 4.1 below shows the annual average income of migrants (represented in the figure as All OSB) and the New Zealand-born population. Information on the relative earnings of the migrant population are broken down by length of residence in New Zealand.

- New migrants have the largest percentage earning less than $0 or $0 per annum with 23 percent. At the same time new migrants have a similar percentage of people earning $70,000 and over per annum as the other migrant groups.
- The largest group of recent migrants is those earning $30,000 to $50,000 per annum in 2013, with 21 percent of people in this group. Almost 30 percent of recent migrants still earn less than $10,000 per annum.
- For established migrants the largest group is those earning $10,000 to $20,000 per annum, with 23 percent of the population. Less people earn $10,000 or less in this group (14 percent) than earn $70,000 or more (15 percent).

Figure 4.1 Proportion of each population group by income, 2013[1]



[1] For all migrants and New Zealand-born, who are 15 years or older

Per capita, the income tax paid by migrants was approximately $5,712, compared to $5,348 paid by the New Zealand-born population. The age structure of the two population sub-groups is one factor contributing to this difference, as discussed in section 3.

The age profile of a population, all things being equal, typically reflects its annual average income profile. This is because the age profile illustrates the number of people in the prime working age population, which is people between the ages of 18 and 64.

- In 2013, approximately 75 percent of all migrants resident in New Zealand were between the ages of 18 and 64. In contrast, 62 percent of the New Zealand-born population were between these ages.

Despite the wide difference in the proportion of people from each population group in the 18 to 64 year old age group, the average annual income of each group also comes into play. Migrants have a higher proportion of people earning less than $20,000 per annum, with

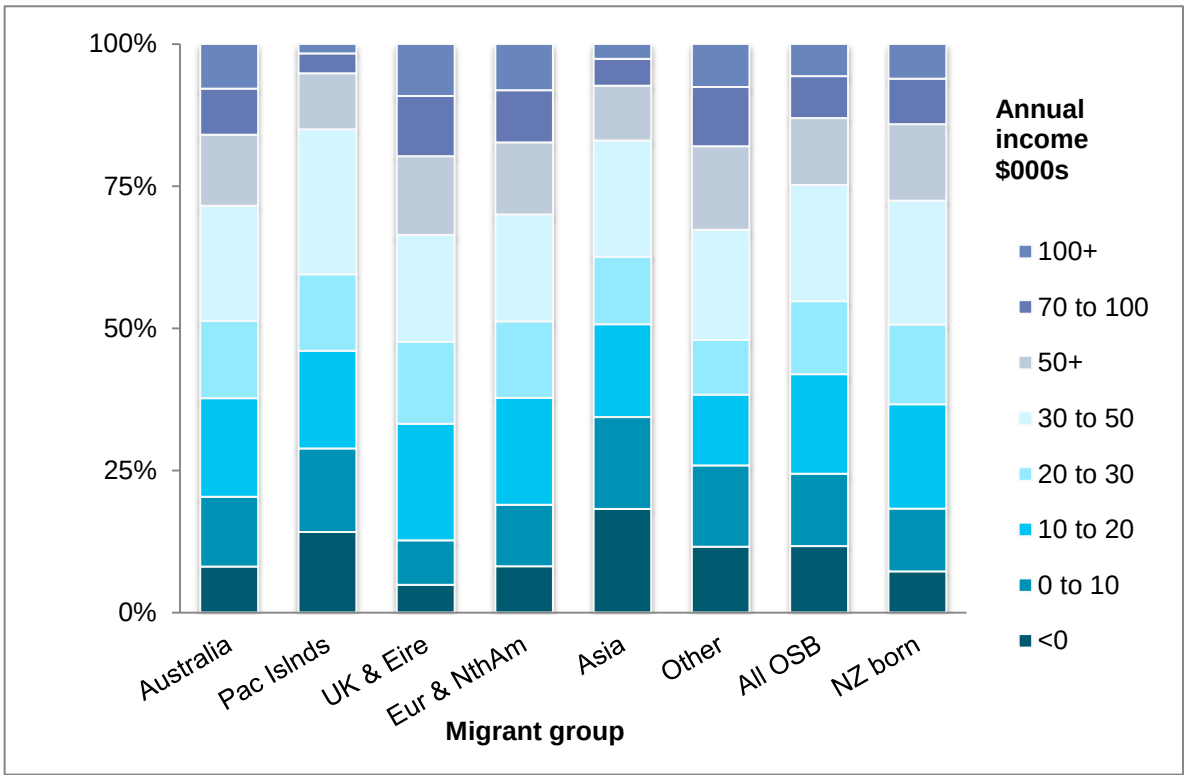
- Approximately 42 percent of migrants earning $20,000 per annum or less, compared with 37 percent of New Zealand-born residents.

The annual income of migrants tends to increase with their duration of residence. For example, per capita income tax revenue rises from $3,877 for new migrants to $6,886 for established migrants. This is similar to the finding in the 2006 study, where established migrants contributed approximately 35% more to income tax revenue per capita than the New Zealand-born.

4.2.2 Income tax revenue by region of birth

The fiscal impact of migrants on income tax revenue differs also by their region of birth, along with their duration of residency, as noted in above.

Figure 4.2 Proportions of each population group by income & region of birth, 2013[2]



[2] For all migrants and New Zealand-born, who are 15 years or older

Overall, migrants from Australia and the UK and Ireland have a similar income profile to New Zealand-born residents. Migrants from Asia and the Pacific Islands tend to have a lower income profile with 51 percent and 46 percent, respectively, of these migrants earning $20,000 per annum or less. This difference is most likely due to a high proportion of Asian migrants studying and Pacific Island migrants working in lower-skilled elementary or service jobs.

However, the length of time a migrant has been in New Zealand has a very strong effect on their income profile. For example, per capita income tax revenue from new Pacific Island migrants was $1,732 in the year ended June 2013, and for new Asian migrants it was $2,330. Once these groups reside in New Zealand for 15 years or more and become established, the level of income tax revenue generated is 2.5 times higher for Pacific Island migrants ($4,657), and for Asian migrants ($6,144).

This finding is supported by Census data, which indicates that the proportion of Asian and Pacific Island migrants who are unemployed or not in the labour force consistently falls as the duration of their residency increases. For example, the proportion of Asian migrants with no occupation drops 9 percent points, from 47 percent to 38 percent as Asian migrants move from being new migrants (those in New Zealand less than five years) to recent migrants (resident in New Zealand for five to 14 years). In contrast, for migrants as a whole, the labour force participation rate falls and then rises as people move into retirement.

The per capita income tax contribution of migrants from the UK and Ireland rapidly increases between those in New Zealand as a new migrants ($7,404), and those that are recent migrants who has resided in New Zealand for five to 14 years ($8,251). The per capita income tax contribution from recent migrants from this region is slightly higher than that of established migrants, at $7,643. This small change may reflect differences in the age of migrants from the UK and Ireland rather than how long they have resided in New Zealand. For example, approximately 62 percent of recent migrants from the UK and Ireland were aged between 25 and 64 years old, while 50 percent of established migrants were within this age group.

4.2.3 The contribution of migrants to GST revenue

Goods and Services Tax (GST) accounted for just over one third (37 percent) of migrants' contribution to government revenue, which is slightly higher than the proportion accounted for by the New Zealand-born population (36 percent).

Migrants contributed $3,999 per capita to GST revenue while the New Zealand-born population contributed $3,439.

GST revenue rises substantially as migrants become established, which reflects their increase in average income, and therefore purchasing power, with duration of residence. GST per capita for new migrants sat at approximately $3,345, before rising to $3,748 for recent migrants, and $4,570 for established migrants.

The proportion of fiscal revenue from GST rises slower than income tax. This is partly a reflection of the regressive nature of GST and the progressive nature of income tax. That is, consumption expenditure tends to use a larger proportion of income the lower a person's income. Therefore, the incidence of GST tends to be higher for people on lower incomes.

4.3 The impact of migrants on government expenditure

This analysis includes government expenditure on education, health, and welfare benefits. The impact of migrants on government expenditure is driven by demand factors such as age, family status, and participation in education and the labour market. However, the fiscal impact of these demand factors is mediated by the eligibility constraints that migrants face, particularly in their early years of residence in New Zealand.

4.3.1 Expenditure on education and student allowances

Total government expenditure on education for migrants was an estimated $1,698 million in the year to June 2013. Total government expenditure on education for the New Zealand-born population was over four times greater than this, at $7,387 million.

Government expenditure on education varies by the length of time a migrant resides in New Zealand. With the education provided to new migrants costing an estimated $644 million; for recent migrants an estimated $804 million; and for established migrants an estimated $250 million.

Allowing for the differences in population group size, the expenditure differences also remain apparent in the per capita estimates, as shown in Table 4.2. Total education expenditure per person was approximately $1,547, with splits of $2,559 for new migrants, $2,077 for recent migrants and $545 for established migrants.

Per capita expenditure on education for the New Zealand-born population in contrast was $2,349. Education expenditure is higher due to the large number of New Zealand-born people in compulsory education.

- 29 percent of the New Zealand-born population was 18 years old or younger in 2013, compared to 12 percent of the migrant population.
- Within the migrant population, 25 percent of new migrants were aged 18 or younger, compared with 17 percent of recent migrants and only one percent of established migrants. Note, to be an established migrant a person has to live in New Zealand for more than 15 years.

The difference in the age profile means that the New Zealand-born population has substantially higher early childhood and primary/secondary education expenditure per capita, which raises the total per capita expenditure on education for the New Zealand-born population.

Migrants participate in post-compulsory education at a higher rate than the New Zealand-born population. Table 4.2 shows that student allowances were highest for new and recent migrants, with per capita levels of expenditure of $144 for new migrants, and $244 for recent migrants. Taken alongside the estimates of tertiary education expenditure, these figures suggest that a large number of migrants may come to New Zealand to study or move into tertiary education shortly after settling in New Zealand. *Due to higher participation in tertiary education the per capita spend on student allowances for migrants was greater than that of the New Zealand-born population - $166 compared to $130.*

4.3.2 Expenditure on health and New Zealand Superannuation

Health care and superannuation expenditure is closely tied to the age structure of a population. Health expenditure tends to fall after the first few years of life before rising rapidly towards the end. Health expenditure on zero to four year olds is almost 50% higher per person than that spent on young to middle-aged adults. While health expenditure on those aged 65 and over is almost four times higher than that spent on young to middle-aged adults.

The impact of migrants on health spending in the year to June 2013 was $3,619 million. This compares with $9,798 million spent on health care for the New Zealand-born population, as detailed in Table 4.1. The amount spent on health care by migrant group included $588 million spent on new migrants, $999 million spent on recent migrants, and $2,032 million spent on established migrants.

Per capita spend on health care was $4,426 for established migrants, as shown in Table 4.2. This is almost 35% higher than the average spend per capita for migrants, at $3,297. This average spend per capita for all migrants was slightly higher than the New Zealand-born average spend per capita, at $3,116.

New Zealand Superannuation expenditure on migrants was $2,238 per person. This expenditure was concentrated in the established migrant group, at $4,936, compared to recent migrants ($493) and new migrants ($0). This reflects the older age structure of established migrants and that established migrants are more likely to meet eligibility requirements than recent and new migrants. New migrants are not eligible.

The figure for New Zealand Superannuation expenditure on established migrants is almost twice as much as that spent on the New Zealand-born population, at $2,474 per capita, as shown in Table 4.2.

4.3.3 Expenditure on Work and Income benefits

Total benefit expenditure on migrants was $843 million in the year to June 2013, compared with $4,314 million spent on the New Zealand-born population.

The largest benefit expenditure category was "Other main benefits" at $634 million. This includes the Sickness Benefit, $191 million; Domestic Purposes Benefit, $280 million; and Invalids Benefit $163 million. Supplementary benefits to migrants accounted for $39 million of government expenditure, and migrants received $151 million in Unemployment Benefit payments in the year to June 2013.

Government expenditure on "Other main benefits" increases per capita once migrants move from being new to recent, before falling once they are established in New Zealand. For example, government expenditure on new migrants on "Other main benefits" was $194 in the year to June 2013, while expenditure on recent migrants was $847 and on established migrants it was $561.

This per capita expenditure is also mirrored in Supplementary benefits, which include the Accommodation Supplement and Disability Allowance. The comparable per capita figures rise from $12 spent on new migrants on these benefits, to $58 for recent migrants and $38 for established migrants.

People have to reside in New Zealand for at least two years before they are eligible to apply for an Unemployment benefit. This means only a small subset of new migrants are eligible for this benefit and the per capita spend is lower, at $101 spent on Unemployment benefits for new migrants in the year to 30 June 2013.

Unemployment benefit payments rise for the recent migrant group, to $221 per person. This reflects the smaller number of people in the recent migrant group and greater eligibility. Although the total expenditure for the established migrant group ($55 million) was slightly smaller to the recent migrant group ($86 million), the larger number of people who are established migrants pulls the per capita spend on unemployment benefits down to $120, almost half that of the recent migrant group.

Overall, per capita spend on Unemployment benefits for migrants, at $151 per person, was lower than expenditure on these benefits for the New Zealand-born population, at $203 per person.

4.4 The fiscal impact of migrants by region of birth

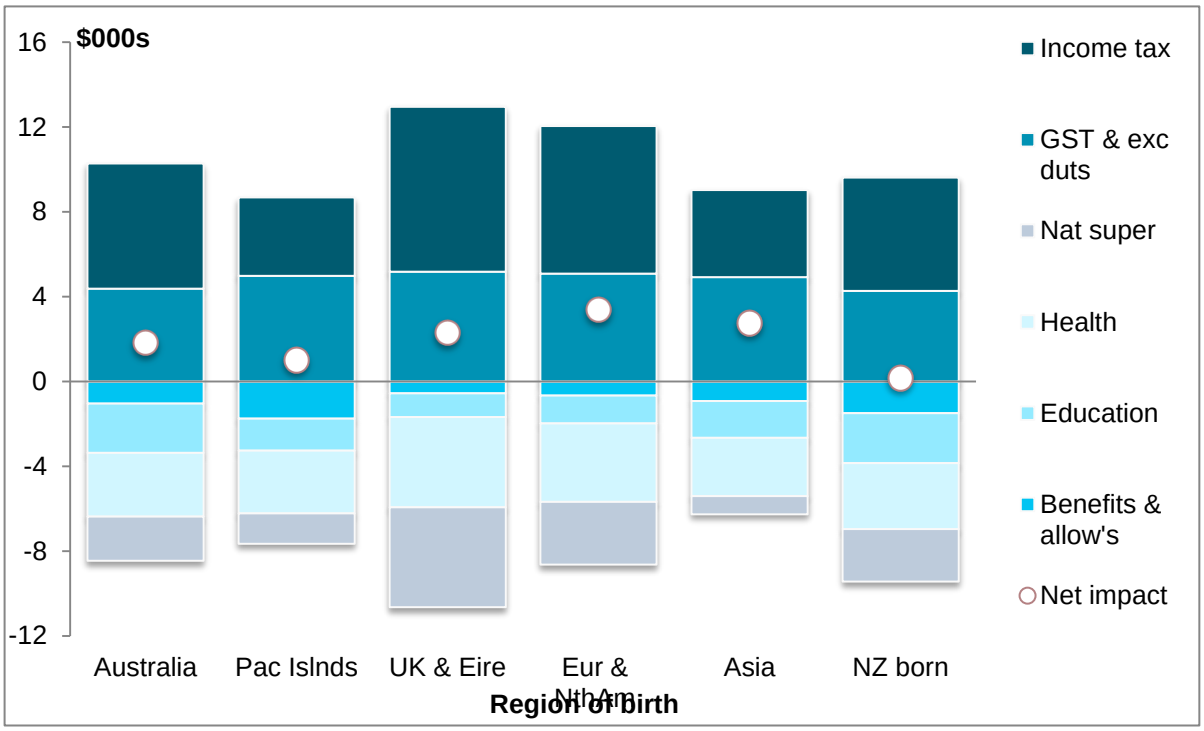
Migrants from different regions have substantial different personal, family and social circumstances. This means the fiscal impacts of migrants differ markedly depending on their age, how long they have been in New Zealand, and the region they were born in. For example, the fiscal impact per capita ranges from $1,011 for migrants from the Pacific Islands through to $5,054 per capita for migrants from 'Other' regions, including the Middle East, South America and Africa.[3]

[3] Technical Appendix Table 27 to Technical Appendix Table 29 provide detailed estimates of the fiscal impacts of migrants by region of birth.

Figure 4.3 illustrates the differences in fiscal impacts across migrant groups by region of birth. This figure shows that all migrant groups had a positive net fiscal impact on the New Zealand economy, as indicated by the circles in the figure.

- The fiscal revenue per capita impacts range from $8,674 for Pacific Island migrants, to $12,952 for migrants from the UK and Ireland. For migrants from the UK and Ireland, income tax comprises 60 percent of the fiscal revenue (which is the highest of all groups), while for Pacific Island migrant's income tax comprises 43 percent of their total fiscal revenue (which is the lowest of all groups).
- Australian, Europe and North American, and 'Other' migrants had similar per capita revenue impacts of between $10,284 and $12,044. For each of these three regions, established migrants contribute the largest share to fiscal revenue, but also have the highest amount of fiscal expenditure.
- Migrants from Asia contributed $9,029, which is close to the Pacific Island migrant level. Despite the lower level of per capita fiscal revenue, the net per capita impact of migrants from Asia is close to that of migrants from the UK and Ireland, Europe and North America. This group together have the highest per capita fiscal impacts.

Figure 4.3 Per capita fiscal impact by region of birth, 2013



Migrants from the UK and Ireland were the biggest source of income tax revenue and expenditure. This reflects the earnings profile and age structure of this migrant group, though it results in one of the smaller per capita net fiscal impacts, at $2,306 per person. The group with the second largest revenue and second largest expenditure by migrant, is the European and North American migrant group, with a net fiscal impact of $3,399 per person.

Australian migrants stand out from other migrant groups in terms of government expenditure on early childhood, primary and secondary education. Total education expenditure for this group was $1,622 per capita, compared to $869 per capita for all migrants. The net per capita fiscal impact of migrants from Australia was $1,822, which was lower than the average per capita impact of all migrants at $2,653, but higher than that for the New Zealand-born, at $172. Government expenditure on health, New Zealand Superannuation and benefits, for migrants from Australia, was lower than that spent on the New Zealand-born.

Pacific Island and Asian migrants had relatively similar per capita fiscal revenue profiles, and contributed $8,674 and $9,029 per capita, respectively. There are marked differences in government expenditure on these two groups. These differences mean that the net fiscal impact overall for both groups is quite different, with Pacific Island migrants at $1,011 and Asian migrants at $2,767.

Government expenditure on education for Pacific Island migrants was lower than that spent on Asian migrants, $1,511 per capital compared to $1,732 per capita.

- The main differences in expenditure are at the primary, secondary and tertiary education levels. Notably, Asian migrants had the highest levels of tertiary education expenditure and student allowances of all the migrant groups, at $872 and $245 per capita, respectively.
- The participation of Asian migrants in tertiary education is discussed further in Section 10.1. Suffice to note here, 34 percent of new Asian migrants aged 15 years and over were in tertiary training. Many of these people would be foreign-fee paying students; however, this study does not capture revenue to the international education sector.
- Pacific Island migrants received the largest amount per capita of government expenditure on benefits, at $1,603. The majority of this expenditure was other main benefits ($1,268). However, the amount of government expenditure on Unemployment benefits for this migrant group was lower than the average for all migrants, at 18 percent of all expenditure on benefits compared to 20 percent.
- Asian migrants received less in terms of the average amount paid per benefit, at $684 but received a larger proportion of benefits via Unemployment benefits at 24 percent.
- Migrants from the UK and Ireland, and migrants from Europe and North America received the highest per capita expenditure on health. This high per capita expenditure, $4,256 for UK and Ireland, is due to the high proportion of the migrant population over 65 years of age. In the 2013 Census 30 percent of this migrant group are in this age group. In comparison 14 percent of the New Zealand-born population is aged 65 and over. Migrants from Europe and North America who received $3,707 per capita in health funding, also had a large proportion of their population over 65 years of age. In this case that proportion was just 20 percent. All other migrant groups have less than 14 percent of their population in this over 65 age group.
- Health expenditure for migrant groups is more strongly tied to their older population than the New Zealand-born population. This is because of the small proportion of their population which are five years old or younger. This group is the next most expensive age group for health after those 65 and older. New Zealand-born has 9 percent of its population aged under 5, while Australian migrants have 5 percent of their population in this age group. All the remaining migrant groups have 1 percent of their population in this age group.
- Migrants from the UK and Ireland received the highest per capita expenditure on superannuation. There per capita expenditure, $4,707 is much higher than the next highest $2,964 per capita for the European and North American migrants. The high per capita expenditure is due to the high proportion of UK and Ireland established migrants aged 65 and over. This is important as migrants are only eligible to New Zealand Superannuation if they have resided in New Zealand for at least 10 years. As already noted in the 2013 Census, 30 percent of UK and Ireland migrants where aged 65 and over. For those UK and Ireland migrants who had resided in New Zealand for 15 or more years, 46 percent were aged 65 and over.[4]

[4] No adjustment was made for superannuation remitted from abroad by a migrant's birth country, but received by the migrant through the New Zealand government. Further details are available in the separate technical appendix report.

5 Comparison with previous fiscal impact studies

This section of our report compares the findings of this research with the previous fiscal impact studies undertaken for the years ending June 1998, June 2002 and June 2006. These earlier studies undertaken by BERL estimated the fiscal impact of immigrants for the years ended June 1998 (measured in $1997/98), June 2002 (measured in $2001/02), and June 2006 (measured in $2005/06).

All figures in this section are reported in $2012/13 terms. The figures from the earlier studies have been inflated to current values using appropriate GDP inflators. This conversion removes the effects of inflation to provide a time-consistent unit of measure. For example, in nominal dollar terms total income tax rose between 2006 and 2013 from $20,077 million to $23,085 million. However, after allowing for the effect of inflation, income tax revenue in 2006 was equivalent to $22,616 million in $2012/13 terms, indicating a much smaller increase in real income tax revenue.

Table 5.1 summarises the estimated fiscal impacts from the four studies, reporting the figures for migrants and the New Zealand-born population sub-groups.[5]

Table 5.1 Comparison of fiscal impacts: 1998, 2002, 2006, 2013 ($m)[6]

	NZ born				Overseas born			
	1997/98	2001/02	2005/06	2012/13	1997/98	2001/02	2005/06	2012/13
	2012/13 $m							
GOVERNMENT REVENUE								
Income tax	19,006	20,320	17,814	16,816	4,742	5,342	5,588	6,269
GST	5,361	5,914	9,134	10,815	1,108	1,566	3,194	4,390
Petrol, alcohol & tobacco excises	2,187	2,196	1,906	2,595	441	579	661	1,052
Income tax, GST & excises	26,554	28,430	28,855	30,226	6,291	7,487	9,443	11,711
GOVERNMENT EXPENDITURE								
Early childhood educ	364	443	718	1,534	18	20	50	89
Prim'y & sec'y schools	3,035	3,404	3,615	3,978	376	513	653	864
Tertiary institutions	1,225	1,310	1,457	1,876	232	342	505	744
EDUCATION	4,625	5,157	5,790	7,387	626	875	1,208	1,698
HEALTH	6,079	6,906	8,008	9,798	1,460	1,931	2,523	3,619
NATIONAL SUPER	5,439	5,424	6,597	7,778	1,601	1,640	880	2,457
Unemployment benefit	1,093	998	656	640	278	232	176	166
Other main benefits	2,174	2,120	3,141	3,215	332	376	480	634
Supplementary benefits	644	659	1,081	459	177	170	208	43
WORK AND INCOME	3,911	3,776	4,878	4,314	787	778	864	843
STUDENT ALLOWANCES	372	393	275	410	102	127	134	182
Education, Health, NS, Stdt allows, Benefits	20,426	21,655	25,547	29,687	4,576	5,351	5,610	8,798
NET IMPACT (*)	6,128	6,774	3,308	540	1,714	2,136	3,833	2,912

[5] Technical Appendix Table 5 and Technical Appendix Table 6 convert the figures in Table 5.1 to total and per annum percentage changes between each study period.

[6] Technical Appendix Table 7 to Technical Appendix Table 9 disaggregate the estimated fiscal impacts for the three studies reported in Table 5.1 by the new, recent, and established migrant groups.

The positive net fiscal impact of migrants fell by $921 million between 2006 and 2013.

This change represents a 24% decrease in real terms over the seven-year period. Government revenue from migrants grew by 24% over the period, while government expenditure on migrants grew by 57%.

The net fiscal impact of the New Zealand-born population has been positive across the three previous studies. Government revenue from the New Zealand-born population constantly grew during this period, despite changes in the underlying tax components, while fiscal expenditure accelerated. As a result, the net fiscal impact of the New Zealand-born population climbed between 1998 and 2002, before declining between 2002 and 2006. Between 2006 and 2013 the net fiscal impact of the New Zealand-born population declined again.

- Fiscal expenditure for the New Zealand-born population rose by $4,140 million (net) between 2006 and 2013. Increased health expenditure accounted for 43 percent of this net change.
- New Zealand Superannuation payments contributed a further 29 percent to this net increase, while education and student allowance payments contributed to 39 percent and 3 percent of the increase, respectively. A fall in Work and Income payments offset the increase in expenditure by 13 percent.

Table 5.2 below shows the average change per annum between each of the studies.

Table 5.2 Comparison of fiscal impacts: 1998, 2002, 2006, 2013 (%pa)

	NZ born				Overseas born			
	1997/98	2001/02	2005/06	2012/13	1997/98	2001/02	2005/06	2012/13
	% change (per annum average) between studies							
GOVERNMENT REVENUE								
Income tax		2%	-3%	-1%		3%	1%	2%
GST		2%	11%	2%		9%	20%	5%
Petrol, alcohol & tobacco excises		0%	-3%	5%		7%	3%	7%
Income tax, GST & excises		2%	0%	1%		4%	6%	3%
GOVERNMENT EXPENDITURE								
Early childhood educ		5%	13%	11%		4%	25%	9%
Prim'y & sec'y schools		3%	2%	1%		8%	6%	4%
Tertiary institutions		2%	3%	4%		10%	10%	6%
EDUCATION		3%	3%	4%		9%	8%	5%
HEALTH		3%	4%	3%		7%	7%	5%
NATIONAL SUPER		0%	5%	2%		1%	-14%	16%
Unemployment benefit		-2%	-10%	0%		-4%	-7%	-1%
Other main benefits		-1%	10%	0%		3%	6%	4%
Supplementary benefits		1%	13%	-12%		-1%	5%	-20%
WORK AND INCOME		-1%	7%	-2%		0%	3%	0%
STUDENT ALLOWANCES		1%	-9%	6%		6%	1%	4%
Education, Health, NS, Stdt allows, Benefits		1%	4%	2%		4%	1%	7%
NET IMPACT (*)		3%	-16%	-23%		6%	16%	-4%

The net fiscal impact of migrants decreased by an average of 4% per annum between the 2006 and 2013 studies.

- This annual average decrease is equivalent to the total decrease of 24% over the seven-year period, this is indicated in Table 5.1 and Technical Appendix Table 5.
- Across all four studies fiscal revenue from migrants has grown in real terms. Fiscal expenditure has also grown in real terms for migrants across all four studies.
- The net fiscal impact of migrants grew quickly between 2002 and 2006, but has fallen between 2006 and 2013. The slowdown between 2006 and 2013 reflects faster growth in tax expenditure compared to revenue growth (seven percent versus three percent).

Table 5.3 shows the fiscal impacts per capita for migrants and the New Zealand-born population across the four studies.

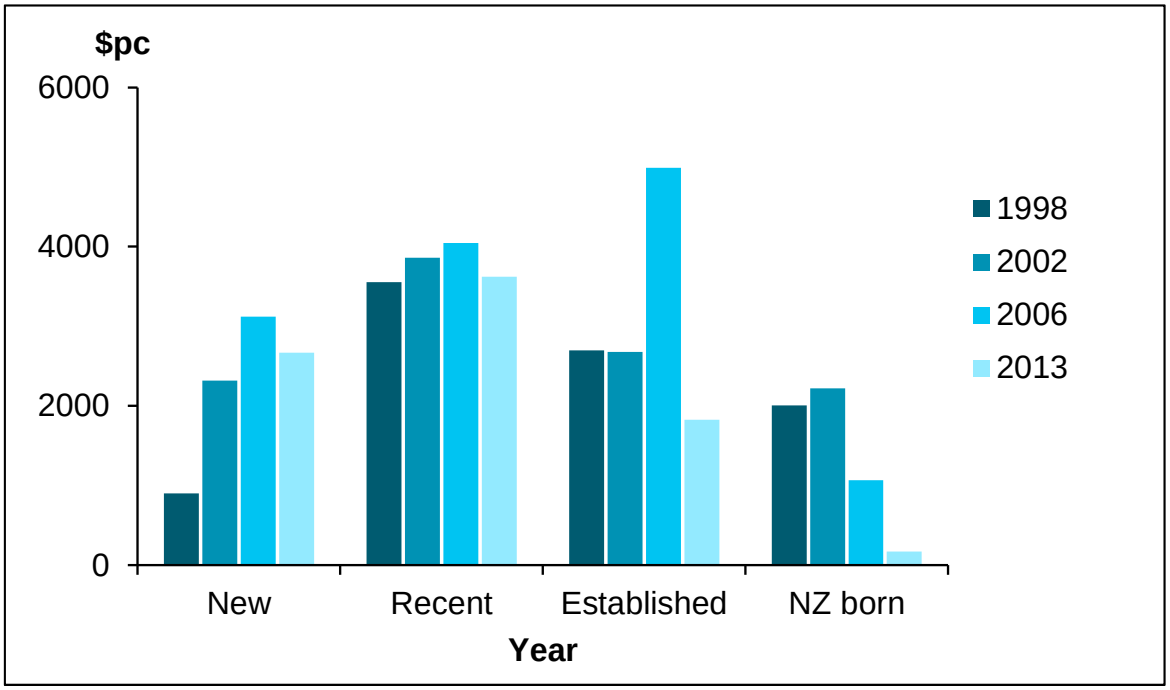
Table 5.3 Comparison of per capita fiscal impact: 1998, 2002, 2006, 2013 ($pc)

	NZ born				Overseas born			
	1997/98	2001/02	2005/06	2012/13	1997/98	2001/02	2005/06	2012/13
	2012/13 $ per head							
GOVERNMENT REVENUE								
Income tax	6,214	6,656	5,745	5,348	7,220	7,209	6,027	5,712
GST	1,753	1,937	2,946	3,439	1,687	2,113	3,445	3,999
Petrol, alcohol & tobacco excises	715	719	615	825	671	782	712	958
Income tax, GST & excises	8,682	9,313	9,306	9,613	9,579	10,104	10,184	10,669
GOVERNMENT EXPENDITURE								
Early childhood educ	119	145	232	488	27	28	54	81
Prim'y & sec'y schools	992	1,115	1,166	1,265	572	692	704	788
Tertiary institutions	401	429	470	597	354	461	544	678
EDUCATION	1,512	1,689	1,867	2,349	952	1,181	1,302	1,547
HEALTH	1,987	2,262	2,582	3,116	2,224	2,606	2,722	3,297
NATIONAL SUPER	1,778	1,777	2,127	2,474	2,437	2,214	950	2,238
Unemployment benefit	357	327	211	203	424	313	190	151
Other main benefits	711	694	1,013	1,023	505	507	517	577
Supplementary benefits	211	216	349	146	270	230	224	39
WORK AND INCOME	1,279	1,237	1,573	1,372	1,199	1,049	932	768
STUDENT ALLOWANCES	122	129	89	130	156	172	144	166
Education, Health, NS, Stdt allows, Benefits	6,678	7,094	8,239	9,441	6,968	7,221	6,050	8,016
NET IMPACT (*)	2,004	2,219	1,067	172	2,610	2,883	4,134	2,653
Population (000)	3,059	3,053	3,101	3,144	657	741	927	1,098

Overall, *the net fiscal impact of migrants per capita fell by more than a third between the 2006 and 2013 studies*. This decline was driven by total fiscal expenditure growing quicker than the migrant population (56% compared to 18% percent). This expenditure reflects rising health, education, superannuation and unemployment benefit payments, and modest growth in student allowance expenditure.

Figure 5.1 shows the change in migrants' net fiscal impact by their duration of residence, and compares this impact with the New Zealand-born population (see Technical Appendix Table 11 for the numerical estimates).

Figure 5.1 Per capita fiscal impact by duration of residency: 1998, 2002, 2006, 2013 ($pc)



The net fiscal impact of new, recent and established migrants fell between 2006 and 2013.

- For new migrants, per capita fiscal revenue and expenditure rose during this period but their net impact fell by 15%, from $3,121 to $2,667 per capita.
- For recent migrants, rising per capita fiscal revenue and expenditure resulted in their net impact falling by just 10%, from $4,044 to $3,623 per capita.

In our previous study in 2006, the largest proportional change came from the established migrant category, which had an 86% increase in their net fiscal impact, from $2,676 to $4,989. In 2013, the net impact of established migrants has fallen by 63%, from $4,989 to $1,828. This fall reflects per capita expenditure rising by 41% while per capita revenue remained at a similar level to 2006. At an item level, increasing health and superannuation expenditure drove the rise in per capita expenditure on established migrants.

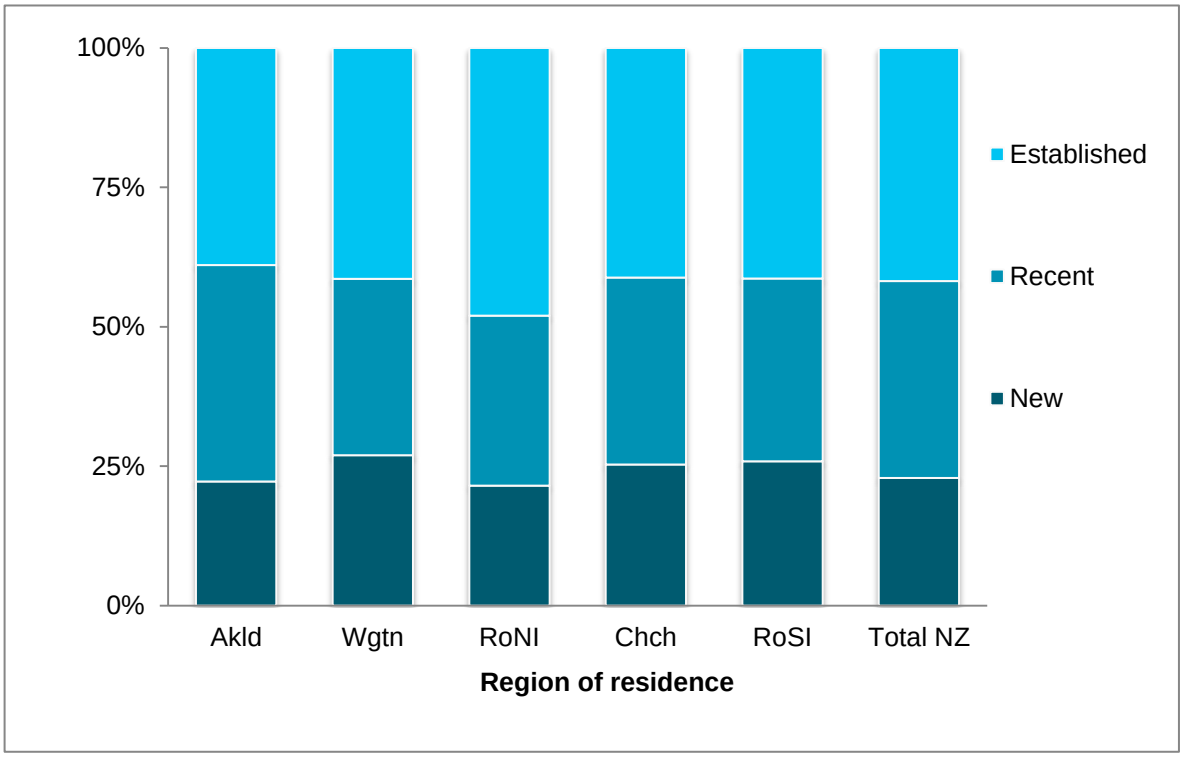
6 The fiscal impact of migrants by region of residence

This section focuses on the fiscal impact of migrants in five geographic regions: Auckland, Wellington, Christchurch, the Rest of the North Island, and the Rest of the South Island. It discusses regional differences in terms of how long migrants have been in New Zealand and their age, and how this impacts on government revenue and expenditure.

Most new migrants live in the urban and metropolitan areas of New Zealand. However, as the duration of their residency in New Zealand increases, new migrants begin to move to other parts of New Zealand. This means in the short-run, the fiscal impacts of new or recent migrants are greater in the urban and metropolitan areas than in the rest of New Zealand. However, in the long-run the overall fiscal impacts of migrants in the rest of the country mirrors those of the urban and metropolitan areas.

Figure 6.1 illustrates the distribution of migrants by the five geographic regions and the length of time they have been in New Zealand.

Figure 6.1 Duration of residency by region of residence 2013



n=1,040,508

In 2013, the Wellington and Christchurch regions had a higher percentage of new migrants, whereas the Auckland region had the highest percentage of recent migrants. More established migrants live throughout the Rest of the North Island rather than in the main centres.

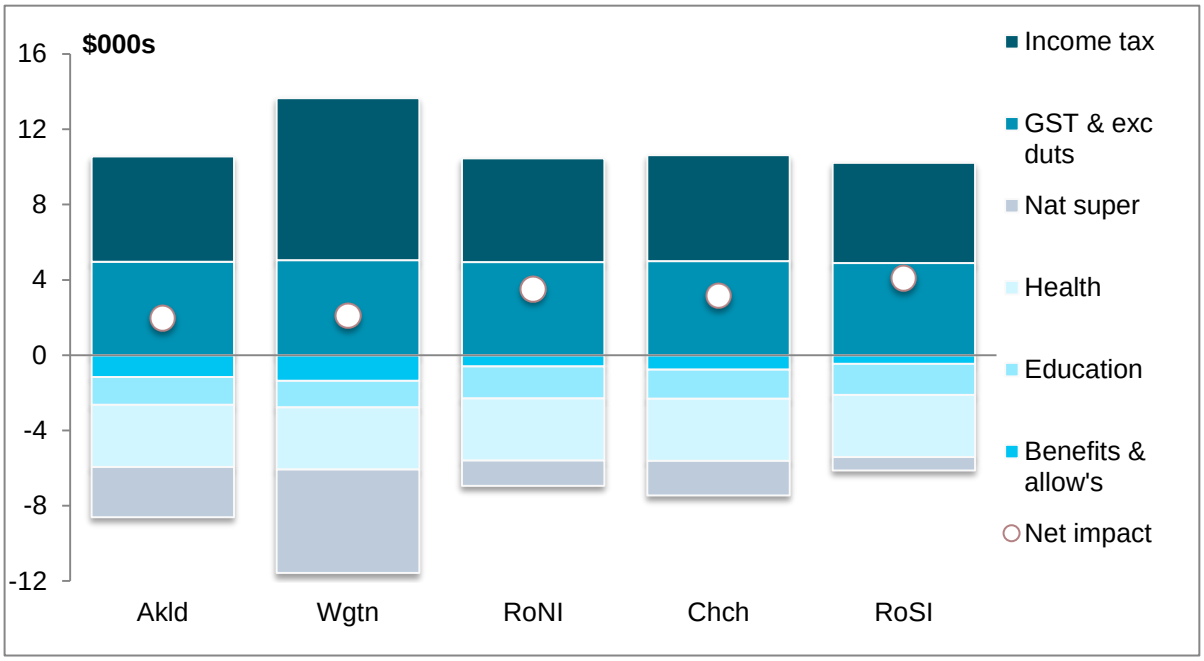
Figure 6.2 broadly illustrates the per capita impacts of migrants across government revenue and expenditure. On average, the GST and excise duties levels were similar across the nation at approximately $4,900 to $5,000 per head.

Overseas-born people living in Wellington had the largest impact on government expenditure, while Auckland based migrants had a similar impact on government expenditure as migrants in the remaining three areas of the

country. On the government revenue side, migrants from Auckland, Christchurch, Rest of the North Island and Rest of the South Island contributed similar per capita amounts, while those from Wellington contributed the most.

Approximately 40 percent of the migrant population in the Auckland region were recent migrants in 2013, while another 40 percent were established migrants. The net fiscal impact of the recent migrants was much higher than that of the established migrants, which was similar to that of new migrants. Established migrants on a per capita term provided both the highest government revenue and received the highest government expenditure of the three migrant groups. This resulted in the net fiscal impact of this group being similar to the new migrants, who provide the smallest revenue and the smallest expenditure per capita.

Figure 6.2 Per capita fiscal impacts of migrants 2013 ($pc)



In Auckland, migrants had lower incomes per capita than the New Zealand-born population, paying tax of $5,590, while the Auckland New Zealand-born population paid tax of $5,970 per capita. However, established migrants on average had much higher incomes than the New Zealand-born population and therefore paid more in income tax, at $7,010 per capita.

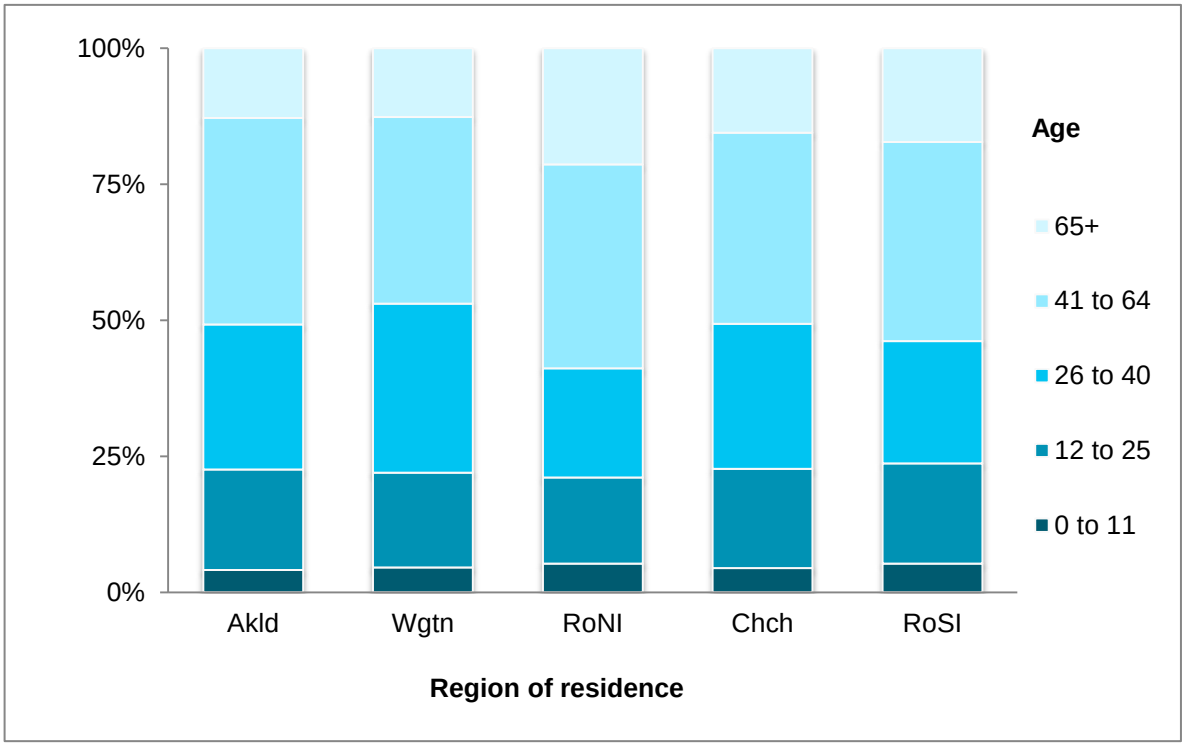
6.1 Migrants in the Auckland region

Between the 2006 and 2013 Census the population of the Auckland region grew by 30%, from an estimated 1,093,000 people to 1,418,000. This population growth was driven by migrants; the proportion of the population that were born overseas grew by 36% between 2006 and 2013, compared to a 26% increase in the New Zealand-born population living in Auckland. Approximately 40% of Auckland's residents in 2013 were migrants and the majority of all migrants in New Zealand lived in Auckland at that time, at 52%.

In 2013, over one-third (35 percent) of all migrants in the Auckland region were new migrants. This percentage has remained consistent since the 2001 Census of Population and Dwellings. However, the percentage of established migrants living in the Auckland region has continued to decline since 2001. This means migrants tend to move to other regions of New Zealand after staying in Auckland for between five and 15 years.

Figure 6.3 shows the age of migrants across the five geographic regions.

Figure 6.3 Age composition of migrants, five geographic regions, 2013



n=1,040,508

In the Auckland region, 38 percent of migrants were between the ages of 41 and 64; 27 percent were between 26 and 40 years old; and 18 percent were between 12 and 25 years old. Similar proportions can be seen for the Wellington and Christchurch regions, while the Rest of the North Island and the Rest of the South Island have larger proportions of migrants over the age of 65, at approximately 20 percent in this category.

Table 6.1 Fiscal impact of migrants in Auckland 2013 ($m)

NZ born	Overseas born total			Overseas born: yrs in NZ		
				less than 5	between 5 and 14	15 or more
	2012/13 $m					
	GOVERNMENT REVENUE					
5,075	Income tax	3,176		457	1,168	1,551
2,753	GST	2,275		430	839	1,007
640	Petrol, alcohol & tobacco excises	545		102	198	245
8,468	Income tax, GST & excises		5,996	988	2,205	2,803
	GOVERNMENT EXPENDITURE					
526	Early childhood educ	41		41	0	0
1,213	Prim'y & sec'y schools	411		146	244	21
533	Tertiary institutions	382		125	150	107
2,272	EDUCATION	834		313	394	128
2,647	HEALTH	1,873		304	517	1,052
1,914	NATIONAL SUPER	1,518		127	262	1,130
174	Unemployment benefit	103		14	54	35
929	Other main benefits	436		32	229	175
120	Supplementary benefits	30		3	16	11
1,222	WORK AND INCOME	568		48	299	221
104	STUDENT ALLOWANCES	95		19	49	27
8,159	Educ, Hlth, NS, Stdt allows, Befits		4,888	811	1,521	2,557
309	NET IMPACT (*)		1,108	178	685	246

* The Net Impact refers to the revenue and expenditure categories explicitly identified in the table only.

As shown in Table 6.1, migrants in the Auckland region had a positive net fiscal impact of $1,108 million. This is a decrease from $1,448 million recorded in our 2006 study. This net fiscal impact includes $5,996 million in revenue and $4,888 million in expenditure.

- The New Zealand-born Auckland residents contributed a net impact of $309 million, which comprised $8,468 million in revenue and $8,159 million in expenditure.

New migrants bought slightly less petrol, alcohol and tobacco, so the excise taxes they paid were about 49% and 58% less than those paid by recent and established migrants. In total, the Government gained revenue of $988 million from these migrants in the year ending June 2013.

Established migrants contributed $1,551 million in income taxes, which was significantly higher than new and recent migrants, at $457 million and $1,168 million respectively. Established migrants also added more in terms of GST ($1,007 million), compared to new migrants ($430 million) and recent migrants ($839 million).

On the government expenditure side, new and recent migrants drew more heavily on primary and secondary education than established migrants. But apart from Education and Work and Income benefits, established migrants received more government expenditure.

Overall, in the Auckland region, government expenditure on the established migrants was significantly higher than that on the other two categories. This expenditure occurred in the context of a higher contribution to government revenue by established migrants.

The detailed per capita estimates for migrants in the Auckland region are provided in Technical Appendix Table 31 and Technical Appendix Table 32.

6.2 Migrants in the Wellington region

In 2013, approximately 60,672 migrants lived in the Wellington region.[7] The net fiscal impact of these migrants in the year to June 2013 was $126 million, down from the $502 million recorded in 2006. Total government revenue from migrants in the Wellington region was $828 million, while total government expenditure was $702 million.

On a per capita basis, the net fiscal impact of migrants residing in the Wellington Region was $2,080 in the year to June 2013. For new migrants, this per capita net fiscal impact was $3,055, for recent migrants the impact was $2,875, and for established migrants the impact was $838. It should be noted that the higher contribution of established migrants to tax revenues was balanced somewhat by their much higher impact on New Zealand Superannuation payments.

However, on the expenditure side the older age profile of this migrant sub-group is apparent in spending on health and New Zealand Superannuation. For example, government expenditure on New Zealand Superannuation and health care for migrants in the Wellington region was 76 percent of all migrant expenditure, compared to 69 percent in Auckland and Christchurch.

The Wellington region continued to have higher average incomes in 2013, compared to 2006. And this impacted favourably on the net fiscal impact of migrants. As such, the per capita income tax contribution from migrants in this region at $8,605 was larger than the rest of New Zealand. In addition, a lower proportion of recent migrants lived in the Wellington region than nationally in 2013, 32 percent compared to 35 percent.

6.3 Migrants in the Christchurch region

In 2013, approximately 78,387 migrants lived in the Christchurch region. The net fiscal impact of these migrants in the year to June 2013 was $248 million. Total government revenue from migrants in this region was $833 million, while total government expenditure was $585 million.

Migrants in the Christchurch region contributed the least towards income tax, at $441 million in the year to June 2013. However, it has one of the highest income tax paid per capita by migrants. In the Christchurch region, migrants paid $5,621 per capita in income tax, slightly above that of the Auckland region.

Approximately 25 percent of the migrants in the Christchurch region in 2013 were new migrants, 33 percent were recent migrants, and 41 percent were established migrants. A similar proportion of new migrants lived in the Christchurch region as the Auckland region, but the percentage of established migrants in this region was slightly lower than the national average.

Established migrants in the Christchurch region contributed $402 million towards fiscal revenue in the year to June 2013.

[7] For the purposes of this study the Wellington Region refers to the four cities in that area i.e. Wellington, Lower Hutt, Upper Hutt and Porirua.

6.4 Migrants living in the Rest of New Zealand

Migrants who lived in the Rest of the North Island had a net fiscal impact of $985 million in the year to June 2013. This impact was influenced by the larger number of migrants living in the Rest of the North Island compared to the Rest of the South Island; 281,000 migrants compared to 109,000 migrants. For those migrants living in the Rest of the South Island the net fiscal impact was $446 million.

On a per capita basis however, the smaller population in the Rest of South Island region is a positive. The per capita contribution of migrants to income tax revenue in the Rest of the South Island was $4,080 in 2013, compared to $3,499 from migrants in the Rest of the North Island.

In terms of age, the majority of migrants who lived outside of the main centres were aged 41 or older. For example, 37 percent of migrants were aged between 41 and 64 years old in both regions, while 21 percent of migrants were over 65 in the Rest of the North Island and 17 percent of migrants were in this age group in the Rest of the South Island. The national average in terms of age of migrants was 37 percent were aged between 41 and 64 years old in 2013, and 16 percent of migrants were over 65.

6.5 Summary

The fiscal impact of migrants living in the Auckland region dominated the overall fiscal impact of migrants in 2013. This is because 52 percent of all migrants lived in this region and a relatively large proportion of these migrants were new or recent migrants (61 percent). In the short run, these features make the Auckland region an important part of the overall impact of migrants on the New Zealand economy.

The net fiscal impact was positive across all five New Zealand regions and across all three categories of new, recent and established migrants. Although regional differences exist, the gap has narrowed in the last seven years particularly with more new or recent migrants living in the South Island.

7 The Labour Force Status of the migrant population

This section examines the labour force characteristics of New Zealand working age migrants (aged 15 years plus).[8] This section analyses six different labour force groups, according to a migrant's region of residence, region of birth and length of residence in New Zealand. The discussion also makes comparisons with the New Zealand-born population.

Table 7.1 lists the Labour Force Status variables that are examined and the measures of interest. Section 11.2 further defines these variables.

Table 7.1 Labour force status measures

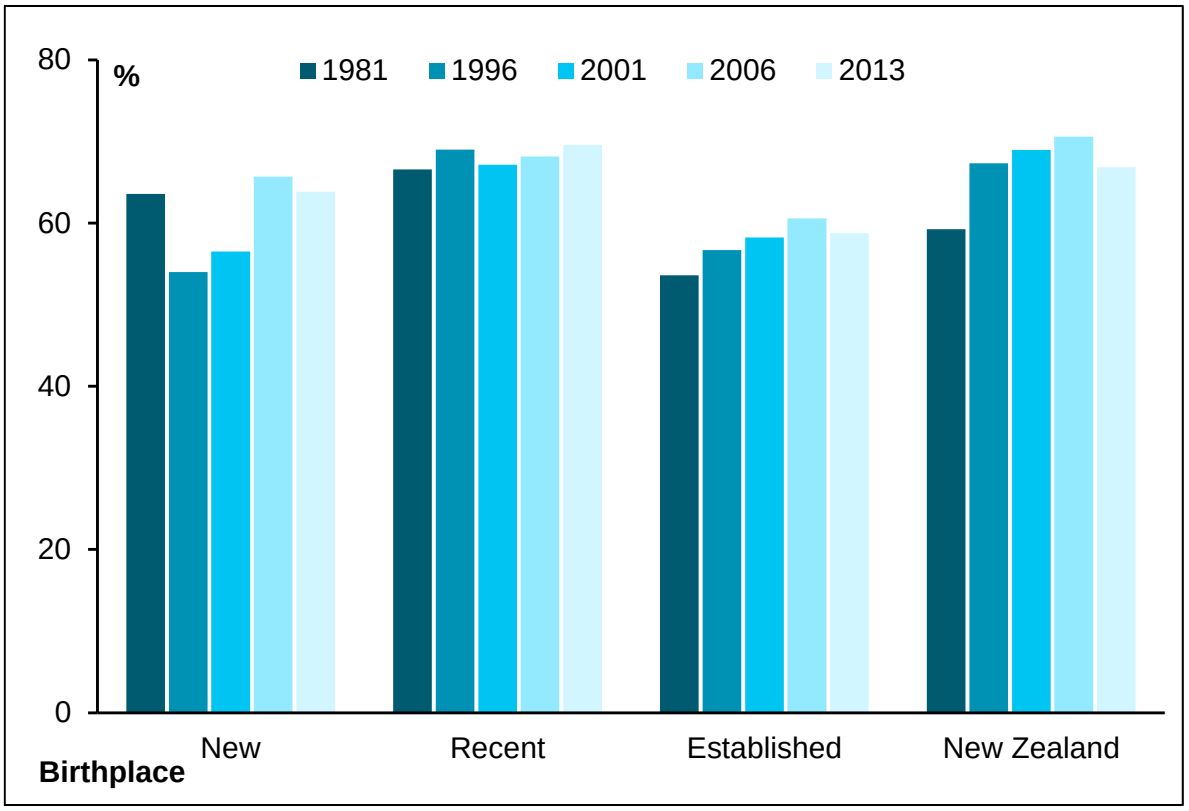
Outcome	Variable	Migrant characteristic(s)	Measure
Labour force status	Participation rate (LFPR)	Where born	LFPR of group / LFPR of New Zealand born
	Self-employed		% of group self-employed / % of New Zealand born self-employed
	Employers		% of group employers / % of New Zealand born employers
Labour force status	Participation rate (LFPR)	Where born by years in New Zealand	LFPR of group / LFPR of New Zealand born
	Self-employed		% of group self-employed / % of New Zealand born self-employed
	Employers		% of group employers / % of New Zealand born employers

[8] This includes everyone aged 65 and over. Working Age is defined as everyone aged 15 years or older.

7.1 Labour force participation rate

According to Census data, the labour force participation rate of the New Zealand-born population increased from 59 percent in 1981, to 67 percent in 1996, 69 percent in 2001, 71 percent in 2006, and 67 percent in 2013. Comparable figures for the migrant population indicate that their labour force participation rate in 1981 was 59 percent, 59 percent in 1996, 60 percent in 2001, 64 percent in 2006, and 63 percent in 2013. These comparisons are depicted in Figure 7.1.

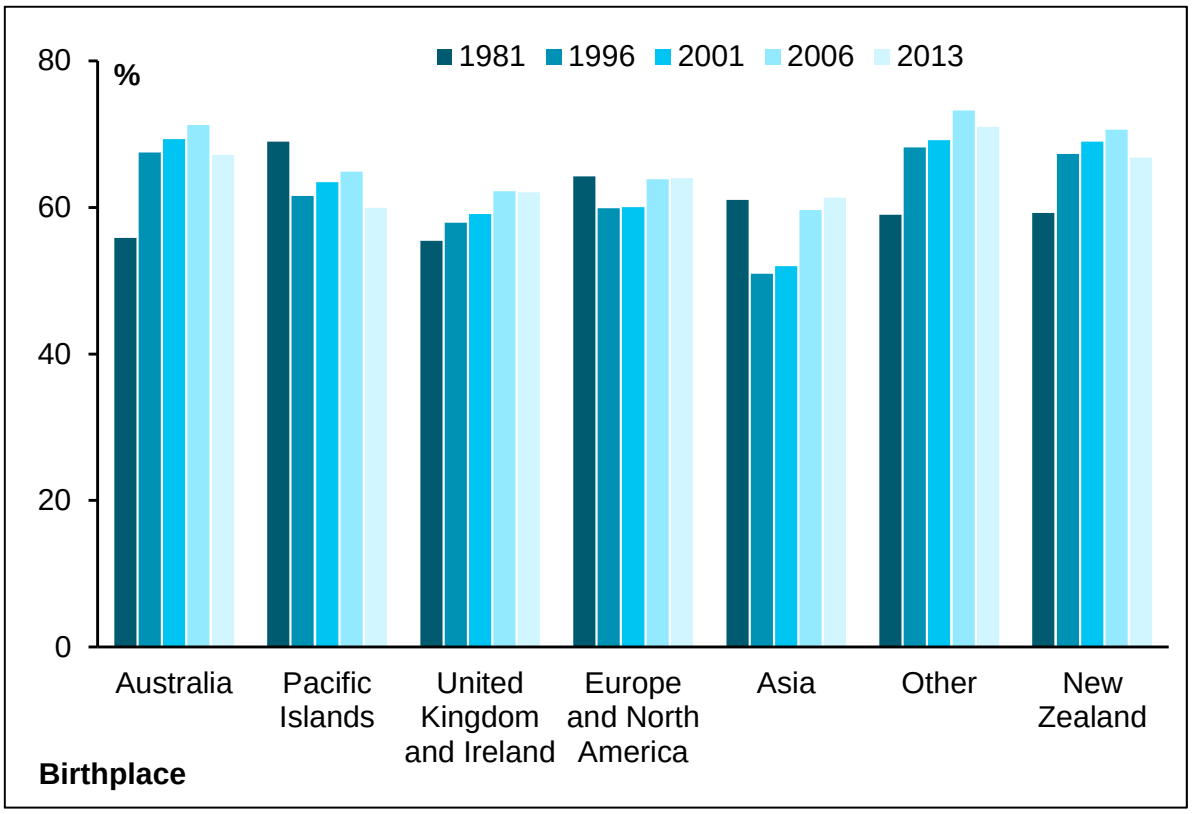
Figure 7.1 Labour force participation rates, migrants and New Zealand-born population, 1981-2013



The increase in the labour force participation rate of the New Zealand-born population between 1981 and 1996 was not experienced by migrants. Instead, there was a reduction in the labour force participation rates of migrants born in Asia, Europe and North American, and the Pacific Islands.

By migrant groups, those who were recent migrants had similar labour market outcomes as the New Zealand-born population. Conversely, the labour force participation rates of new and established migrants were below those of the New Zealand-born population during this period from 1981 to 2013 – with the exception of the new migrants group in the 1981 snapshot year.

Figure 7.2 Participation rate for migrant groups by years of residence in New Zealand



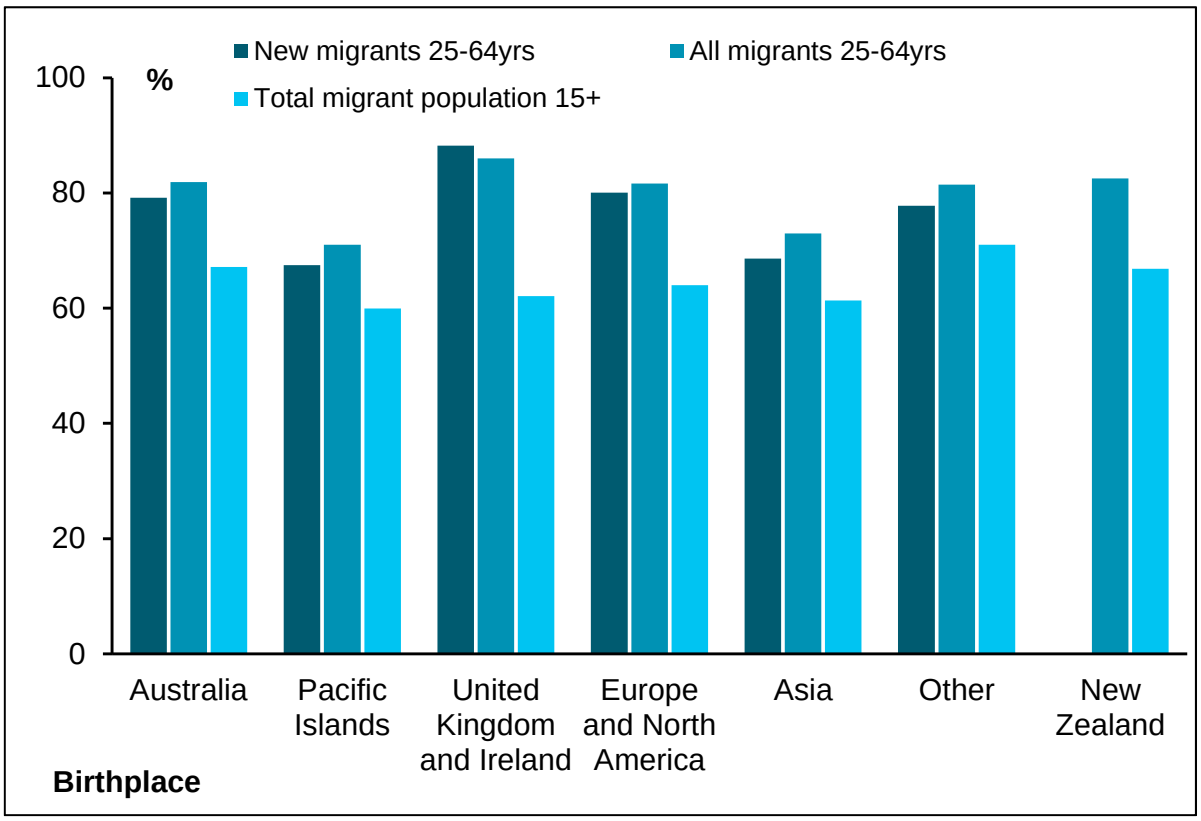
Taken together with the earlier analysis, these observations of labour force participation suggest the differences in labour market outcomes between migrant and New Zealand-born groups are not fully explained by length of residence. This is confirmed in our analysis in sub-section 7.1.1 below, which suggests that age, birth place and qualifications are also all significant factors in determining labour force participation.

7.1.1 The labour force participation rates of 25 to 64 year olds

Figure 7.3 shows the labour force participation rates for new migrants aged between 25 and 65, all migrants aged between 25 and 65, including new migrants, and all migrants aged 15 and over. The figure indicates that labour force participation rates amongst migrants aged between 25 and 65 are broadly comparable between regions of birth. The exceptions to this are the lower participation rates of migrants born in the Pacific Islands and Asia.

Some of the reasons behind this lower participation rate of migrants born in the Pacific Island may be their level of qualification. As discussed in more detail in section 8, Pacific Island migrants have much higher proportion of their migrant population with no qualifications. For the migrant population from Asia, the high participation in study, as discussed in section 10 could be restricting the number of people able to be employed. Many international students may not be eligible to work or may choose not to work and concentrate on their studies.

Figure 7.3 Labour force participation rate, migrants by region of birth



As expected, the labour force participation rates of people in the 25 to 64 year old age group are noticeably higher than that of the overall population. 78 percent of all migrants in this age group are participating in the labour force, compared to 63 percent of migrants aged 15 and over.

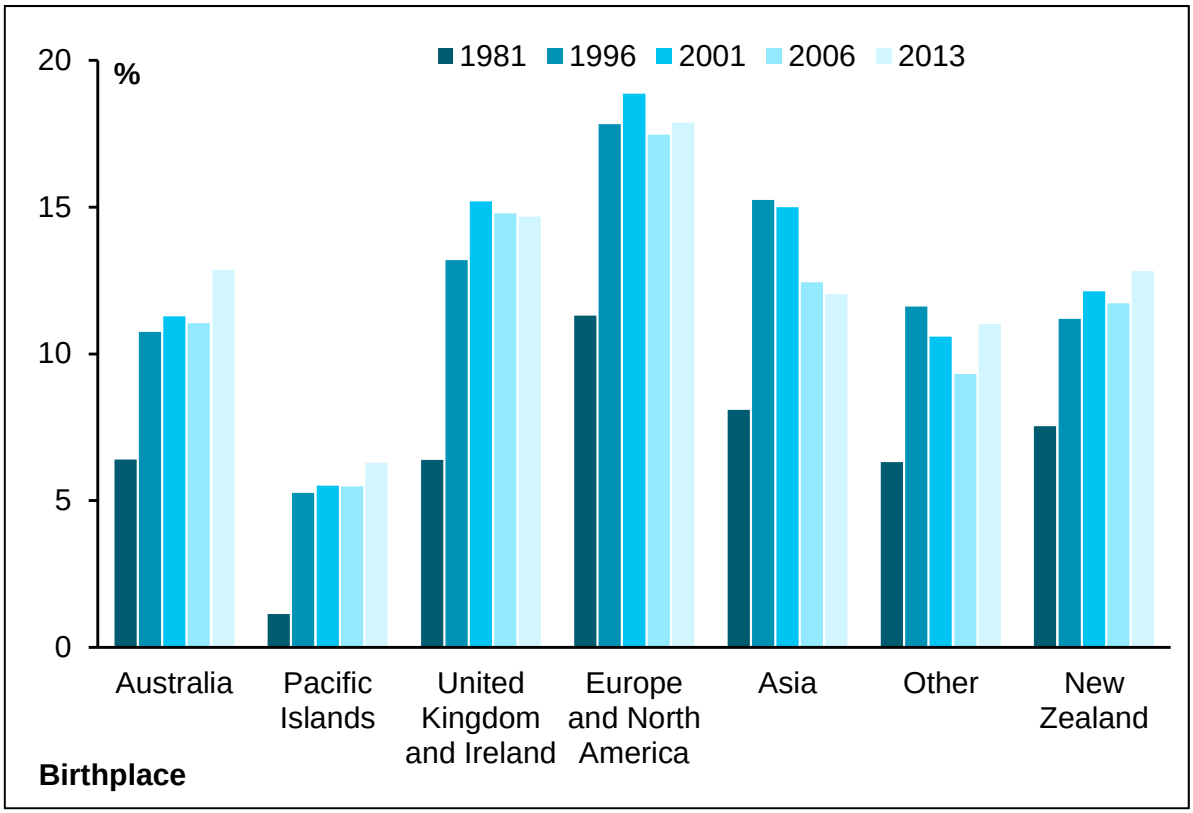
Also, as expected, new migrants in the 25 to 64 year old age group have a lower labour force participation rate than the overall rate for migrants. This shows that the labour force participation for recent and established migrants is higher. The exception to this is migrants from the UK and Ireland; new migrants aged 25 to 64 from this region have a higher labour force participation rate than their overall population aged 25 to 64. With a labour force participation rate of 88 percent in 2013, compared to 86 percent for all migrants aged 25 to 64.

7.2 Prevalence of self-employed

Of those employed in 2013, 12.8 percent of the New Zealand-born population were self-employed. This proportion has risen from 11.7 percent in 2006 and 12.1 percent in 2001.

As depicted in Figure 7.4, this pattern of increase in self-employment over the 1981 to 2001 period followed by a decline in 2006, and rise in 2013, is mirrored across almost all migration birthplace groups. The exception is the fall in proportion recorded between 2001 and 2013 in the Asian-born group.

Figure 7.4 Proportion of employed in population group who are self-employed



An additional observation is that for all birthplace groups except the Pacific Island-born population, the overall rate of self-employment is at least on a par, if not above, the relevant New Zealand-born figure. Incorporating the years in New Zealand dimension into this analysis, suggests the established migrant group have notably higher prevalence of self-employment than the New Zealand-born group. In 2013, for example, 16.1 percent of employed established migrants were self-employed – compared with the 12.8 percent figure for those born in New Zealand. Except for the Pacific Island-born group, this proportion ranged from 13.5 percent for the Australian-born to 22 percent for established migrants born in Europe and North America.

Conversely, the prevalence of self-employment amongst new migrants is lower than the New Zealand-figure, with 5.9 percent of self-employed. Here the lower incidence holds for all birthplace groups.

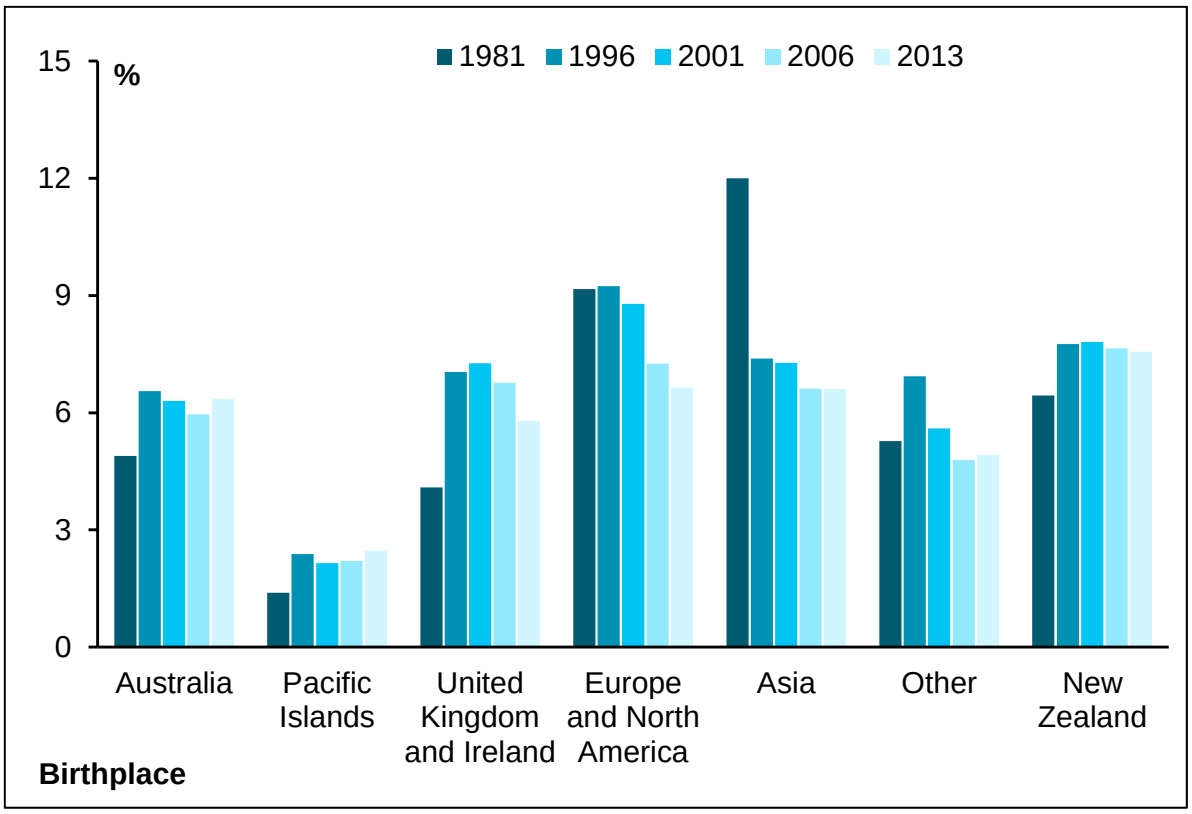
7.3 Prevalence of employers

In 2013 and 2006, migrants were less likely to be employers than the New Zealand-born population. In 2013, just two percent of recent migrants were employers, with the highest proportion recent migrants from Australia, at 2.8 percent.

Amongst established migrants, the proportion of employers is noticeably higher for migrants from Asia, Europe and North America, and the UK and Ireland. However, for established migrants born in Australia and the Pacific Islands, the proportions who were employers remained below that of the New Zealand-born average.

As depicted in Figure 7.5, of those employed in 2013, 7.6 percent of the New Zealand-born population were employers. This is the same proportion as 2006, but slightly down from the 7.8 percent recorded in 1996 and 2001, but higher than the 6.2 percent recorded in 1981.

Figure 7.5 Proportion of employed in population groups who are employers



7.4 Labour force status summary

As shown in Figure 7.2 participation rate outcomes for new and established migrant groups appear to be noticeably lower than those for the New Zealand-born population. For established migrants it is possible that the difference is due to differences in retirement, with established migrants from UK, Ireland, Europe and North America having large proportions of their population aged 65 and over. Recent migrant population groups in 2013 and in previous years have a similar participation rate to the New Zealand-born population.

The prevalence of self-employed is relatively similar for migrant groups, compared to the New Zealand-born population. The Europe and North American migrant group is a particularly noticeable feature in this observation. Furthermore, this migrant group also leads in the prevalence of employers. Other migrant groups, however, feature less so in this measure.

8 Qualifications and the migrant population

There are varying levels of qualification achievement, which can impact on labour market outcomes. We investigate these, differentiating according to migrant characteristics as noted in Table 8.1. Section 11.2 further defines these qualification variables.

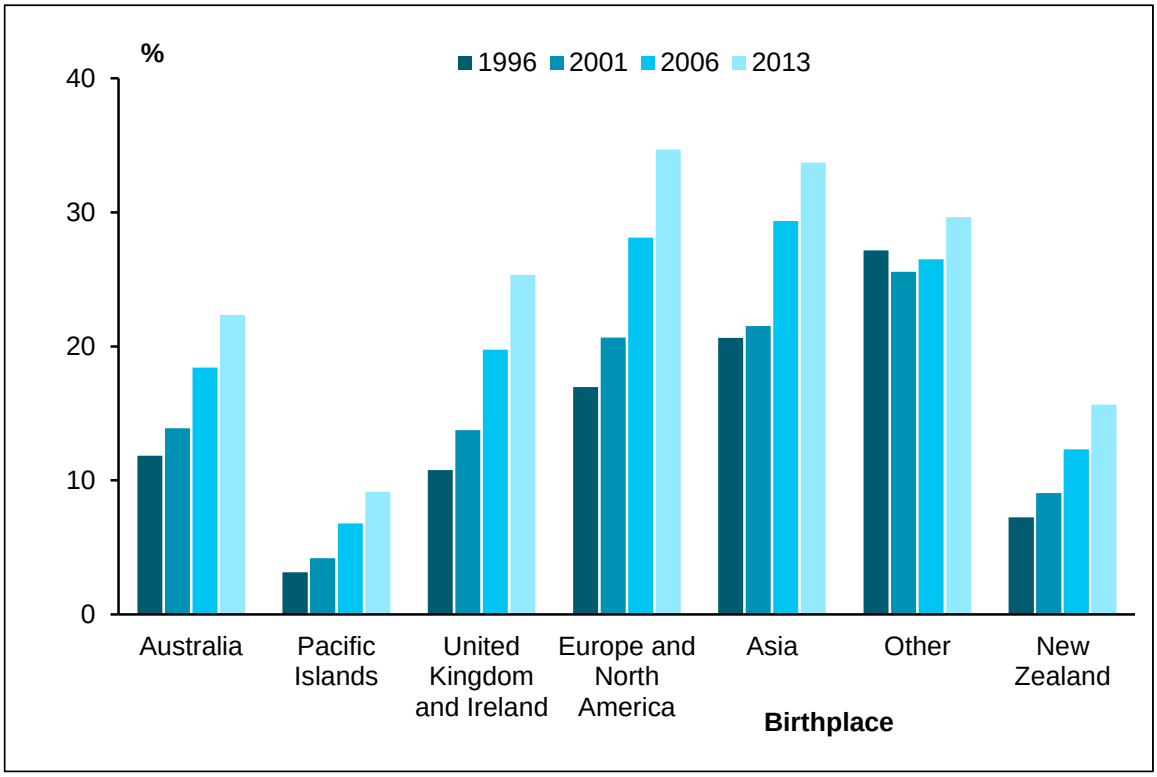
Table 8.1 Qualification measures

Outcome	Variable	Migrant characteristic(s)	Measure
Qualification	No Qualification	Where born	% of group NQ / % of New Zealand born NQ
	Vocational Qualification		% of group VQ / % of New Zealand born VQ
	Degree Qualification		% of group DQ / % of New Zealand born DQ
Qualification	No Qualification	Where born by years in New Zealand	% of group NQ / % of New Zealand born NQ
	Vocational Qualification		% of group VQ / % of New Zealand born VQ
	Degree Qualification		% of group DQ / % of New Zealand born DQ

8.1 Degree qualifications

According to the Census data, the proportion of the New Zealand-born working age population with a degree qualification increased from 7 percent in 1996 to 9 percent in 2001, 12 percent in 2006 and 16 percent in 2013. Comparable figures for the overseas born population group were 13 percent, 15 percent, 22 percent and 27 percent. These comparisons are depicted in Figure 8.1.

Figure 8.1 Proportion of population group with degree qualification in working age population



In essence, the noticeable rise in the proportion of degree qualified in the New Zealand-born working age population over the 1996 to 2013 period has been reflected in the overseas-born population, with the exception of those from the 'Other' region where the proportion of degree qualified has remained stable across the four time periods at around 27 percent.

Of further note, incorporating the years in New Zealand dimension here shows that as the length of stay in New Zealand increases the proportion of the population holding a degree qualification decreases. Overall 32 percent of new migrants have a degree qualification, 31 percent of recent migrants have a degree, but only 23 percent of established migrants have a degree. This is most likely due to the age composition of established migrants and the importance of a degree qualification to gaining employment affecting many of those seeking employment rather than those with established employment.

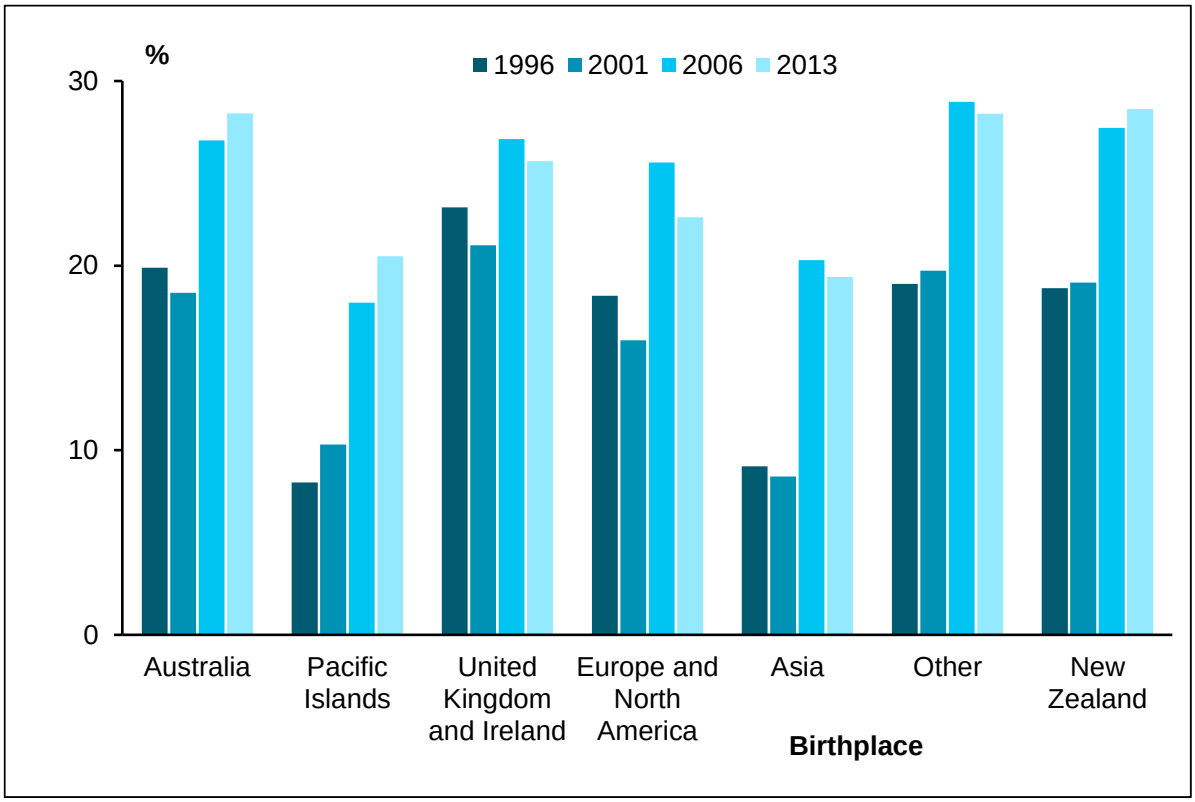
Adding a labour force component to the analysis shows that 82 percent of New Zealand-born with a degree are employed, overseas born with degrees have a similar proportion employed, with the exception of those from Asia where 74 percent are employed. The proportion of migrants and New Zealand-born with degree qualification has increased from 2001, but is at a similar level to 2006.

For migrants from Asia with a degree qualification, the lower proportion employed means that there is a higher proportion than other regions of people not in the labour force. Migrants from Asia as shown in section 10 have a higher proportion involved in study. It is therefore possible that the difference in employment rates is coming from students with a degree qualifications seeking even higher qualifications.

8.2 Vocational qualifications

According to the Census data, the proportion of the New Zealand-born working age population with a vocational qualification increased from 19 percent in 1996 and 2001, to 27 percent in 2006 and 28 percent in 2013. Comparable figures for the overseas born population group were 17 percent, 15 percent, 24 percent and 23 percent. These comparisons are depicted in Figure 8.2.

Figure 8.2 Proportion of population group with vocational qualification in working age population



In essence, the noticeable jump in the proportion of vocational qualified in the New Zealand-born working age population over the 2001 to 2006 period has been reflected in the overseas-born population. According to Statistics New Zealand this jump is partly due to the inclusion of the example of a trade certificate on the 2006 Census questionnaire, which saw substantial increase in level four and level five vocational qualifications between 2001 and 2006. At the same time there was a natural increase in the number of people undertaking and completing trade qualifications since 2001.

Apart from migrants from the Pacific Islands and Asia, the remaining groups in 2013 have a similar proportion of their working age population holding vocational qualifications.

Incorporating the years in New Zealand dimension here, shows that as the length of stay in New Zealand increases, the proportion of the population holding a vocational qualification increases, except for migrants from the Pacific Island and Asia. Overall 20 percent of new migrants have a vocational qualification, 25 percent of recent migrants have a vocational qualification, and 24 percent of established migrants have a vocational qualification. For established migrants the proportion with a vocational qualification is influenced by the lower proportion of migrants from Pacific Island (18 percent) and Asia (17 percent).

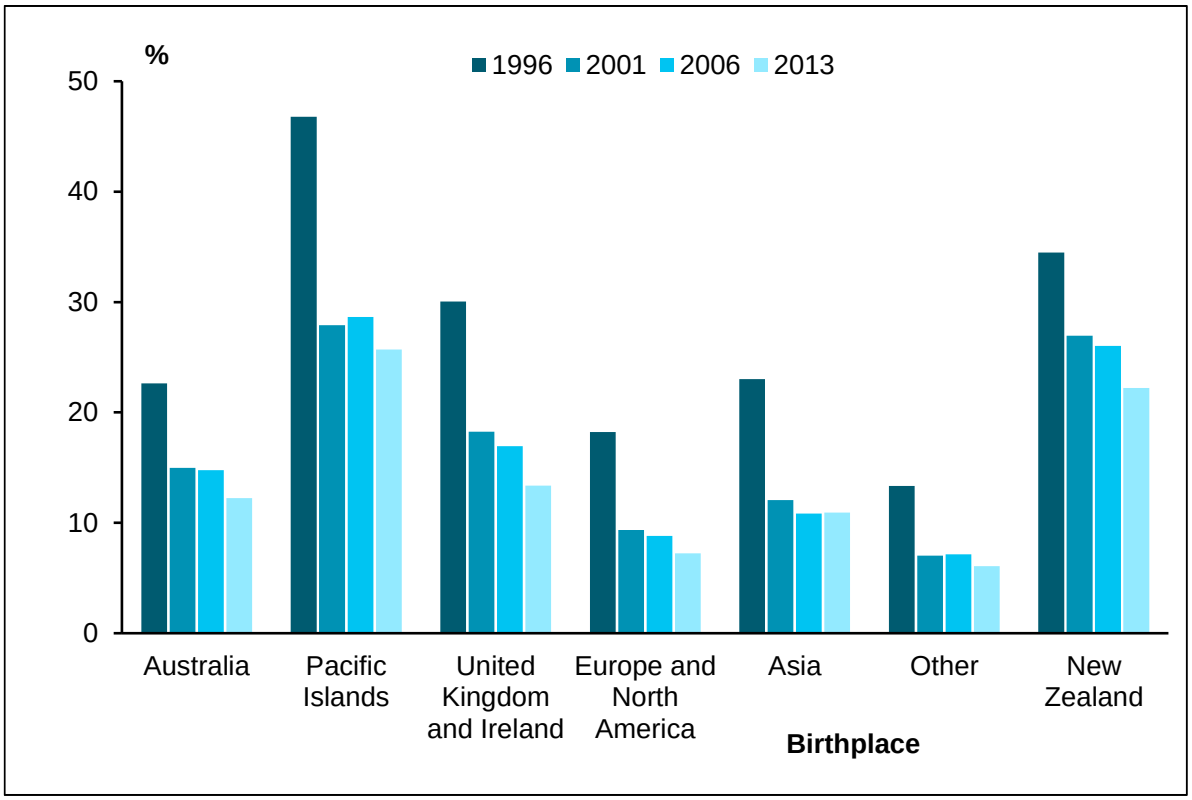
Established migrants from Australia, UK and Ireland, Europe and North America and Other, all have much higher rates of vocational qualification then new migrants from these regions (28 percent for established migrants and 20 percent for new migrants). Adding a labour force component to the analysis shows that 72 percent of working age New Zealand-born with a vocational qualification are employed.

Overseas born with vocational qualifications have a similar proportion employed, with the exception of those from Asia where 62 percent are employed, and those from Europe and North America with 64 percent. For migrants from Europe and North America this is due to the large number of established migrants with a vocational qualification who are no longer part of the labour force. Given the age composition of the Europe and North America migrants group, as noted in section 3.4.2, it is likely many of these migrants who are no longer in the labour force have retired.

8.3 No qualifications

According to the Census data, the proportion of the New Zealand-born working age population with no qualification decreased from 34 percent in 1996 to 27 percent in 2001, to 26 percent in 2006, to 22 percent in 2013. Comparable figures for the overseas born population group were 35 percent, 27 percent, 26 percent and 22 percent. These comparisons are depicted in Figure 8.3.

Figure 8.3 Proportion of population group with no qualification in working age population



As depicted in Figure 8.3, the New Zealand-born population had the highest proportions of those in the working age population with no qualification, apart from migrants from the Pacific Islands. While the overall overseas born population shared a similar proportion of people with no qualification, most groups had a lower proportion than the New Zealand-born population.

Incorporating the years in New Zealand dimension here, shows that as the length of stay in New Zealand increases the proportion of the population with no qualification increases. Overall 8 percent of new migrants have no qualification, 9 percent of recent migrants have no qualification, and 18 percent of established migrants have no qualification.

Adding a labour force component to the analysis shows that 49 percent of New Zealand-born working age population with a no qualifications, are not in the labour force. The overseas born working age with no qualifications have a slightly higher proportion of not in the labour force. Working age migrants from Europe and North America who have no qualifications have the highest proportion of people not in the labour force, with 68 percent.

8.4 Qualification summary

Overall both migrants and New Zealand-born have seen the proportion of the working age population with degree qualifications rise since 1996, though migrants over that time have and continue to have higher proportions of their working age population with degree qualifications compared to New Zealand-born.

9 Migrants and occupations

This section examines the occupations of working-aged migrants (that is all migrants aged 15 years and older).[9] This section analyses nine different occupation groups, according to a migrant's region of residence, region of birth and length of residence in New Zealand. The discussion also makes comparisons with the New Zealand-born population.

9.1 Overview

In 2013, 564,000 migrants were in the labour force and employed. This figure excludes those who were either unemployed or not in the labour force, which totalled 388,000.

- The largest proportion of migrants were employed as professionals in 2013, at approximately 25 percent.
- A further 16 percent of migrants were employed as managers, and 12 percent were employed as technicians or trades workers.
- Four percent of migrants were employed as machinery operators and drivers, compared to 6 percent of the New Zealand-born population.
- This analysis excludes those migrants who listed no occupation on their Census form.

As a comparator, in 2013 the three largest occupations among the New Zealand-born population were professionals (20 percent), managers (18 percent) and clerical and administrative workers (12 percent).

Table 9.1 Occupation summary, 2013

NZ born	Overseas born total		Overseas born: years in NZ		
			less than 5	between 5 and 14	15 or more
	Occupation (000)				
266	Managers	90	15	33	42
286	Professionals	141	26	52	62
163	Technicians and Trades Workers	65	14	25	26
122	Community and Personal Service Workers	49	13	18	19
171	Clerical and Administrative Workers	57	8	22	27
128	Sales Workers	49	10	20	18
79	Machinery Operators and Drivers	24	3	9	12
158	Labourers	53	14	18	21
64	Not Elsewhere Included	36	8	12	16
824	No occupation (*)	388	79	115	194
2,260	Total	952	191	324	437

*unemployed or not in the labour force

In terms of length of residence in New Zealand, there were slightly fewer new migrants employed as managers (13 percent), compared to the average for all migrants (18 percent). And more new migrants employed as labourers (12 percent compared to the average for all migrants at 9 percent). Recent and established migrants had the same occupational mix as the average, with the exception of a smaller percent of established migrants working as labourers and sales workers.

[9] This includes everyone aged 65 and over, so that we can include all workers aged 65 and over, who are still working.

While the New Zealand-born population had twice as many number of people unemployed or not in the labour force as overseas migrants. As proportion of people of the working age population, New Zealand-born had the lowest proportion of people unemployed or not in the labour force (36 percent). The equivalent proportion for the new migrant category was 41 percent. This rate dropped for recent migrants to 35 percent, before rising to 44 percent for established migrants. The higher rate for the latter category is likely to reflect the older age profile of this group rather than a lower propensity for employment amongst the conventional working age cohort in this population.

9.2 Occupation groups

In this subsection we discuss the proportion of migrants employed in professional, managerial and trades worker occupations.[10] We distinguish between migrant groups by birthplace, their years of residence in New Zealand and their qualifications, as noted in Table 9.2. Section 11.2 further defines these occupation variables.

Table 9.2 Occupation measures by migrant group

Outcome	Variable	Migrant characteristic(s)	Measure
Occupation	Professionals & managers	Where born	% of group profs / % of New Zealand born profs
	Trade workers		% of group trade / % of New Zealand born trade
Occupation	Professionals & managers	Where born by years in New Zealand	% of group profs / % of New Zealand born profs
	Trade workers		% of group trade / % of New Zealand born trade

9.2.1 Professional and managerial occupations

Between 1996 and 2013, the number of migrants employed in professional and managerial positions increased. For example, 17 percent of migrants were employed in professional and managerial positions in 2001, 20 percent in 2006 and this proportion has grown to 24 percent in 2013. In contrast, the proportion of people who are New Zealand-born and employed in professional and managerial occupations increased from 16 percent in 2001, to 19 percent in 2006, and 22 percent in 2013.

[10] Trade workers are a subset of the technicians and trade workers occupation group.

Figure 9.1 Migrants in professional and managerial occupations, by birthplace, 1996-2013

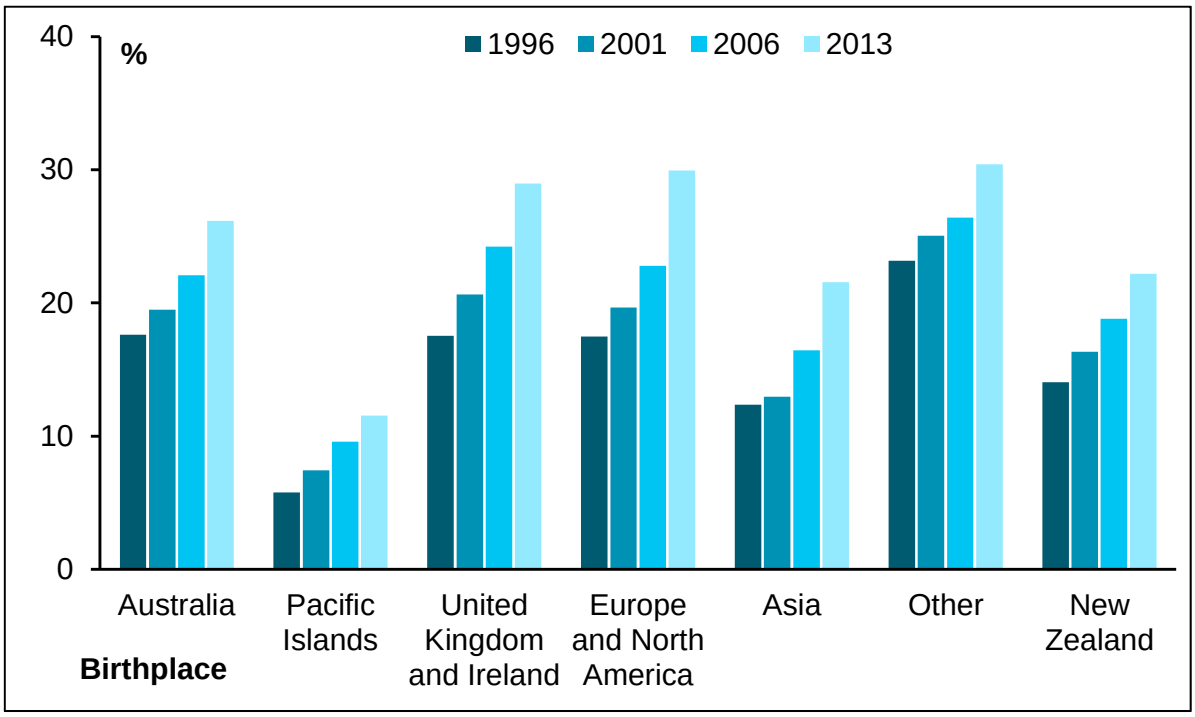


Figure 9.1 illustrates this growth in employment by migrant birthplaces. The proportions are broadly comparable with the employment of the New Zealand-born population in these roles. The exception to this observation is migrants born in the Pacific Islands.

- 38 percent of recent migrants from the UK and Ireland born were employed in professional or managerial positions in 2013; 35 percent of recent migrants from Europe and North America; 27 percent of recent migrants from Australia, and 24 percent from Asia.
- 12 percent of recent migrants from the Pacific Islands were employed in professional or managerial positions in 2013. Adjusting for years of residency in New Zealand, 14 percent of established migrants from the Pacific Islands were in professional and managerial occupations in 2013, compared to 7 percent of new migrants.

9.2.2 Trades workers[11]

The 1996 to 2013 period has seen an across-the-board increase in the proportion of migrants employed in trade occupations, from 4.6 percent in 1996 to 5.7 percent in 2013. In comparison, the proportion of the New Zealand-born population that were employed in trade occupations increased from 5.8 percent in 1996 to 6.2 percent in 2013.

Figure 9.2 shows the comparable proportions for all migrant groups by birthplace with the New Zealand-born figures for all four Census years. The largest increase in the proportion of trade workers, between 2006 and 2013 has come from migrants from Asia which saw its proportion of people employed as trade workers jump from 2.5 percent to 5.7 percent. This large jump in the proportion of migrants from Asia employed as trade workers has come from a tripling of the total number of people from this migrant group employed as trade workers.

[11] For this analysis trade workers for each Census year have been separated out of the technicians and trade workers occupation group

Figure 9.2 Proportion of earlier migrants in trades occupations

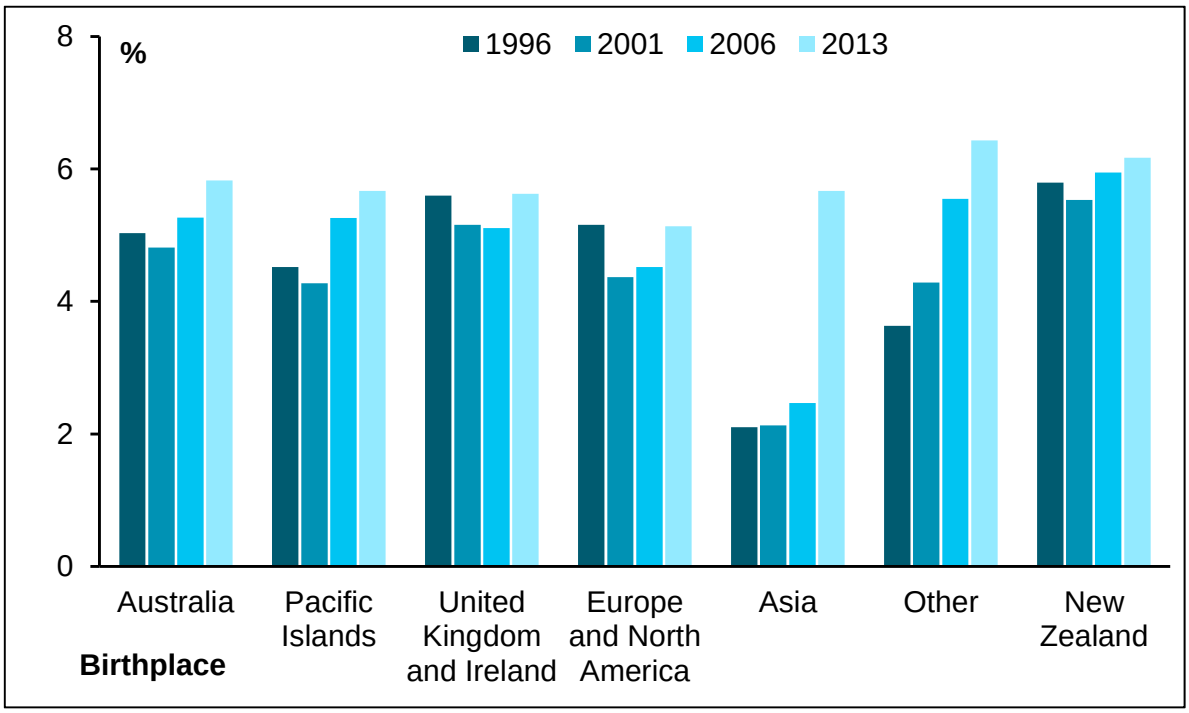


Figure 9.2 shows that the proportion of trade workers for most migrants groups dropped between 1996 and 2001, which was in line with the decline seen for the New Zealand-born. The only exceptions being those migrants from Asia or from 'Other' regions. Since 2001, the proportion of trade workers for each group of migrants has increased to 2006 and again to 2013. With the only exception being those migrants from the UK and Ireland which saw a decline between 2001 and 2006.

Incorporating the years in New Zealand dimension into this analysis, shows that a slightly higher proportion of new and recent migrants were employed in trade occupations in 2013 compared to established migrants (6.2 percent and 6.4 percent respectively, compared to five percent for established migrants).

9.3 Occupation by region of birth

Table 9.3 gives the proportion of people reporting a particular occupation by region of birth.

Table 9.3 Occupation by region of birth 2013 (%)

NZ born	Overseas born total		Overseas born : region of birth							
			Australia	Pacific Islands	The United Kingdom and Ireland	Europe and North America	Asia	Other	Not specified
	Occupation %								
18	Managers	16	18	8	20	18	16	17	10
20	Professionals	25	25	13	30	33	23	30	11
11	Technicians and Trades Workers	12	11	12	11	10	12	12	11
8	Community and Personal Service Workers	9	9	10	8	9	9	8	8
12	Clerical and Administrative Workers	10	12	9	12	9	9	11	6
9	Sales Workers	9	9	8	7	6	11	8	6
6	Machinery Operators and Drivers	4	4	11	3	2	4	3	6
11	Labourers	9	8	18	6	6	11	6	14
4	Not Elsewhere Included	6	4	10	4	6	6	4	28
100	Total	100	100	100	100	100	100	100	100

In 2013, there were almost 50,000 Australian-born migrants in New Zealand aged over 15 years old. Of this number, 64 percent were employed and 36 percent were either unemployed or not in the labour force.

The majority of Australian-born migrants worked as professionals (25 percent), managers (18 percent), and clerical and administrative workers (12 percent). Another 12 percent of Australian-born migrants worked as labourers or as machinery operators or drivers.

Approximately 55 percent of Pacific Island-born migrants were in the labour force in 2013. Labourers were the largest occupation of this group of migrants, at 18 percent of the migrant workforce. Approximately 13 percent of migrants from the Pacific Islands were employed as professionals in 2013. 12 percent were technicians and trade workers, and eight percent worked as managers.

With 246,000 migrants from the UK and Ireland aged 15 plus, this region was the second largest source of New Zealand migrants. 60 percent of these migrants (149,000) had employment. 30 percent of the migrants from this region of birth worked as professionals, 20 percent were managers, and 12 percent were clerical and administrative workers. These percentages were higher than the overseas-born averages of 25 percent, 16 percent and 10 percent, respectively.

Migrants from Europe and North America had similar occupational preferences. With a large percentage working as professionals (33 percent), managers (18 percent) and technicians and trade workers (10 percent). A relatively small number of the migrants born in the regions of UK and Ireland and Europe and North America undertook jobs in the machinery operators and drivers, or labourers occupations.

Asian born migrants were the largest group in the overseas-born population with 294,000 migrants in New Zealand aged 15 plus. 23 percent of these migrants worked as professionals, which was 2 percentage points lower than the total overseas-born average. Managers (16 percent), technicians and trade workers (12 percent), labourers (11 percent), and sales worker (11 percent) jobs were popular amongst Asian born migrants. The rate of sales worker and labourer jobs amongst Asian migrants was 2 percentage points higher than the overseas-born average.

9.4 Occupation by region of residence

Overall, professionals and managers were the two largest occupations among overseas-born populations across all the countries. In our previous study based on 2006 data, professionals and managers were again the two largest occupations for migrant born populations.[12]

Table 9.4 Occupation in Auckland 2013

NZ born	Overseas born total		Overseas born: yrs in NZ		
			less than 5	between 5 and 14	15 or more
	Occupation (000)				
71	Managers	45	8	17	21
89	Professionals	69	13	26	30
38	Technicians and Trades Workers	32	7	13	13
29	Community and Personal Service Workers	24	6	9	9
49	Clerical and Administrative Workers	31	5	12	15
35	Sales Workers	28	6	12	11
17	Machinery Operators and Drivers	14	2	5	7
23	Labourers	23	6	8	9
15	Not Elsewhere Included	18	4	6	8
206	No occupation	205	42	61	103
571	Total	490	98	167	225

Although regional difference still existed in terms of absolute numbers, there was no major difference with regard to the percentage of each occupation in a particular region. Moreover, the New Zealand-born population and overseas-born population had similar occupation preferences, according to their percentages in each region.

The Auckland region employed 285,000 migrants, and employed the largest proportion of the overseas-born population (51 percent) out of the five regions. Professionals (24 percent), managers (16 percent) technicians and trade workers (11 percent), and clerical and administrative workers (11 percent) were the top four occupations for overseas-born migrants in this region. Fewer new migrants worked in the areas of managing; the rate for this group was 2 percentage points lower than the regional average of overseas-born population. Recent and established migrants had similar occupation choices, with managers, professionals and technicians and trade workers making up the top three. These choices were similar to those of New Zealand-born.

Wellington, as the capital city, had a high proportion of the population employed as professionals and managers, with 38 percent and 15 percent, respectively, for the overseas-born population and 35 percent and 17 percent, respectively, for the New Zealand-born population. Around 11 percent of total migrants in Wellington worked in the field of clerical and administrate workers. In particular, the new migrants, worked in the community and personal service workers, accounted for 26 percent of the total migrant population in Wellington. The number of migrants working as machinery operators and drivers was about 3 percent in Wellington, lower than that in Auckland (5 percent).

In Christchurch, the top three occupations were managers, professionals and technicians and trade workers for both New Zealand-born and overseas-born population. Over 25 percent of the recent migrants were working

[12] Statistics New Zealand in 2009 changed its occupation categories from ANZSCO96 to ANZSCO06. This change makes comparisons between this study and our previous studies more difficult.

as professionals in Christchurch, significantly higher than the proportion in the New Zealand-born population (21 percent).

The rest of New Zealand (i.e. the Rest of North Island and Rest of South Island regions) had similar percentages as in the regions described above, with a large proportion working as managers and professionals. The labourer occupation also employed a large percentage of migrants.

Among the top three occupations, there were more established migrants working in the field of managers, but more new migrants working as technicians and trade workers and labourers. As the duration of residence in New Zealand increases, migrants tend to have more similar occupations to the New Zealand-born population. In other words, established migrants made almost the same occupational choices as the New Zealand-born.

9.5 Occupation summary

In 2013 the largest occupation group for migrants was professional with 141,000 migrants employed in this profession. The second largest occupation for migrants was managers with 90,000. Together these two occupations employ a quarter of all migrants aged 15 years and over. Narrowing that down to employed migrants, managers and professionals represent 41 percent of all migrants that are employed.

Compared to the New Zealand-born population, a slightly higher proportion of migrants are employed as either professionals or managers, with 24 percent of migrants compared to 22 percent of New Zealand-born.

Migrants from North America and Europe, the UK and Ireland, and those from Other regions have the highest proportions employed as professionals and managers. In the case of North America and Europe 51 percent of the employed workforce are in these occupations. UK and Ireland and migrants from the Other region have respectively 50 and 47 percent of their employed workforce in these occupations. The higher proportions of migrants from these two regions employed in these occupations compared to New Zealand-born may help to explain the high tax revenue generated by migrants from these two regions.

Lastly, almost 45 percent of established migrants have no occupation and are not part of the labour force. This is the highest proportion of any of the three migrant groups and shows the impact of those aged over 65 and retired in the established migrant group.

10 Study and the Migrant Population

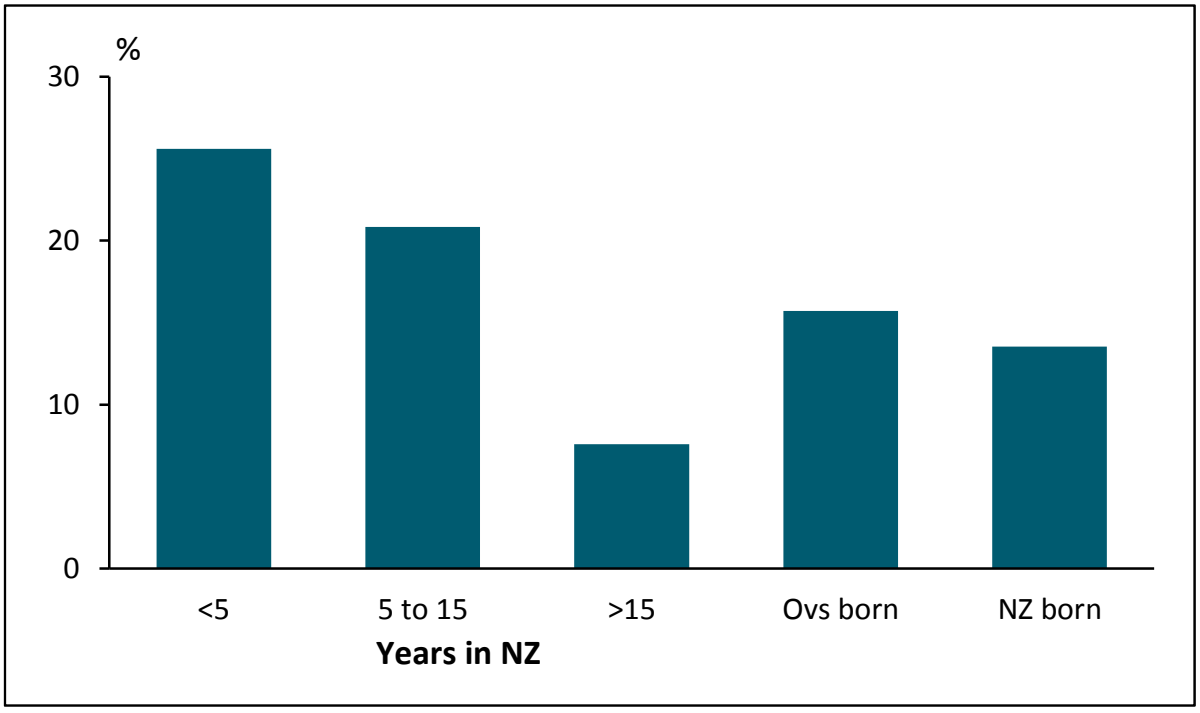
This section examines New Zealand migrants who participated in study. In particular, the section examines whether the migrant population and sub-groups within this population differed in their rate of study compared to the New Zealand-born population.

This section uses a similar method to that used in BERL's 2008 study. It draws on Census 2013 data about usually resident New Zealanders who responded that they had been studying recently.

The Census data do not separately identify whether usually resident respondents are Full Fee Paying (FFP) students or residents eligible for government subsidised educational services. Therefore, the estimates in this report are likely to overestimate education expenditure by foreign students in New Zealand. That is, some usually resident students would be treated as migrants who receive subsidised education rather than FFP students.

Figure 10.1 below shows the mix of resident migrants and New Zealand-born aged 15 years old and over recently engaged in study. The rate of study by migrants overall (at just over 15.5 percent) was slightly higher than for New Zealand-born (13.5 percent). There were substantial differences in study participation amongst the overseas-born population according to their duration of residence in New Zealand.

Figure 10.1 Proportion of population groups participating in study, 2013[13]



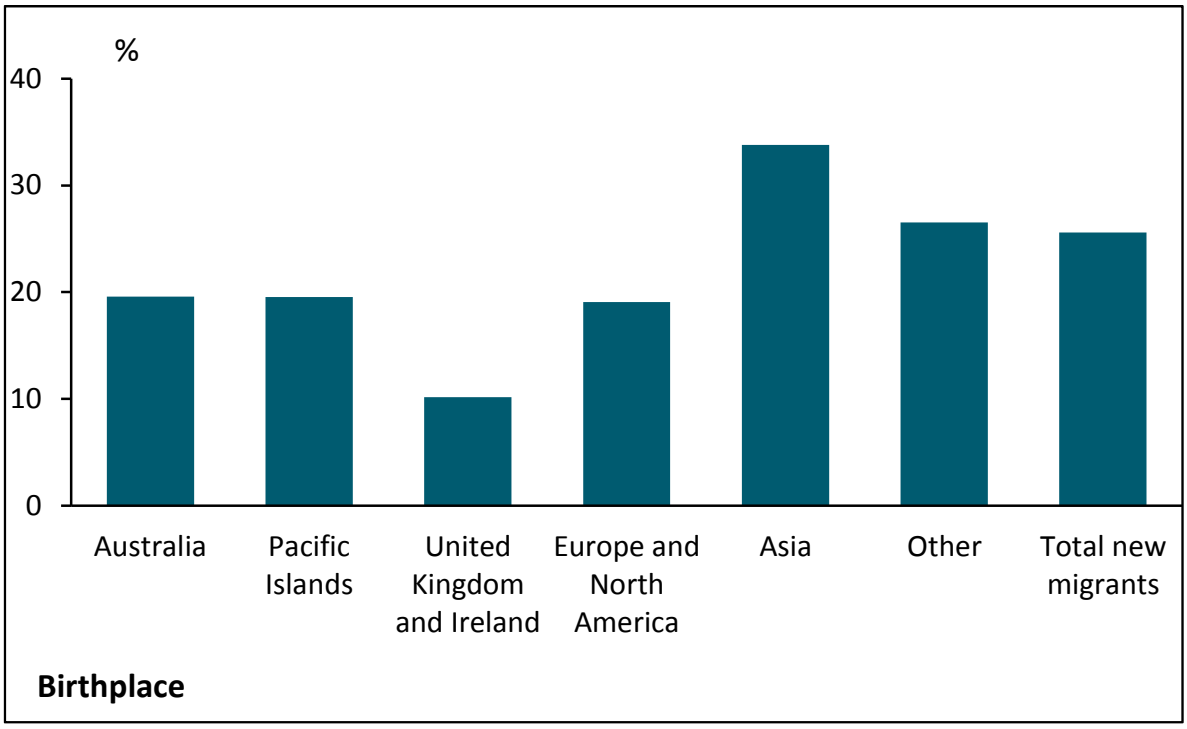
10.1 Study amongst new migrants

Figure 10.1 shows that new migrants had a relatively higher rate of study (at 26 percent) than migrants who have been in New Zealand for a longer period of time. The higher rate of study was related to the age composition of new migrants. The new migrant group had a younger age profile than more established migrants. The median age of new migrants was approximately 28 years old, while the median age for recent migrants was 35 and for established migrants it was 55.

[13] For all migrants and New Zealand-born, who are 15 years or older

Figure 10.2 below shows the region of birth of new migrants and their respective rates of study. This figure is based on the overseas-born population aged 15 and over. Because there has been no adjustment for the differing ages of migrants from each region, some of the apparent differences in rates of study could be a direct result of the differing age composition of new migrants across the region of birth sub-groups, as opposed to reflecting inherently different behavioural characteristics of the population groups. Nonetheless, the figure supports the view that some of the difference in rates of study can be attributed to region of birth factors such as enrolments in English language courses and/or the origin of FFP students.

Figure 10.2 Proportion of new migrants studying by region of birth, 2013[14]



New migrants from Asia had the highest rate of study (34 percent) amongst new migrants.

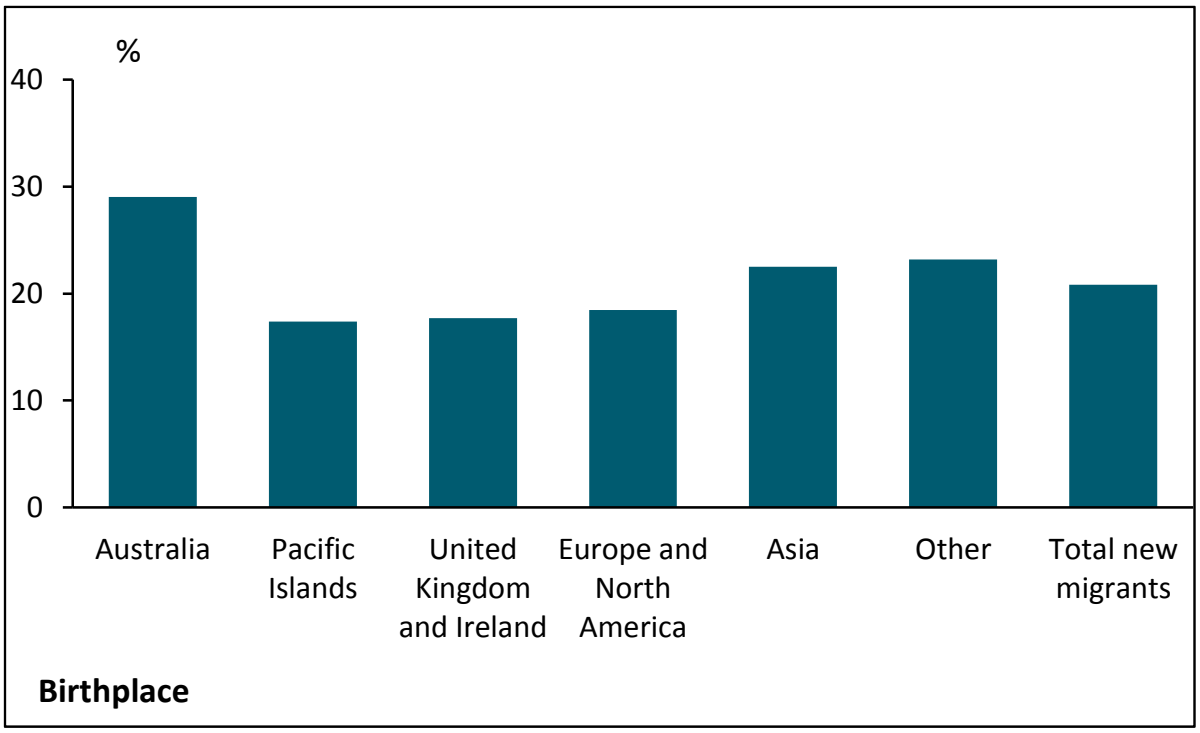
10.2 Study amongst recent migrants

Study participation rates amongst the recent migrant group were less diverse across the region of birth sub-groups than among new migrants. The Australian group had the highest participation rate (29 percent), followed by the Asian migrant population (23 percent), as shown in Figure 10.3.

These participation rates suggest that the family structure of migrants to New Zealand may also play an important role over time. For example, the migration of families from Australia may be leading to "second round" effects on rates of study as younger family members enter into the 15+ year age group a number of years after shifting to New Zealand. This would explain why the new Australian migrants had a relatively low rate of study but recent (and also established) migrant Australians had a relatively higher rate of study.

[14] For all migrants and New Zealand-born, who are 15 years or older

Figure 10.3 Proportion of recent migrants studying by region of birth, 2013[15]



10.3 Study amongst the 15-25 year age cohort

The discussion above suggests that the age composition of the migrant population and its sub-groups has a significant influence on study participation rates. The following discussion examines this influence by examining the 15 to 25 year age cohort. This range predominantly focuses on post-secondary school study and allows investigation of differences between new, recent and established migrants.

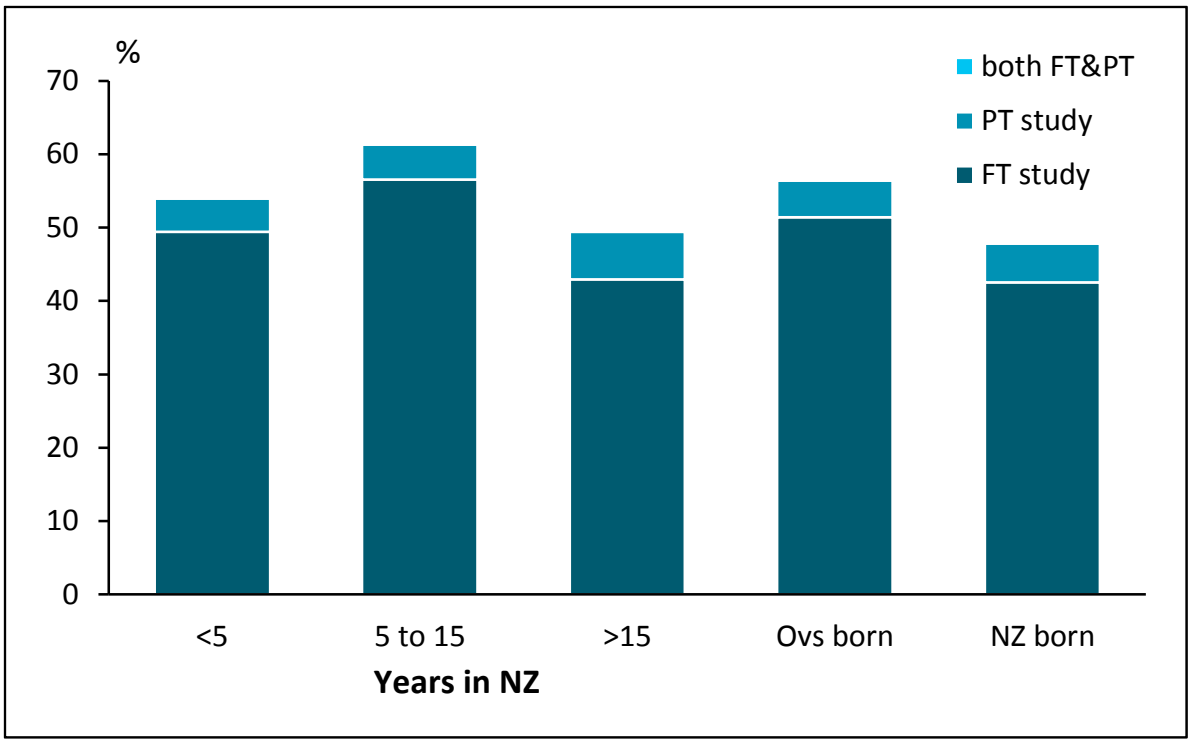
Figure 10.4 below shows the proportion of the New Zealand-born and overseas-born populations within the 15-25 year cohort participating in study. The overseas-born population within this age group is further disaggregated by the length of residence in New Zealand.

Overall, the migrant population had an average rate of study of 56 percent. The recent migrant groups in the 15-25 year cohort had the highest rates of study (64 percent), which has differed markedly from the rate amongst the new and established migrant groups (at 54 percent and 49 percent, respectively). This implies those who were 10-20 years of age when they migrated to New Zealand had a much higher propensity to remain in some form of study after secondary school than the established migrant population.

[15] For all migrants and New Zealand-born, who are 15 years or older

Figure 10.4 shows that the rate of study by established migrants was similar to the rate for the New Zealand-born (48 percent). The figure also indicates almost no people engaged in full-time and part-time study simultaneously, which is very similar to the 2008 study.

Figure 10.4 Proportion of 15-25 year cohorts participating in study 2013

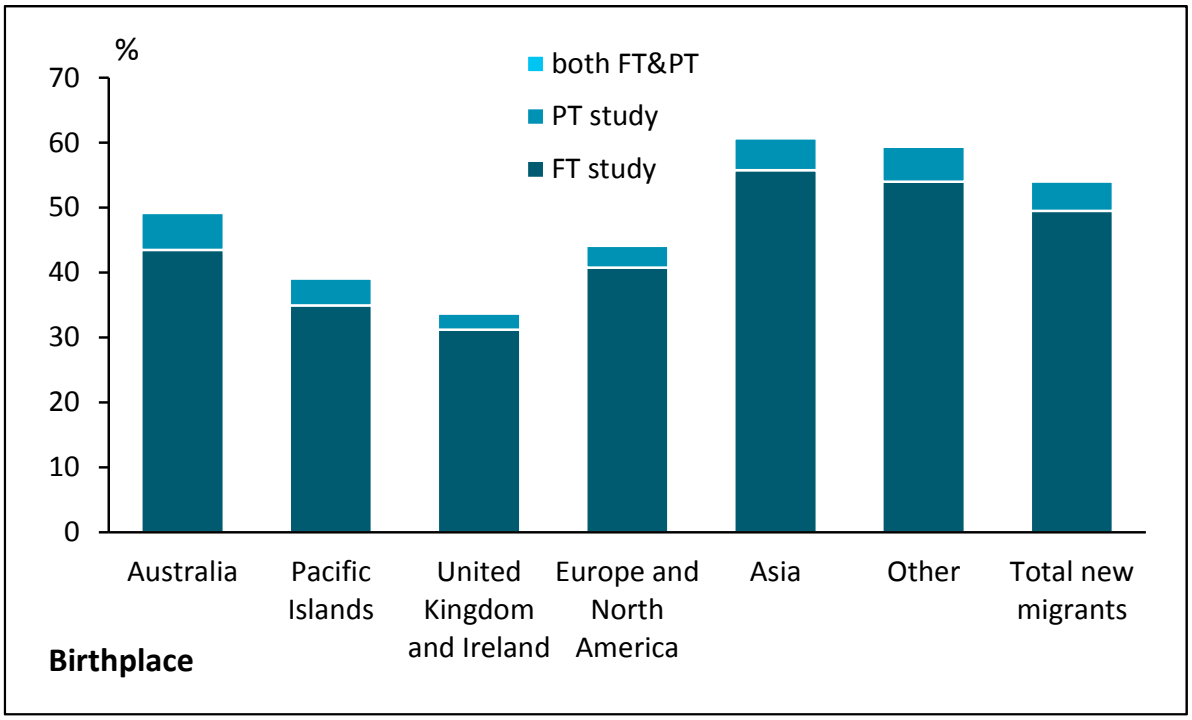


FT = full time; PT = part time

Figure 10.5 below shows the rates of study of the new migrant population in the 15-25 year age cohort. This population group also had a higher rate of study than any other population group. The figure indicates that study rates were reasonably consistent across the different regions of birth, excepting the Asian migrant population.

Just over six out of ten new Asian migrants were engaged in study (at a rate of 61 percent). This rate was higher than the next highest two groups of new migrants from 'Other' and Australia, at 59 percent and 50 percent, respectively. New Europe and North American (44 percent), Pacific Island (39 percent) and UK and Ireland (33 percent) immigrants had rates of study that were lower to the New Zealand-born rate (48 percent).

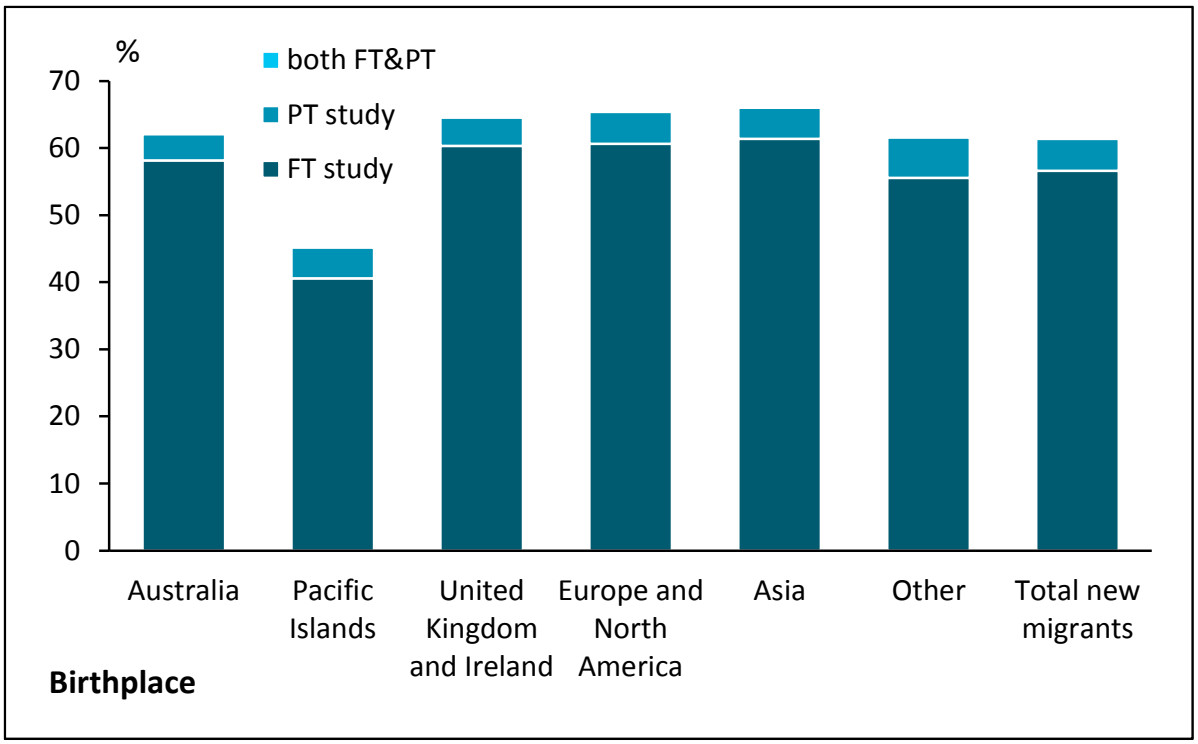
Figure 10.5 Proportion of 15-25 year old new migrants studying by region of birth 2013



FT = full time; PT = part time

The study participation profile changes markedly for recent immigrants, as shown in Figure 10.6 below. This figure indicates the rates of study were reasonably consistent across the region of birth sub-groups, with only the population from the Pacific Islands showing a relatively low rate of study.

Figure 10.6 Proportion of 15-25 year old recent migrants studying by region of birth 2013



FT = full time; PT = part time

10.4 Summary of migrants' participation in study

Overall, migrants had a higher rate of participation in study than the New Zealand-born population. This difference was most obvious in the new and recent migrant population, while established migrants tended to have a lower participation rate than the other two migrant populations and the New Zealand-born population.

Examination of study participation rates by those aged 15 and over indicates that migrants from Asia had significantly higher rates of study than any other group. Australia and 'Other' also had higher rates of study than migrants from other regions and their New Zealand-born counterparts.

A second observation is lower participation in post-compulsory study by migrants born in the Pacific Islands. The participation rate was not significantly altered as these migrants transitioned from new to recent status. This contrasts with the overall study participation rate of new and recent Pacific Island migrants, which falls from 20 percent to 17 percent.

11 Methodology

This section provides a summary of the method used to calculate the fiscal impact of migrants, and the definitions used in various sections of this report. For full details of the method used to calculate the fiscal impact of migrants to New Zealand, and for notes on the limitations to the coverage and extent of this study, see section 1 of the technical appendix.

11.1 Method

Data sources

The principal population data source employed for this analysis was the 2013 Census. Census data cross-tabulations were provided for migrants by region of birth, duration of residence in New Zealand, plus income, age and region of residence where relevant. In addition, 2012/13 Household Expenditure Survey (HES) data and the Treasury's Long Term Fiscal Model (LTFM) were used to determine population expenditure profiles by age group.

Crown Financial Statements, Budget Estimates and Budget documents were used to obtain details of aggregate central government revenue and expenditure profiles. This was complemented by data provided from the Ministry of Social Development, on beneficiaries, and the Ministry of Education, on students.

Estimation

This study uses population income and expenditure profiles to disaggregate government revenue and expenditure data. A range of administrative data sets were combined with data provided from government ministries specifically for this study.

The estimates for the main revenue and expenditure items are calculated on an individual basis. This reflects that the New Zealand tax system is based, for the most part, on the individual. GST and excise duty impacts are based on household expenditure profiles, rather than translating household expenditure patterns into individual spending. For this purpose, a migrant household is defined as one where either the occupier or spouse identified themselves as born overseas (according to Census responses).

Per capita fiscal impact

Per capita estimates allow some comparison of the fiscal impacts across sub-groups within the migrant and New Zealand-born populations. These impacts equal the relevant estimated total divided by the number of persons in the relevant population group. For example, the per capita fiscal impact on income tax revenue of new migrants equals the total tax revenue from that group ($975m, as per Table 4.1) divided by the number of new migrants (252,000), giving the result of $3,877 (as per Table 4.2).

Working age population per capita fiscal impact

The working age population (WAP) per capita figures are also calculated to improve the comparability of these estimates across the sub-groups. These figures allow for the effect of the differing age structures of the various sub-populations. For example, there are no under 15-year-olds in the established migrant group. The impact of this sub-group on primary and secondary education is partly determined by the category's duration-related definition. It can therefore be useful to adjust for age-composition effects. A simple adjustment is to calculate the per capita impacts for those aged 18-64. This approach differs from age standardisation.

The WAP per capita figures equal the total fiscal impact estimate for a population group divided by the number of people aged 18-64 in the relevant population group. For example, the WAP per capita fiscal impact on income

tax revenue of new migrants equals the total tax revenue from that group ($975m) divided by the number of new migrants aged 18-64 (181,000), giving the result of $5,373 (as per Technical Appendix Table 3, page 8).

Limitations

This study focuses on a subset of relevant issues and is subject to a number of limitations

1. The study concerns the impacts of gross immigration, not of net migration flows.
2. The study concentrates on fiscal rather than economic impacts. Due to this the study is limited to estimating the direct monetary impacts on the government's operating budget.
3. The study does not cover all components of the government accounts.
4. This study captures a number of influences on differences in the fiscal impacts between population groups. Data limitations restrict the degree to which within group differences can be used to estimate overall impacts.

11.2 Definitions and analytical categories

Where possible, the same definitions and categories have been used as our previous studies, to allow valid comparisons.

A migrant is defined as a person who was born overseas.

Some Census returns did not specify the respondent's country of birth and were allocated as non-specified. For estimation purposes, this group were pro-rata across the two categories of migrant and New Zealand-born.

The aim of this reallocation was to preserve the migrant-to-domestic-born ratio and to maintain consistency with nationwide totals.

The migrant population was further divided into sub-categories for additional analyses. These categories were their duration of residence in New Zealand at the time of the Census (three groups), and their region of birth (six specified areas). The categories are listed below.

Table 11.1 Migrant group definitions

Group	Notes:
new migrant	overseas born and usually resident in New Zealand for less than 5 years
recent migrant	overseas born and usually resident in New Zealand for 5 to 14 years
established migrant	overseas born and usually resident in New Zealand for 15 or more years

Table 11.2 Region of birth definitions

Region of birth	Notes:
Australia	
Pacific Islands	Melanesia, Micronesia, Polynesia
The United Kingdom and Ireland	
Europe and North America	Excluding the UK and Ireland
Asia	South, Central and Eastern Asia
Other	Africa, the Middle East, and South America
Not specified	

In addition, the analysis also investigated the impact of migrants by five regions of residence as shown in following table.

Table 11.3 Region of residence definitions

Region of residence	Notes:
Auckland	
Wellington	Wellington City, Hutt City, Upper Hutt City, Porirua City
Rest of North Island	
Christchurch City	
Rest of South Island	

For additional analysis on the profile of the migrant population by region of birth, the following occupation, qualification and labour force statuses were used.

Table 11.4 Occupation group definitions

Occupation groupings	Occupation groups	ANZSCO06 classification:
Prof & Manager	Professionals and Managers	Major groups 1 and 2
Trade Workers	Trade Workers	Sub-major group 32 to 39
Technicians	Technicians	Sub-major group 31
Comm & Person Workers	Community and personal service workers	Major group 4
Clerical & Sales	Clerical and administrative workers, and sales workers	Major groups 5 and 6
Machinery Op & Labour	Machinery operators and drivers, and labourers	Major groups 7 and 8

Table 11.5 Qualification group definitions

Qualification groupings	Notes:
No qualification	No qualification
School qualification	Level 1-2 certificate and overseas secondary school qualification
Vocational qualifications	Level 3-4 certificate and Level 5-6 Diploma
Degree qualifications	Bachelor degree, post-graduate and honours degree, masters degree and doctorate degree

Table 11.6 Labour force status definitions

Labour force status	Notes:
Employees	Employed full-time, employed part-time and unpaid family worker
Self-employed	Self-employed and without employees
Employers	Employer
Unemployed	Unemployed
Not in the labour force	Not in the labour force

12 Summary Tables 2013

Table 12.1 Fiscal impact of migrant population, 2013 ($m)

								impact on revenue	impact on spending	
								net fiscal impact		
		Years in NZ						**ALL**		
		less than 5			between 5 and 14		15 or more			
Region of birth	Australia	94	90		136	149	468	335	699	575
		4			**-13**		**133**		**124**	
	Pacific Islands	163	175		419	407	788	628	1,370	1,211
		-12			**12**		**160**		**160**	
	UK & Ireland	469	208		987	571	2,330	2,333	3,787	3,112
		261			**416**		**-3**		**674**	
	Europe & North America	263	124		378	211	711	635	1,351	970
		138			**167**		**76**		**381**	
	Asia	742	574		1,333	834	1,024	741	3,099	2,149
		167			**500**		**282**		**950**	
	Other	271	161		637	335	391	231	1,299	727
		110			**302**		**160**		**572**	
	Not specified	14	11		36	17	56	25	106	54
		3			**18**		**31**		**52**	
ALL MIGRANTS		2,016	1,345		3,926	2,524	5,769	4,929	11,711	8,798
		671			**1,402**		**839**		**2,912**	
									30,226	29,687
								NEW ZEALAND BORN	**540**	

Table 12.2 Per capita fiscal impact, 2013 ($pc)

										impact on revenue	*impact on spending*
										net fiscal impact	
		Years in NZ						***ALL***			
		less than 5		*between 5 and 14*		*15 or more*					
Region of birth	*Australia*	*6,627*	*6,367*	*7,815*	*8,561*	*12,901*	*9,234*	*10,284*	*8,462*		
		260		***-745***		***3,668***		***1,822***			
	Pacific Islands	*5,809*	*6,247*	*7,992*	*7,754*	*10,175*	*8,115*	*8,674*	*7,663*		
		-438		***238***		***2,061***		***1,011***			
	UK & Ireland	*11,266*	*4,999*	*12,714*	*7,355*	*13,464*	*13,480*	*12,952*	*10,646*		
		6,268		***5,359***		***-17***		***2,306***			
	Europe & North America	*10,243*	*4,848*	*11,546*	*6,447*	*13,204*	*11,787*	*12,044*	*8,645*		
		5,395		***5,098***		***1,417***		***3,399***			
	Asia	*6,799*	*5,265*	*9,085*	*5,680*	*11,717*	*8,485*	*9,029*	*6,262*		
		1,534		***3,405***		***3,232***		***2,767***			
	Other	*8,804*	*5,240*	*11,334*	*5,961*	*14,948*	*8,826*	*11,482*	*6,428*		
		3,564		***5,373***		***6,122***		***5,054***			
	Not specified	*6,617*	*5,114*	*9,399*	*4,526*	*11,559*	*5,224*	*9,817*	*5,011*		
		1,503		***4,873***		***6,336***		***4,806***			
ALL MIGRANTS		8,013	5,346	10,145	6,522	12,566	10,738	10,669	8,016		
		2,667		**3,623**		**1,828**		**2,653**			
										9,613	9,441
										NEW ZEALAND BORN	
										172	

Table 12.3 Fiscal impact by region of residence, 2013 ($m)

								impact on revenue	*impact on spending*
								net fiscal impact	
Region of residence		*Years in NZ*						***ALL***	
		less than 5		*between 5 and 14*		*15 or more*			
AUCKLAND	*Overseas born*	*988*	*811*	*2,205*	*1,521*	*2,803*	*2,557*	*5,996*	*4,888*
		178		***685***		***246***		***1,108***	
	NZ born							*8,468*	*8,159*
								309	
WELLINGTON	*Overseas born*	*180*	*130*	*248*	*193*	*400*	*379*	*828*	*702*
		50		***55***		***21***		***126***	
	NZ born							*1,741*	*1,986*
								-245	
REST OF NORTH ISLAND	*Overseas born*	*459*	*391*	*857*	*641*	*1,623*	*923*	*2,939*	*1,954*
		68		***216***		***700***		***985***	
	NZ born							*11,979*	*12,872*
								-893	
CHRISTCHURCH	*Overseas born*	*169*	*104*	*262*	*185*	*402*	*296*	*833*	*585*
		66		***76***		***106***		***248***	
	NZ born							*2,713*	*2,218*
								495	
REST OF SOUTH ISLAND	*Overseas born*	*219*	*143*	*354*	*223*	*542*	*303*	*1,115*	*669*
		76		***131***		***238***		***446***	
	NZ born							*5,325*	*4,427*
								897	

Table 12.4 Per capita fiscal impact by region of residence, 2013 ($pc)

									impact on revenue	*impact on spending*
									net fiscal impact	
Region of residence		*Years in NZ*						***ALL MIGRANTS***		
		less than 5		*between 5 and 14*		*15 or more*				
AUCKLAND	*Overseas born*	*7,809*	*6,405*	*10,016*	*6,908*	*12,666*	*11,555*		*10,557*	*8,606*
		1,404		***3,109***		***1,111***			***1,951***	
	NZ born								*9,968*	*9,604*
									364	
WELLINGTON	*Overseas born*	*11,024*	*7,970*	*12,926*	*10,051*	*15,911*	*15,073*		*13,649*	*11,568*
		3,055		***2,875***		***838***			***2,080***	
	NZ born								*13,118*	*14,967*
									-1,849	
REST OF NORTH ISLAND	*Overseas born*	*7,577*	*6,456*	*9,990*	*7,467*	*12,022*	*6,835*		*10,446*	*6,947*
		1,120		***2,523***		***5,187***			***3,499***	
	NZ born								*8,957*	*9,625*
									-668	
CHRISTCHURCH	*Overseas born*	*8,527*	*5,223*	*9,965*	*7,057*	*12,442*	*9,161*		*10,621*	*7,459*
		3,304		***2,908***		***3,281***			***3,162***	
	NZ born								*10,232*	*8,364*
									1,868	
REST OF SOUTH ISLAND	*Overseas born*	*7,740*	*5,060*	*9,898*	*6,227*	*11,999*	*6,718*		*10,208*	*6,128*
		2,679		***3,671***		***5,281***			***4,080***	
	NZ born								*9,516*	*7,912*
									1,604	

13 Glossary

Degree Qualification: A level 7 or above tertiary qualification. This includes 2013 Census groups Bachelor Degrees, Post-graduate or Honours Degrees, Masters Degrees and Doctorates.

Established Migrants: People not born in New Zealand, who have moved to New Zealand to live on a permanent basis and have resided in New Zealand for 15 or more years.

Fiscal Impact: Any contributions made to Central Government from a population group or Central Government expenditure attributable to a population group.

Full Fee Paying Students: Are students studying at New Zealand schools and tertiary education providers, who fully pay their own fees. New Zealand citizens and residents are entitled to Government subsidies and therefore do not fully pay for their own fees. Full Fee Paying Students tend to be International Students who have come to New Zealand for study.

Labour Force Participation Rates: The proportion of the working-age population in the labour force. The labour force includes all people who are either employed, or unemployed and looking for work.

Labour Force Status: Is a derived variable that classifies people aged 15 years and over according to their inclusion or exclusion from the labour force. Labour Force Status classifications includes self-employed, employers, employees, unemployed and not in the labour force.

Net Fiscal Impact: Contributions made to Central Government revenue from a population group less Central Government expenditure attributable to the population group.

New Migrants: People not born in New Zealand, who have moved to New Zealand to live on a permanent basis, but who have resided in New Zealand for less than five years.

Per Capita: Is a Latin term that translates into "by head," basically meaning "average per person". It is used in this report to take a total fiscal impact and to divide it evenly across all the people of the selected population group.

New Zealand-Born: People who were born in New Zealand and who still reside in New Zealand on a permanent basis.

Not in the Labour Force: This includes everyone in the working-age population who is neither employed nor unemployed. This usually includes the retired, students, full-time unpaid caregivers, those unable to work, and those not seeking work.

Other Region: Includes all permanent migrants to New Zealand who resided in South America, the Caribbean, Central America (including Mexico), Africa (including South Africa), and the Middle East, prior to their arrival in New Zealand.

Overseas Born: People who still reside in New Zealand on a permanent basis, but who were not born in New Zealand.

Real Per Capita: Is a per capita calculation that has been adjusted to remove the effects of changes in price across time.

Recent Migrants: People not born in New Zealand, who have moved to New Zealand to live on a permanent basis and have resided in New Zealand for between 5 and 15 years.

Rest of the North Island: This region includes all North Island areas, not part of the Auckland or Wellington Region. Rest of the North Island therefore includes Northland, Waikato, Bay of Plenty, Gisborne, Hawke's Bay, Taranaki and the Manawatu-Whanganui regions.

Rest of the South Island: This region includes all South Island areas, not part of the Christchurch City Local Authority area. Rest of the South Island therefore includes Nelson, Tasman, Marlborough, West Coast, Otago, and Southland regions, along with the Canterbury region outside of Christchurch City.

School Qualification: A qualification obtained at a secondary school or equivalent. This includes 2013 Census groups Level 1 and 2 Certificates and overseas secondary school qualifications.

Participation in Study: Includes all of a population group aged 15 years and older who participate in secondary or tertiary studies. This can be either full time, part time or both.

PLT Migrants: Permanent Long Term (PLT) Migrants are non-New Zealand citizens or residents who arrive in New Zealand intending to live in New Zealand for 12 months or longer.

Usually Resident Population: Is the population count of a country which includes residents of that country who have resided in that country for the last 12 months, or who plan to reside in the country for the next 12 months.

Vocational Qualification: A level 3 to 6 tertiary qualification. This includes 2013 Census groups Level 3 and 4 Certificates and Level 5 and 6 Diplomas.

Working-age Population: The usually resident, non-institutionalised, civilian population within a country aged 15 years and over.