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LIFE AFTER STUDY

International students' settlement experiences in New Zealand

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EXECUTIVE SUMMARY

Purpose of this report

This report uses multiple information sources to describe the characteristics of international students in New Zealand, the motivations of former international students who have successfully transitioned to work and residence, and the early settlement experiences of former international students in New Zealand.

By understanding some of the factors that contribute to the successful retention and settlement of former international students in New Zealand, we can develop policies and services to better support this segment of the migrant population.

Data sources

The research presented in this report makes use of both administrative and survey data from three sources. Multiple sources of information enable us to gain a fuller understanding of international student experiences and examine the characteristics of these students as well as their experiences at different stages of their transition from study to residence.

The three primary data sources used in this research are the:

- Department of Labour's immigration administrative data about visa and permit applications
- Transitions Survey, which is a survey of skilled principal migrants who transitioned from temporary to permanent residence in New Zealand
- Longitudinal Immigration Survey: New Zealand (LisNZ) data from 6 months (wave 1) and 18 months (wave 2) after a cohort of migrants gained permanent residence in New Zealand.

International students in New Zealand

Economic contribution

Education is one of New Zealand's top five export industries. It generated an economic benefit of over $2.3 billion in 2007/08 and indirectly supports over 32,000 jobs.[1] Export education also contributes to the academic reputation of institutions and can improve the cost-efficiency of education provision.[2]

The Organisation for Economic Co-operation and Development (OECD) estimated that 3 million tertiary students were enrolled outside their country of citizenship

[1] Infometrics, NRB, and SkinnerStrategic. 2008. *The Economic Impact of Export Education*. Wellington: Education New Zealand and Ministry of Education. Available at www.educationcounts.govt.nz/publications

[2] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 310.

in 2007.[3] New Zealand is the eighth largest recipient of international students in the OECD, receiving around 2.1 percent of foreign students in tertiary education. However, New Zealand's per capita rate of 15 international students per 1,000 people is the highest in the OECD.[4]

Predominance of the Asian student market

Around 70,000 international students are granted permits to study in New Zealand each year and 75 percent are from Asia (predominantly, China, South Korea, and India). Internationally, Asian students comprise about half (47 percent) of all foreign students in OECD countries.

Two-step migration process

Over time, around 31 percent of fee-paying international students transition to work and/or permanent residence in New Zealand. Around one-fifth of fee-paying international students gain permanent residence in New Zealand.

Indian and Chinese students have the highest transition rates to work (72 percent and 43 percent), and their main route into the labour market is via the Study to Work policies.

Through their studies and time spent in New Zealand, international students gain knowledge of local work practices and regulations, proficiency in English, an understanding of local social and cultural norms, and qualifications that New Zealand employers recognise. This experience makes international student graduates highly attractive as potential migrants to New Zealand.

Motivating factors when choosing New Zealand

Choosing New Zealand as a study destination

The quality and cost of education in New Zealand, opportunities to work in New Zealand after graduation and to apply for residence, and opportunities to study in an English-speaking country are important drivers in international students' decisions to study in New Zealand.

Staying on in New Zealand after study

Just over one-third (37 percent) of former students who gained residence in New Zealand as skilled migrants intended to apply for permanent residence from the outset.

Former students who had a vocational qualification as their highest qualification gained in New Zealand were more likely to report that they sought a vocational qualification to help them gain permanent residence (51 percent) than students who gained a bachelor's or higher degree.

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[3] OECD. 2009. *Education at a Glance: OECD indicators.* Paris: Organisation for Economic Co-operation and Development, p 312.

[4] Based on OECD estimates of foreign students and total populations in 2007.

The most important factors influencing students' decisions to apply for permanent residence were lifestyle (80 percent), safety and security (80 percent), and educational opportunities (68 percent).

Economic-related motivations were relatively weak pull factors for international students with only 56 percent choosing to migrate to New Zealand for job opportunities.

International students' settlement experiences

Employment outcomes

Eighteen months after gaining permanent residence, 68 percent of former international students were in full-time employment. Of these, 62 percent worked in a skilled job and 31 percent worked in professional occupations.

Importance of qualifications in the transition to the labour market

Former students with a bachelor's or higher degree were more likely to experience positive labour market outcomes (that is, earn more money, work in a higher skilled job, and report a higher level of job satisfaction) than those with a vocational qualification gained in New Zealand.

Many students continue to study after gaining residence

Many former students who were not in the labour force were studying. Eighteen months after gaining permanent residence, almost half (48 percent) of former students had done other study (excluding English language study) in New Zealand since gaining permanent residence and almost one-fifth were out of the labour force and studying.

Conclusion

International students make a positive contribution to the economic and social fabric of New Zealand. The availability of policies that facilitate students' transition from study to work and residence are important in attracting and retaining international students here.

Future research

The variety of data sources creates several opportunities for further research. Immigration administrative data offers the possibility of assessing the retention of students who transition to work or residence in New Zealand. In addition, the third and final wave of LisNZ will allow for further analysis of settlement outcomes for former international students with particular attention to changes over time.

1 INTRODUCTION

1.1 Purpose of this report

The purpose of this report is to identify the key characteristics of international students in New Zealand, their transitions to work and residence, and their early settlement experiences in New Zealand.

Tracking the settlement outcomes of international students requires data on a population that is often not captured in official statistics. This type of research requires administrative data and surveys that include these populations such as the Transitions Survey and the Longitudinal Immigration Survey: New Zealand (LisNZ). Immigration administrative data is ideal for tracking students' movements from study permits to other permits.

The survey data enables us to explore factors that contribute to successful migration outcomes for former international students. Factors such as students' motivations to study in New Zealand and their intentions when they first arrived help to explain differences in transition rates.

Data on employment status, occupation, and income supplements administrative data about who transitions to permanent residence. This supplementary data also enables a more robust picture to be developed about how former international students perform in the labour market alongside other migrants. Positive labour market experiences are an important aspect of retaining these migrants in New Zealand.

Understanding the factors relating to international students' successful transition to residence and settlement in New Zealand will contribute to the development of effective immigration policy and settlement services for this growing segment of the migrant population.

1.2 Context of this report

Internationally, two developments over the past decade have raised the profile of international students. The first development is the internationalisation of education with economic benefits to receiving countries. The second development is the promotion of highly skilled migration and policies that foster links between export education and permanent migration.[5] Facilitating export education while incentivising international graduates to remain in the country has become known as two-step migration.

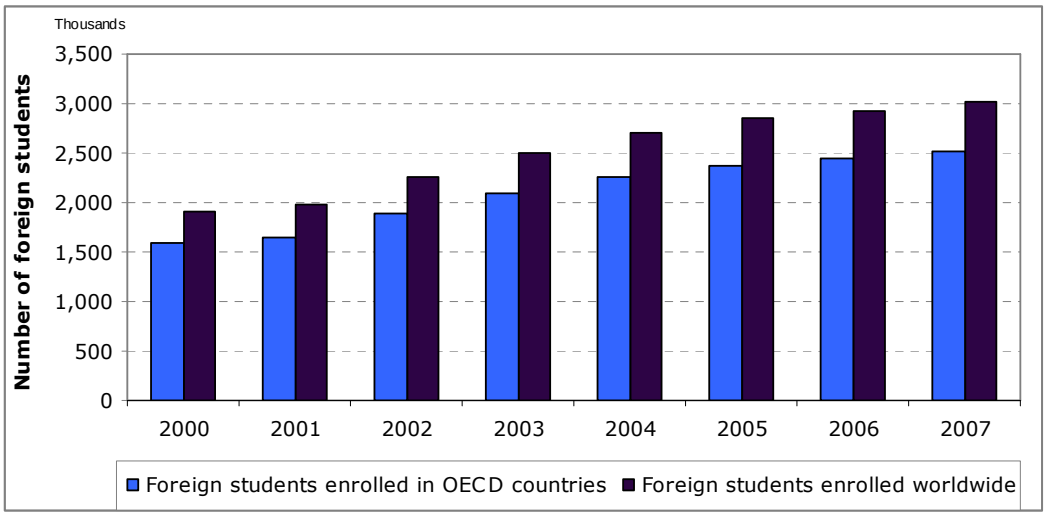
Education is one of New Zealand's top five export industries. It generated an economic benefit of over $2.3 billion in 2007/08 and indirectly supports over

[5] B Suter and M Jandl. 2008. Train and retain: National and regional policies to promote the settlement of foreign graduates in knowledge economies. *Journal of International Migration and Integration* 9: 401–418.

32,000 jobs.[6] In addition to the immediate fiscal benefit generated by tuition fees, international education can also contribute to the academic reputation of institutions and improve the cost-efficiency of education provision.[7]

The growth in the internationalisation of tertiary education over the last decade has occurred alongside the globalisation of economies and societies. The Organisation for Economic Co-operation and Development (OECD) estimated that in 2007, 3 million tertiary students were enrolled outside their country of origin (Figure 1.1).[8] New Zealand is the eighth largest recipient of international students, receiving around 2.1 percent of foreign students in tertiary education. However, New Zealand's per capita rate of 15 international students per 1,000 population is the highest in the OECD.[9]

Figure 1.1 Foreign students enrolled in tertiary education outside their country of citizenship, 2000–2007



Source: OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development. Available at http://dx.doi.org/10.1787/664653153762

The OECD suggests that the language of instruction is a critical factor in students' choice of country for study.[10] In New Zealand, the Ministry of Education reports that New Zealand being an English-speaking country is the most important reason international students choose to study here.[11] In addition to English instruction, countries such as New Zealand, Australia, and Canada can

[6] Infometrics, NRB, and SkinnerStrategic. 2008. *The Economic Impact of Export Education*. Wellington: Education New Zealand and Ministry of Education. Available at www.educationcounts.govt.nz/publications

[7] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 310.

[8] OECD. 2009. *Education at a Glance: OECD indicators.* Paris: Organisation for Economic Co-operation and Development, p 312.

[9] Based on OECD estimates of foreign students and total populations in 2007.

[10] OECD. 2009. *Education at a glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 315.

[11] Ministry of Education. 2008. Experiences of International Students in New Zealand: Report 2007 on the results of the national survey. Wellington: Ministry of Education, p 43.

offer qualified international students opportunities to migrate through policies that link temporary and permanent migration.

Around 70,000 students of more than 150 nationalities are granted student permits in New Zealand annually. Most students are fee-paying students, and around 75 percent are from Asian countries, although this proportion has been decreasing since 2002/03.[12] This compares with around 47 percent of Asian students in all OECD countries combined.[13] In New Zealand, the main student source countries in 2009/10 were China, South Korea, and India.

1.3 Student immigration policy

Immigration policy to support international education has undergone several changes over the last decade. The most important has been a fundamental change in the purpose of student policy from being purely facilitative in its approach to student entry to focusing on international students in the broader context of New Zealand's economic development. This change was apparent in policies to foster the links and transitions between study, work, and permanent residence in New Zealand.

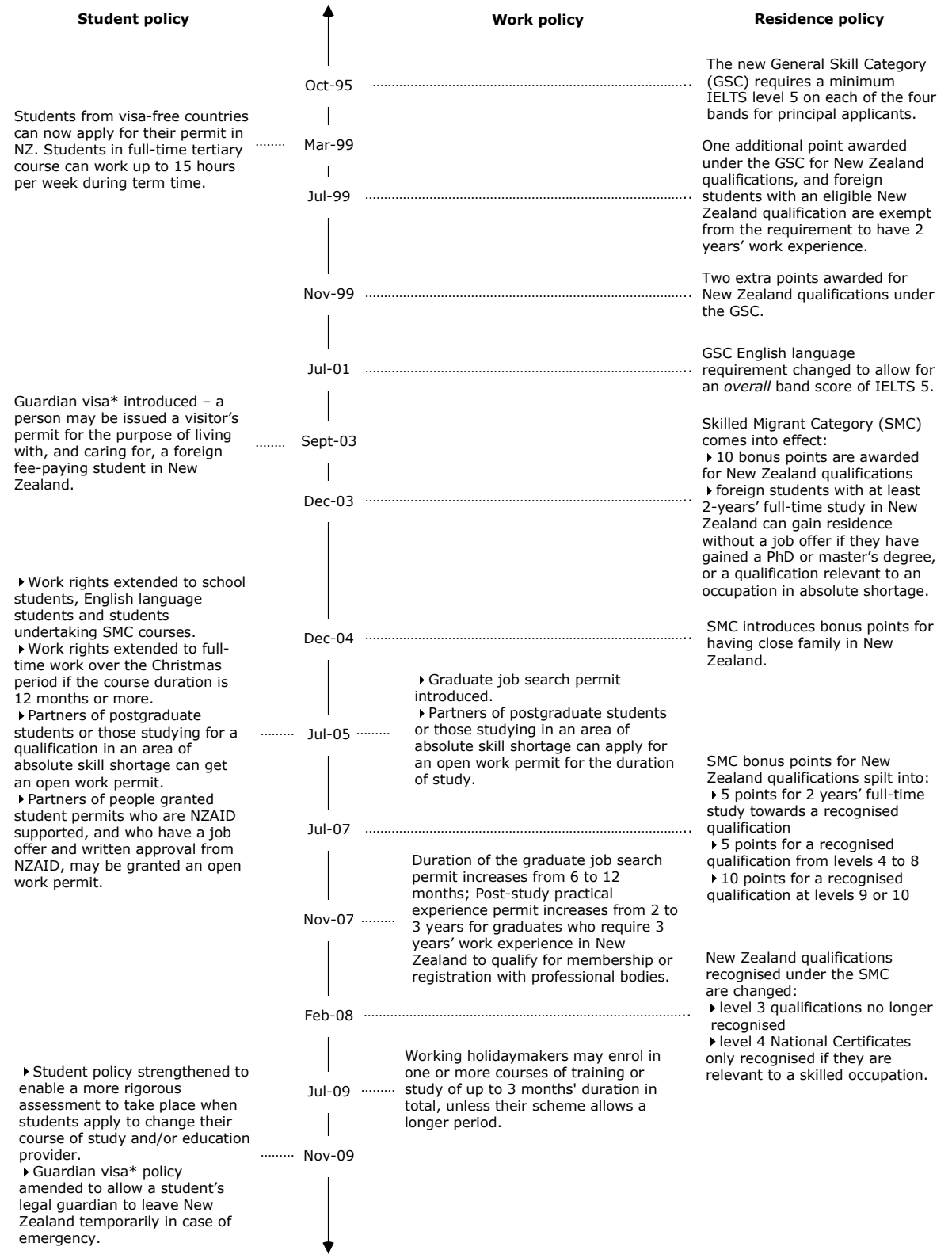
1.3.1 Timeline of immigration policy changes

Figure 1.2 depicts a timeline of immigration policy changes that show the relationship between student, work, and permanent residence policies.

[12] A fee paying student is an international student who meets the full tuition costs on their own or from funds provided to them by sponsors other than the New Zealand Ministry of Foreign Affairs and Trade.

[13] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 320.

Figure 1.2 Timeline of policy changes relevant to international students, 1995–2009



Notes: IELTS = International English Language Testing System; NZAID = New Zealand Agency for International Development.

* The guardian visa is related to international students but is a temporary visitor policy.

1.3.2 Study to work policies

There are two policies for international students that facilitate the transition to work from study: the Graduate Job Search Policy and the Post-Study Practical Experience Policy.

The Graduate Job Search Policy, introduced in 2005, provided new links between studying in New Zealand and opportunities to enter the labour market. Before 2005, students reported having difficulties accessing the labour market after completing study. Students from most of the main source countries had access to Working Holiday Schemes, but those from China had fewer opportunities to transition to work or residence.

The Graduate Job Search Policy allows eligible students to search for a job (on an open work permit) for a limited period, with options to stay in New Zealand if they find work relevant to their qualifications through the existing Post-Study Practical Experience Policy. These two study to work policies aim to make New Zealand a more competitive study destination for international students. Table 1.1 summarises the features of these two policies.

Table 1.1 Features of the study to work policies, as at 30 June 2009

Graduate Job Search Policy	Post-Study Practical Experience Policy
Students must have completed a qualification in New Zealand that qualifies for points under the Skilled Migrant Category[(1)]	Students must have completed a course in New Zealand that has a minimum completion time of 3 years or would qualify for points under the Skilled Migrant Category[(1)]
Applicants do not need a job offer	Applicants must hold a job offer relevant to their course or qualification
Students must apply within 3 months of the end date of their student permit for that qualification	Students must apply within 3 months of the end date of their student permit for that qualification or hold a graduate job search work permit
The permit is granted for 12 months	The permit is granted for 2 years for the applicant to obtain practical work experience suitable to their course or qualification, or 3 years if the applicant is working towards membership or registration with a New Zealand professional association that requires more than 2 years' practical experience

[(1)] The Skilled Migrant Category is the main category in the Skilled/Business Stream (one of four residence streams under the New Zealand Residence Programme). This category is the primary immigration category for permanent skilled migration and is weighted heavily towards skilled employment, work experience, and qualifications.

Between 1 July 2005 and 31 December 2009, just over 28,000 students were issued a graduate job search work visa. Of these students, 63 percent were from China and 19 percent were from India.

The growth of the Indian student market is evident in the graduate job search visa figures. The number of visas issued to Indian students more than doubled

between 2008 and 2009, making India the largest source country for this visa type (Table 1.2).

The relatively low take up of the graduate job search visa by students from South Korea, Japan, and the United States may reflect the availability of Working Holiday Schemes, which are a popular post-study option for students from these countries. The low take up also highlights that permanent migration is less of a driver for students from these countries; these are not major source countries of migrants to New Zealand. Students from Japan and South Korea are usually studying English language or in school, so many return to their country or origin after their study period.

Table 1.2 Graduate job search visa approvals by main source country, 2005–2009

Year approved	Main source country					Total
	China	India	South Korea	Japan	Others	
2005	1,870	140	50	20	220	2,280
2006	5,140	360	120	60	650	6,320
2007	4,180	580	160	70	700	5,680
2008	4,080	1,380	300	90	1,010	6,860
2009	2,380	3,000	280	90	1,180	6,930
Total	**17,640**	**5,460**	**900**	**330**	**3,750**	**28,070**

1.4 Data sources used

This research draws on the three primary data sources of the:

- Department of Labour's immigration administrative data about visa and permit applications
- Transitions Survey, which is a Department of Labour survey of skilled principal migrants that was undertaken in 2007–2008
- Longitudinal Immigration Survey: New Zealand (LisNZ) – waves 1 and 2 were carried out by the Department of Labour and Statistics New Zealand in partnership between 2005 and 2008.

See Appendix A for additional notes on the primary data sources used. Additional data sources are cited in the text where relevant.

Table 1.3 summarises the key characteristics of the three primary data sets.

Table 1.3 Characteristics of the three data sets used in this report

Characteristic	Immigration administrative data	Transitions Survey	Longitudinal Immigration Survey: New Zealand
Source	Department of Labour	Department of Labour	Department of Labour and Statistics New Zealand
Population	All visa and permit applicants	Principal migrants approved for residence through the Skilled Migrant Category[1] who had held a student or work permit in New Zealand	Migrants aged 16 and over (excluding refugees) approved for residence in New Zealand
Student population	All visa and permit applicants	Principal migrants who had held a student permit in New Zealand as independent fee-paying students and/or gained a post-school qualification in New Zealand	Migrants who had held a student permit in New Zealand and/or gained a post-school qualification in New Zealand
Sample period	First student permit approved between January 2003 and December 2006	Approved for residence between July 2006 and August 2007	Approved for residence between November 2004 and October 2005
Survey period	n/a	October 2007 – February 2008	Wave 1: May 2005 – April 2007 Wave 2: May 2006 – April 2008
Size of target population	88,794	12,343	36,220
Size of selected sample	88,794	12,343	12,202
Number of observations	88,794	3,454	Wave 1: 7,137 Wave 2: 6,156
Student subsample[2]	88,794	1,054	1,083
Response rate	n/a	40%	Wave 1: 66% Wave 2: 86%[3]

[1] The Skilled Migrant Category is the main category in the Skilled/Business Stream (one of four residence streams under the New Zealand Residence Programme). This category is the primary immigration category for permanent skilled migration and is weighted heavily towards skilled employment, work experience, and qualifications.

[2] Within each survey, a population of former international students was identified.

[3] The response rate was higher for wave 2 than wave 1, since only wave 1 respondents were eligible to be surveyed for wave 2.

1.5 Structure of this report

Chapter 2 describes the key features of international students in New Zealand and the immigration policies that enable international students to move from study to other permit types.

Chapter 3 examines the characteristics of students who transition from study to work and permanent residence in New Zealand.

Chapters 4 and 5 use the two surveys of migrants in New Zealand (the Transitions Survey and LisNZ) to explore the motivations, experiences, and intentions of international students who have gained permanent residence in New Zealand.

Chapter 6 concludes the report.

Appendices A–H contain information about the data sources, immigration policy definitions, and extracts from the survey questionnaires used in the analysis.

2 INTERNATIONAL STUDENTS IN NEW ZEALAND

Highlights

- The number of fee-paying students decreased 27 percent from 2003 to 2008, including a 61 percent decrease in students from China. In 2009, enrolment numbers increased 6 percent to 93,500 – the first increase since 2002.
- The number of students from India has increased steadily from around 1,200 annually in the first half of this decade to over 7,000 in 2009/10. India is New Zealand's third largest source country behind China and South Korea.
- The university sector's share of international enrolments has decreased from 28 percent in 2005 to 20 percent in 2009.
- Students from China enrol predominantly in universities and private training establishments. One-third of students from South Korea enrol in schools and almost half in private training establishments.
- The fields of society and culture, management and commerce, natural and physical sciences, and information technology are the most common for international students in New Zealand.

2.1 Introduction

New Zealand's export education sector has changed dramatically over the past 12 years. The start of this decade was characterised by growth in international student numbers, driven primarily by China (Figure 2.1). At that time, large numbers of students also came from South Korea and Japan. These three countries combined were the source of around 70 percent of all fee-paying students when numbers peaked in 2002/03.

The rapid growth in students from China has been attributed to several factors, including a growing interest by Chinese students in gaining tertiary qualifications in English-speaking countries and their perceptions of New Zealand as a relatively safe, low-cost study destination.[14] The low value of the New Zealand dollar in the early 2000s increased the affordability of studying here.[15]

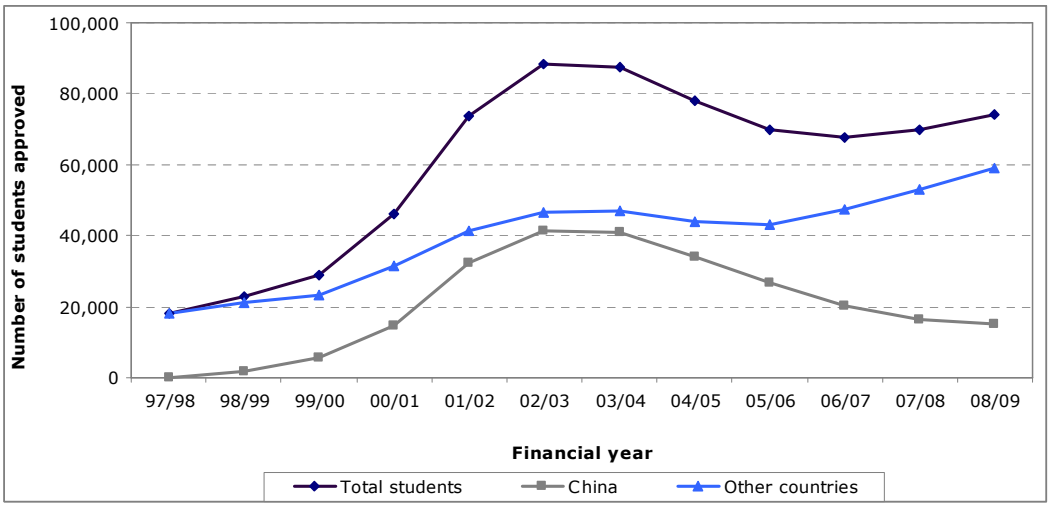
The declining numbers of students from China between 2003/04 and 2008/09 occurred as education opportunities improved in countries such as Australia, the United States, Great Britain, and Canada, as well as in China. The rising value of the New Zealand dollar reduced the cost advantage of studying here, and

[14] Ministry of Education. 2009. *International Student Enrolments in New Zealand: 2002–2008*. Wellington: Ministry of Education.

[15] Reserve Bank of New Zealand. 2010. *Historical Series*. Available at www.rbnz.govt.nz/statistics/exandint/b1/index.html

New Zealand's reputation was compromised with the collapse of some private education providers and the resulting negative publicity.[16]

Figure 2.1 Student permit approvals, 1997/98–2008/09



Source: Department of Labour. 2009. *Migration Trends and Outlook 2008/09.* Wellington: Department of Labour. Available at http://dol.govt.nz/publications/research/migration-outlook-200809/index.asp

The number of fee-paying students decreased 27 percent from 121,200 students in 2003 to 88,600 in 2008, including a 61 percent decrease in students from China.[17] The proportion of Chinese students fell from 44 percent in 2002 to 23 percent in 2008. This decrease in the overall numbers led to a 19 percent reduction in the total tuition fees paid from $742.7 million to $602.3 million. The situation improved in 2009 with enrolment numbers increasing 6 percent to 93,500 – the first increase since 2002.

The decline in numbers from China has been partially offset by increased numbers from other markets. Over the last 5 years, the numbers of students coming from Europe and Latin America have increased and there has been significant growth from India and Saudi Arabia.

India has emerged as an important source country for international students. Since 2007/08, it has been New Zealand's third largest source country behind China and South Korea. The number of Indian students approved to study has increased steadily over the last 5 years, from around 1,200 fee-paying students annually in the first half of this decade to over 7,000 in 2009.[18] The number of Indian students has increased predominantly within public tertiary education institutions (particularly institutes of technology and polytechnics) and private training establishments.

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[16] Education New Zealand. 2008. *Immigration Policy Benchmarking: Implications for competitiveness of New Zealand's export education sector*. Wellington: Education New Zealand, p 9.

[17] Ministry of Education. 2010. *International Education: Latest statistics relating to international education in New Zealand*. Available at www.educationcounts.govt.nz/statistics/international_education (accessed 26 February 2010).

[18] This number refers to the number of visa/permit approvals rather than the number of enrolments.

2.2 Educational sector of international students

Most international students enrol at tertiary level, but students from particular source countries are concentrated in different educational sectors. Table 2.1 shows that the largest sector between 2004 and 2009 was the private training establishment sector, which had 48 percent of fee-paying students in 2009. Enrolments in public tertiary education institutions have been decreasing since 2004. The university sector's share of international enrolments has decreased from 28 percent (27,600) in 2005 to 20 percent (18,900) in 2009.

Table 2.1 Enrolments of international fee-paying students by education sector, 2004–2009

International enrolments by provider groups	2004	2005	2006	2007	2008	2009
	Column percent (%)					
Schools	16.3	14.7	14.6	17.1	17.7	16.5
Institutes of technology and polytechnics	11.2	12.2	11.3	11.0	11.5	11.3
Universities	25.7	28.1	25.5	23.1	21.4	20.2
Private training establishments[(1)]	44.7	43.1	46.1	46.0	46.2	48.1
Subsidiary providers[(2)]	2.2	1.9	2.3	2.9	3.3	3.9
Total enrolments	112,663	98,275	95,294	91,311	88,574	93,505
Change from previous year	-7%	-13%	-3%	-4%	-3%	6%

[(1)] Includes English language schools.

[(2)] Subsidiary providers are mainly the English language training affiliates of some universities and high schools.

Source: Ministry of Education.

Table 2.2 shows that students from China enrol predominantly in universities and private training establishments, with relatively few enrolling in schools. This contrasts with students from South Korea, of whom over one-third enrol in schools and almost half enrol in private training establishments.

Table 2.2 Enrolments of international fee-paying students by education sector and by main source countries, 2009

Source country[1]	Education provider group (%)					Total (%)
	School	ITP[2]	University	PTE[3]	Subsidiary[4]	
China	10.4	12.8	29.3	44.4	3.0	100.0
South Korea	35.3	4.8	8.0	47.7	4.2	100.0
Japan	16.7	7.3	8.7	59.6	7.6	100.0
India	0.8	32.4	13.0	53.7	0.1	100.0
Saudi Arabia	5.3	4.5	22.3	58.3	9.6	100.0
All others	17.3	10.2	25.2	44.0	3.3	100.0
Total row (%)	16.5	11.3	20.2	48.1	3.9	100.0

Note: Due to rounding, percentages may not sum to 100.

[1] Ordered by descending number of enrolments in 2009.

[2] ITP = institute of technology and polytechnic.

[3] PTE = private training establishment, including English language provider.

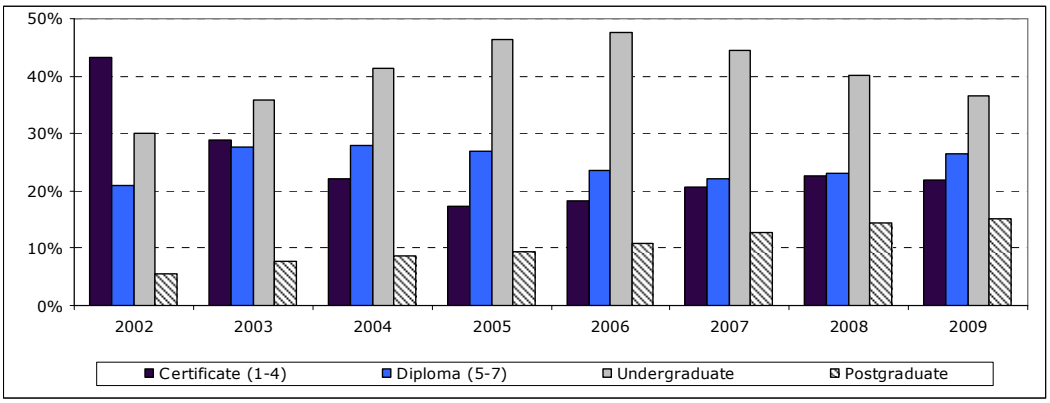
[4] The subsidiary group comprises mainly the English language training affiliates of some universities and high schools.

Source: Ministry of Education.

2.2.1 Distribution of tertiary student enrolments by qualification level

Changing patterns in education providers are also reflected in the qualification level of international students. Figure 2.2 shows international tertiary enrolments by qualification level.

Figure 2.2 International tertiary enrolments by qualification level, 2002–2009



Note: The data for this figure excludes students enrolled at private training establishments that did not receive government tuition subsidies.

Source: Ministry of Education.

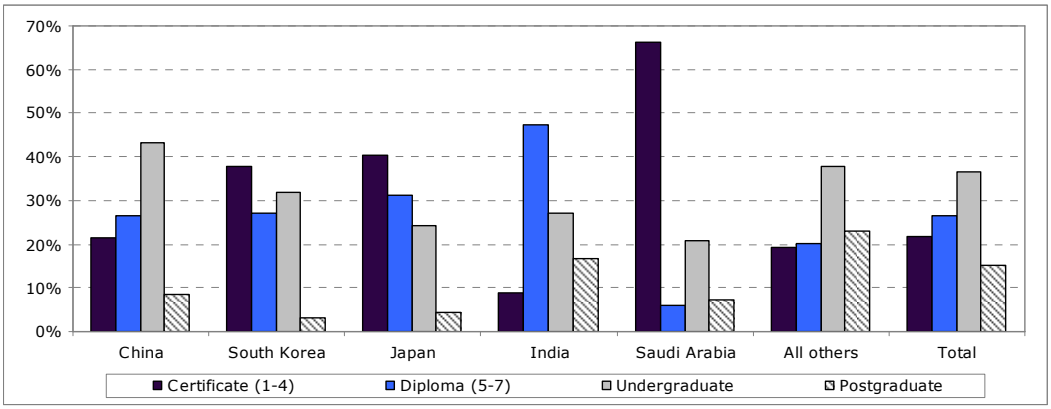
The proportion of international tertiary students enrolled in certificate courses fell from 43 percent in 2002 to 17 percent in 2005. Since then, certificate-level courses have comprised around 20 percent of tertiary enrolments.

The proportion of students enrolled in diploma-level courses has also fluctuated, but has risen since 2007 and comprised 27 percent of enrolments in 2009. Students from India and China accounted for almost all of the increase in diploma-level students in 2009.

The decreasing market share of public tertiary providers, particularly universities, is reflected in the proportion of enrolments in undergraduate and postgraduate courses. These two groups combined decreased from 58 percent of tertiary enrolments in 2006 to 52 percent in 2009. In absolute terms, however, the number of students enrolled in postgraduate study almost trebled between 2002 and 2009. This may, in part, reflect the impact of a new policy on domestic fees status for new international doctoral students, which was introduced in 2006.[19]

Figure 2.3 shows the qualification level composition within each of the main source countries in 2009 (excluding non-subsidised private training establishments). A high proportion of students from India were enrolled in diploma-level courses (47 percent) in New Zealand compared with in other countries.[20] This compares with 27 percent of students overall. At the other end of the spectrum, 17 percent of students from India were enrolled in postgraduate courses compared with 9 percent of students from China and 15 percent overall.

Figure 2.3 International tertiary enrolments by qualification level and main source country, 2009



Note: The data in the figure excludes students enrolled at private training establishments that did not receive government tuition subsidies.

Source: Ministry of Education.

2.2.2 Field of study

Internationally, certain countries attract foreign students into specific fields of study. For example, countries such as the United States, Canada, and several European countries attract a high proportion of international students into the sciences (science, agriculture, engineering, manufacturing, and construction).[21] In New Zealand, the fields of society and culture, management and commerce,

[19] Ministry of Education. 2010. *International Student Enrolments in New Zealand: 2003–2009*. Wellington: Ministry of Education.

[20] This figure excludes enrolments in private training establishments, so most likely underestimates the proportion of diploma-level Indian students.

[21] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 322.

natural and physical sciences, and information technology are the most common (Table 2.3).

Table 2.3 International student enrolments by field of study and qualification level, 2008

	Qualification level (%)				Total (%)
	Certificates Levels 1–4	Diplomas Levels 5–7	Under-graduate	Post-graduate	
Field of study	**Column %[(1)]**				
Natural and physical sciences	4.1	6.3	27.8	21.2	15.7
Information technology	3.9	20.2	20.1	8.2	14.8
Engineering and related technologies	8.0	5.5	5.1	19.4	7.9
Architecture and building	2.5	1.7	3.5	1.3	2.5
Agriculture, environmental and related studies	10.4	1.8	2.9	5.4	4.7
Health	6.9	5.7	10.7	6.0	7.8
Education	1.5	5.2	3.9	4.4	3.8
Management and commerce	12.1	41.4	49.1	28.5	35.8
Society and culture	53.7	31.7	53.3	22.0	43.0
Creative arts	5.7	12.2	14.9	3.1	10.4
Food, hospitality and personal services	13.6	8.4	0.8	0.8	5.7
Mixed field programmes	7.4	3.8	0.5	0.0	2.9
Total students	**9,480**	**11,450**	**15,280**	**6,130**	**42,340**

[(1)] Students may enrol in more than one field. Students are counted in each field in which they are enrolled, so column percentages may sum to more than 100 percent.

Source: Ministry of Education – tertiary Single Data Returns.

The field of society and culture was common across all qualification levels, and the predominant subsectors were language and literature, economics, and law. Management and commerce courses made up just under half of all diploma- and undergraduate-level enrolments (41 percent and 49 percent respectively). Within this field, the three most common subsectors were business and management, accountancy, and sales and marketing. Information technology similarly made up a significant proportion of diploma- and undergraduate-level enrolments (20 percent each). Enrolments in the natural and physical sciences were most common at undergraduate and postgraduate levels (28 percent and

21 percent respectively). Enrolments were spread across the subsectors, although mathematics, biology, and earth sciences were most common.

In addition to the tertiary students in Table 2.3, students are also enrolled in private training establishments (40,896 students in 2008). An analysis of the Ministry of Education's export education levy data shows 70 percent of students enrolled in private training establishments took English language courses. Other fields were business/business computing (14 percent) and tourism/hospitality (4 percent).[22]

[22] Ministry of Education. 2010. *Export Education Levy Key Statistics for Full-Years 2003–2009*. Available from www.educationcounts.govt.nz/statistics/international_education/export_education_levy_statistics/29650/29680/29692

3 INTERNATIONAL STUDENTS' TRANSITION PATHWAYS TO WORK AND RESIDENCE

Highlights

- Former fee-paying international students comprise around 13 percent of approvals for residence through the New Zealand Residence Programme (around 6,200 permanent migrants each year).
- Analysis of administrative records from 1997 to 2006 showed 21 percent of fee-paying international students transitioned to permanent residence, taking an average of 4 years to transition after receiving their first student permit.
- Twenty-three percent of former international students transitioned to work, with over half of these making the subsequent transition to residence. A further 8 percent made a direct transition from study to residence.
- Transition rates for students from India and China are much higher than those of students from South Korea and Japan, whose main motivation is to study English rather than gain a tertiary qualification.

3.1 Introduction

Former fee-paying international students comprise around 13 percent of approvals for residence through the New Zealand Residence Programme (around 6,200 permanent migrants each year). International students can gain permanent residence in New Zealand through two main routes. The most common route is to transition to a work permit and then to residence. The second, less common, route is to gain residence directly from study.

Research has shown that the transition pathways students take are influenced by several factors.[23]

Immigration policies influence completing students' options after study. These options depend primarily on where students are from, the type of qualifications they gain, and when they complete their study.

Other factors that also influence students' migration decisions are their motivations, social networks, desire to stay in New Zealand, and connections with the labour market.

3.2 Student transitions: Long-term trends

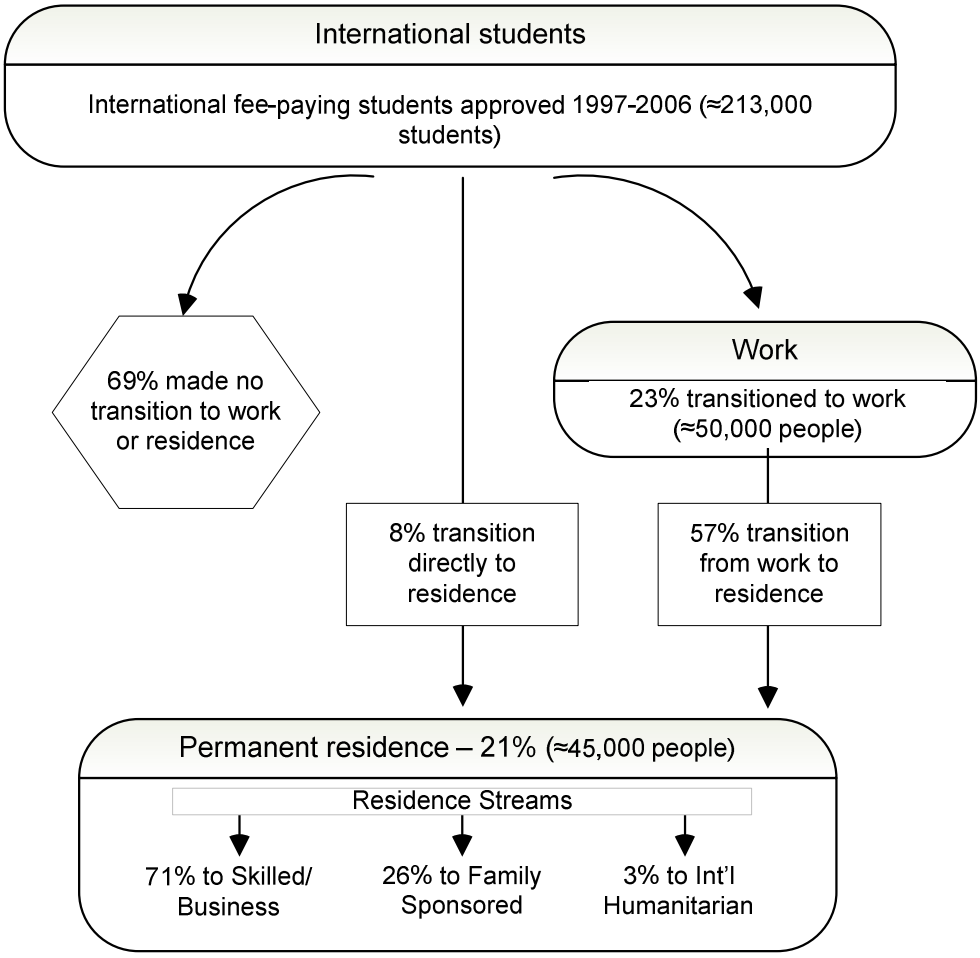
An analysis of 213,100 immigration administrative records from 1997 to 2006 showed 21 percent of fee-paying international students transitioned to

[23] Department of Labour. 2007. *International Students: Studying and staying on in New Zealand*. Wellington: Department of Labour.

permanent residence. The average time taken to transition was about 4 years from the time the student received their first student permit.

Twenty-three percent of fee-paying international students transitioned to work, with over half (57 percent) of these making the subsequent transition to residence. A further 8 percent made a direct transition from study to residence. Figure 3.1 summarises the transition pathways.

Figure 3.1 Summary of student transitions, 1997–2006



Note: Int'l = International.

3.3 International students' intentions

Studies have demonstrated international students' propensity to want to migrate permanently after study. Survey results that the Ministry of Education published in 2004 and 2008 showed that an increasing proportion of international students intended to apply for permanent residence in New Zealand (from 42 percent to 61 percent).[24]

[24] Ministry of Education. 2004. *The Experiences of International Students in New Zealand: Report on the results of the national survey*. Wellington: Ministry of Education; Ministry of Education. 2008. *Experiences of International Students in New Zealand: Report 2007 on the results of the national survey*. Wellington: Ministry of Education.

The increase may reflect the growth in students from source countries such as India who are more likely to want to migrate after studying.[25] It may also reflect the increased availability of study to work permits from July 2005.

3.4 Characteristics of international students who transition to work or residence

We used a cohort approach to determine international students' transition pathways to work and residence. The analysis included 88,800 international fee-paying students approved their first student permit in New Zealand from 1 January 2003 to 31 December 2006. The Department of Labour's administrative data on immigration applications provided information about the student permits approved in this period and any subsequent work or residence permits approved.

This section summarises the transition rates for all students in the 2003–2006 cohorts disaggregated by their source country/region, education sector, age and gender, and years since beginning study in New Zealand. These summary statistics are set out in Table 3.1.

3.4.1 Student transition rates by source country/region

The analysis shows substantial variation in the work and residence transition rates across the main source countries and regions with rates for students from India and China much higher than those from South Korea and Japan. This demonstrates that migration is a greater driver for students from developing countries than for students from developed countries. Migration is less of a driver for South Korean and Japanese students, whose main motivation is to study English rather than gain tertiary qualifications, hence their lower transition rates.

3.4.2 Student transition rates by education sector

The highest rates of transition to both work and residence were seen in the tertiary sector, in particular among students from institutes of technology and polytechnics, although these students comprised only 6 percent of all students in the analysis.

3.4.3 Student transition rates by age and gender

The average age of international fee-paying students approved for their first student permit in New Zealand was 20. The main departure from this was in the school sector where the average age was 14.

The proportion of male and female students was evenly split with very little difference in the average age and transition rates by gender.

[25] Education New Zealand. 2009. *Indian Students Longitudinal Study: Consolidated report*. Wellington: Education New Zealand.

3.4.4 Student transition rates by years since beginning study in New Zealand

Time is an important factor in student transitions, particularly in the transition to permanent residence. The students who had been in New Zealand the longest (up to 7 years for the 2003 cohort) had the highest residence transition rate.

Table 3.1 Summary of student characteristics, mean age, and transition rates

Characteristic	Percentage of 2003–2006 cohorts (%)	Mean age at first permit (years)	Transition rates (%)	
			Transition from study to work	Transition from study to residence
Source country/region				
China	19.6	21.2	42.5	22.9
South Korea	23.0	17.8	7.3	5.4
Europe (including UK/Ireland)	13.3	21.0	13.2	10.5
Japan	10.5	20.5	7.6	2.3
North America	8.9	21.1	8.9	5.1
South-east Asia	8.6	20.8	19.0	12.8
India	4.5	23.4	71.6	46.7
All others	11.7	21.3	18.5	15.7
Education sector				
University	23.1	22.7	23.5	14.8
Institute of technology and polytechnic	5.5	23.3	47.7	30.1
Private training establishment	20.5	22.0	36.2	17.8
English language provider	20.5	25.4	16.9	8.5
School	30.4	13.6	4.5	7.6
Gender				
Male	49.0	20.2	20.9	12.7
Female	51.0	20.6	19.8	13.0
Years since first permit[(1)]				
7 years (2003 cohort)	33.2	20.1	24.2	17.8
6 years (2004 cohort)	23.0	20.2	18.6	13.1
5 years (2005 cohort)	20.4	20.6	18.0	10.3
4 years (2006 cohort)	23.4	20.7	18.7	7.8
Total students (2003–2006 cohorts)	**88,800**	**20.4**	**20.3**	**12.8**

Note: The residence transition rate of 12.8 percent in the table is lower than the long-run average rate discussed in section 3.2. This is because some students in the 2003–2006 cohorts have had insufficient time to transition to residence, although they may transition in the future.

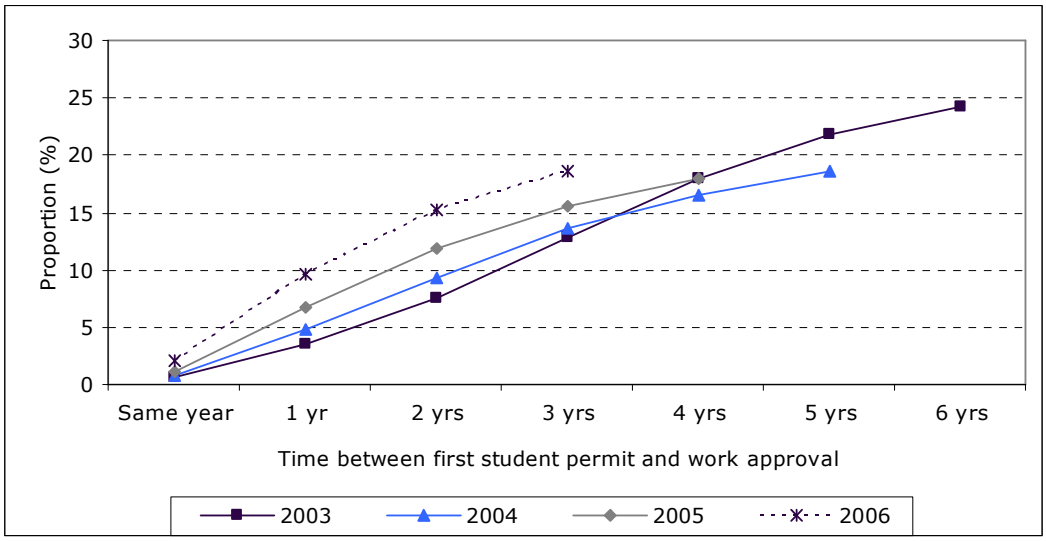
(1) The year a student's first student permit was approved was taken as the starting point.

3.5 Main work transition pathways

We used the administrative data to examine the international student cohorts for 2003–2006 and determine their main pathways from study to work. Of the 88,800 students approved over the 4-year period, 18,000 transitioned to a work permit (20.3 percent).

Figure 3.2 tracks the time lapsed from the first student permit to the first work permit. It shows that the transition time was faster with each cohort, which reflects the availability of the graduate job search permit from 2005.

Figure 3.2 Cumulative proportion of students who transitioned to work by cohort year, 2003–2006



The predominant work transition pathway is through the study to work policies, particularly the Graduate Job Search Policy (from 2005).[26] Over half (52 percent) of students who transitioned to work did so through these study to work policies (Table 3.2). The Graduate Job Search Policy had a marked effect on the ability of students to transition into the labour market. The long-term trends show that students who finished their study after the policy came into effect had a much higher transition rate than earlier cohorts had.

Table 3.2 shows the variation in transition rates and pathways for students from the main source countries/regions, which, in part, reflects the options available to only some students. Students from India and China have the highest transition rates (72 percent and 43 percent respectively) and their main transition pathway is through the study to work policies and Essential Skills Policy.[27]

[26] These include the graduate job search permit and the practical experience post-study permit.

[27] For a description of temporary work policies, see Appendix B.

These trends illustrate the significance of the study to work policies for students from India and China who have little or no access to Working Holiday Schemes.[28] By comparison, Working Holiday Schemes have been a common option for students from Japan, South Korea, and North America who wanted to work in New Zealand.

Table 3.2 Transition to work by student source country/region and work category, 2003–2006

Source country/ region	Student cohort	Trans-itioned to work (%)	Work category (row %)[1]				
			Study to Work	Essential Skills	Family	WHS[2]	Others
China	17,400	42.5	72.7	7.7	13.2	0.0	6.5
South Korea	20,400	7.3	24.7	21.7	21.0	22.7	9.9
Europe (incl UK)	11,800	13.2	26.8	24.8	17.0	22.0	9.4
South-east Asia	7,600	19.0	53.3	17.8	16.9	5.0	7.0
Japan	9,300	7.6	19.3	15.8	13.0	46.0	5.9
India	4,000	71.6	56.3	32.0	6.3	0.0	5.4
North America	7,900	8.9	17.1	21.3	15.0	36.1	10.4
All others	10,400	18.5	32.4	27.0	20.8	4.1	15.7
Total	**88,800**	**20.3**	**52.1**	**17.9**	**14.2**	**7.8**	**8.0**

[1] The table counts the first transition to a work permit. See Appendix B for further information about temporary work policies.

[2] WHS = Working Holiday Scheme.

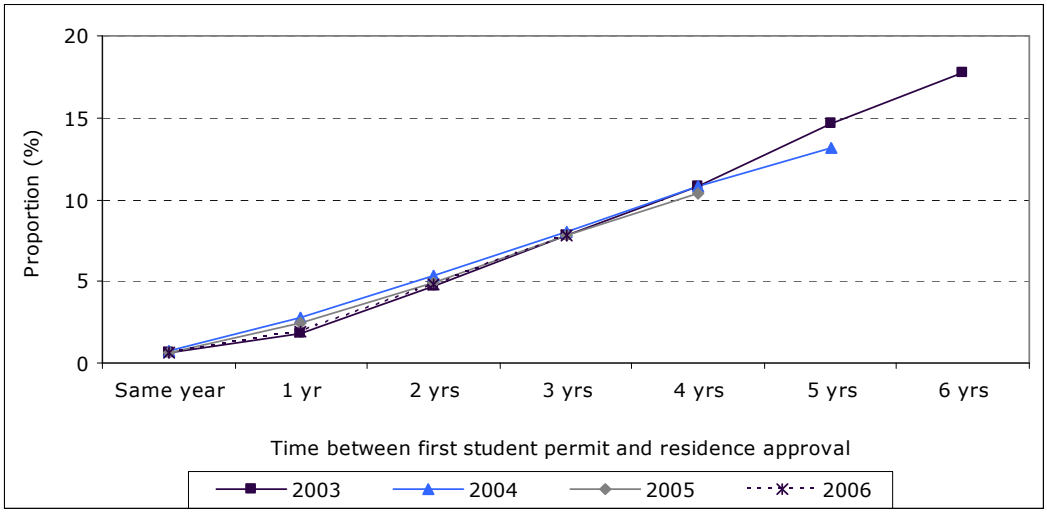
3.6 Main residence transition pathways

We used the administrative data to examine the international student cohorts for 2003–2006 and determine their main pathways from study to residence. Of the 88,800 students in the analysis, 11,400 transitioned to permanent residence (13 percent). The transition rate is lower than the long-run average rate because some students have not had enough time to transition.

Figure 3.3 tracks the time from the first student permit to approval for permanent residence. The figure shows that the transition rate is similar for each cohort and highlights the increased time needed to transition to residence – the rate has not levelled off after 6 years.

[28] The China Working Holiday Scheme was introduced in 2009 and has 1,000 places available annually (applicants must be in China to apply). New Zealand does not have a Working Holiday Scheme with India.

Figure 3.3 Cumulative proportion of students who transitioned to permanent residence by cohort year, 2003–2006



The predominant pathway to residence was through the Skilled Migrant Category (Table 3.3). Of those who transitioned to residence, 67 percent transitioned as skilled migrants. Students from India had the highest transition rates (47 percent), followed by those from China (23 percent), and students from these countries were more likely than others to transition as skilled migrants (88 percent and 73 percent).

Students from Japan, North America, and South Korea had very low transition rates. In the case of students from Japan and South Korea, this most likely reflects their education sector (school and English language providers). In addition, research has shown that North American students are less likely to seek migration opportunities after study than students from the main Asian source countries.[29]

[29] Ministry of Education. 2008. *Experiences of International Students in New Zealand: Report 2007 on the results of the national survey*. Wellington: Ministry of Education.

Table 3.3 Transition to residence by student source country/region and residence category, 2003–2006

Source country/ region	Student cohorts	Trans-itioned to residence (%)	Residence category (row %)[1]				
			Skilled	Business	Partner-ship	Other family	All others
China	17,400	22.9	73.1	1.1	21.5	4.0	0.4
South Korea	20,400	5.4	60.2	13.1	20.0	5.7	1.0
Europe (incl UK)	11,800	10.5	58.8	2.5	32.0	5.4	1.3
South-east Asia	7,600	12.8	57.3	2.6	30.6	8.2	1.3
Japan	9,300	2.3	51.2	2.8	44.7	1.4	0.0
India	4,000	46.7	88.1	0.4	7.8	3.4	0.3
North America	7,900	5.1	56.1	1.5	37.7	4.0	0.7
All others	10,400	15.7	47.9	1.3	24.6	12.7	13.5
Total	**88,800**	**12.8**	**66.7**	**2.5**	**22.5**	**5.8**	**2.5**

[1] See Appendix C for further information about permanent residence categories.

3.7 International students and permanent skilled migration

New Zealand's student immigration policy contributes to the country's sustainable economic development. This is achieved through foreign exchange earnings and by attracting and developing students who have the skills and talents New Zealand needs. Retaining international students is facilitated through the study to work policies, which provide migration opportunities after study, and through the recognition of New Zealand qualifications and work experience in the Skilled Migrant Category.

We used the administrative data to examine the international student cohorts for 2003–2006 and determine the characteristics of students who transitioned to residence as skilled migrants and their main routes to that outcome. Of the 88,800 students in this analysis, 7,600 gained permanent residence as skilled migrants (8.6 percent). This number is expected to increase because many students have not had enough time to transition.

Table 3.4 shows that the main pathway to skilled migration for international students is through the study to work policies. Of those students approved for residence through the Skilled Migrant Category, 44 percent had achieved this through the study to work route. The highest skilled transition rates were observed for students from India (41 percent) and China (17 percent). For these two source countries, around 90 percent of students held a work permit before transitioning as skilled migrants. For other countries, this rate ranged from 45 percent to 78 percent.

Very few students from South Korea and North America transitioned as skilled migrants, but many of those who made the transition did so directly from study. Students from South Korea were, on average, younger than students from other

countries, so were more likely to be at school. Many would have made the transition to residence as secondary applicants, for example, as a dependent child of a skilled migrant.

Table 3.4 Skilled pathway by student source country/region and work category, 2003–2006

Source country/ region	Student cohorts	% skilled path-way	Work category (row %)[1]					
			None[2]	Study to work	Essential Skills	Family	WHS[3]	Others
China	17,400	16.7	10.3	66.4	10.1	8.0	0.0	5.1
South Korea	20,400	3.3	55.2	12.6	17.3	9.3	1.7	3.9
Europe (incl UK)	11,800	6.2	38.0	19.9	28.5	5.8	3.3	4.5
South-east Asia	7,600	7.3	30.6	41.9	20.4	3.6	1.3	2.3
Japan	9,300	1.2	21.6	19.8	27.9	8.1	14.4	8.1
India	4,000	41.1	7.7	44.5	39.2	3.6	0.0	5.0
North America	7,900	2.8	54.7	9.8	21.3	6.2	6.2	1.8
All others	10,400	7.5	37.0	25.6	23.9	7.8	0.6	5.0
Total	**88,800**	**8.6**	**22.0**	**44.2**	**21.5**	**6.6**	**1.0**	**4.7**

[1] See Appendix B for further information about temporary work policies.

[2] Transitioned to skilled residence from study without holding a work permit.

[3] Working Holiday Scheme.

3.8 Regression analysis of student transition pathways

When considering the relationship between students' characteristics and their transition pathways, it is important to control for factors that may influence the probability of students' taking those pathways. For example, the low transition rate for students from South Korea and Japan may be related to measurable factors such as their age or education sector rather than to specific differences between students from different source countries. See Appendix D for further information on the model estimates.

Notwithstanding this approach, differences in transition patterns also reflect unobserved factors. Such factors include students' motivations or ambitions, their social networks, and their opportunities to connect with the labour market.

We modelled the likelihood of students taking one of four pathways.

- *Transition to work* – being approved a work permit after study.
- *Transition to residence from work* – being approved permanent residence after holding a work permit.
- *Transition to residence* – being approved permanent residence after holding a work permit or directly from study.

- *Transition to skilled residence* – being approved permanent residence through a skilled migration policy after holding a work permit or directly from study.[30]

The characteristics included in the regression models as independent variables were:

- student source country/region
- education sector
- gender
- age (three groups)
- the number of years since the first student permit was approved.

3.8.1 Likelihood of transitioning to work and/or residence

Irrespective of the other variables used, the student's source country/region had the greatest effect on their transition pathway. The marginal effects are summarised in Table 3.5.

Table 3.5 Marginal effects of student characteristics estimated from the binomial logistic regression models of transition pathways

Student characteristic (reference group)	Transition pathway (1)			
	Work	**Work to residence**	**Residence**	**Skilled**
Source country/region (China)				
South Korea	-0.26*	-0.11*	-0.15*	-0.10*
Europe (including UK)	-0.22*	0.01	-0.11*	-0.08*
Japan	-0.26*	-0.17*	-0.18*	-0.12*
North America	-0.28*	-0.16*	-0.15*	-0.11*
South-east Asia	-0.16*	0.01	-0.07*	-0.06*
India	0.22*	0.17*	0.22*	0.19*
All other source countries	-0.16*	0.05*	-0.04*	-0.06*
Education sector (university)				
Institutes of technology/polytechnics	0.08*	0.03	0.05*	0.02*
Private training establishment	0.04*	-0.05*	-0.01	-0.02*
English language	-0.01	-0.05*	-0.03*	-0.06*
School	-0.06*	-0.09*	0.01	-0.02
Gender (male)				
Female	0.03*	0.06*	0.03*	0.01*

[30] Predominantly the Skilled Migrant Category, but also includes the Residence from Work Policy.

Student characteristic (reference group)	Transition pathway [1]			
	Work	Work to residence	Residence	Skilled
Age group (23 and over)				
Aged 0–17	-0.18*	-0.23*	-0.11*	-0.08*
Aged 18–22	-0.06*	-0.14*	-0.08*	-0.05*
Years since first permit (4 years)[2]				
7 years (2003 cohort)	0.03*	0.29*	0.09*	0.07*
6 years (2004 cohort)	0.02*	0.20*	0.07*	0.05*
5 years (2005 cohort)	0.01	0.11*	0.03*	0.02*

[1] The four transition pathways are: Work = transition to work – being approved a work permit after study; Work to Residence = transition to residence from work – being approved permanent residence after holding a work permit; residence = transition to residence – being approved permanent residence after holding a work permit or directly from study; Skilled = transition to skilled residence – being approved permanent residence through a skilled migration policy after holding a work permit or directly from study.

[2] The year a student's first student permit was approved was taken as the starting point.

* The marginal effect was statistically significant at the 95 percent confidence level.

3.8.2 Key findings from the regression model

Students from India were significantly more likely to transition to work and/or residence than were students from China. Students from China generally had higher rates of transition than students from all other regions.

On average, the transition rates for students from India for all four pathways were 17–22 percentage points higher than those for students from China.

Students studying at institutes of technology and polytechnics were more likely than other students to transition using any of the four pathways. The largest difference was in the work transition rate, where students at institutes of technology and polytechnics had a rate, on average, 8 percentage points higher than that of university students (the reference category).

When other factors were controlled for, female students were significantly more likely than male students to transition using any of the four pathways, although the differences were relatively small.

On average, transition rates were higher for older students than for younger students.

On average, transition rates for all of the pathways increased over time.

4 INTERNATIONAL STUDENTS' MOTIVATIONS FOR CHOOSING NEW ZEALAND

Highlights

- Most former students in the Transitions Survey were Asian: students from North Asia (predominantly China) made up just over half of all students, followed by students from South-east Asia (16 percent) and South Asia (15 percent).
- English instruction and migration opportunities are key factors in international students' choices about where to study. The quality and cost of education were important drivers for over half of respondents.
- Just over one-third of students who transitioned to residence as skilled migrants intended to apply for residence from the outset.
- Thirty-six percent of students sought qualifications to help them gain permanent residence in New Zealand, and half of these respondents first came to New Zealand intending to apply for permanent residence.
- The most important factors influencing students' decisions to apply for permanent residence were lifestyle (80 percent), safety and security (80 percent), and educational opportunities (68 percent).
- Economic-related motivations were relatively weak pull factors for international students – only 56 percent chose to migrate to New Zealand for job opportunities.

4.1 Introduction

We used the Department of Labour's Transitions Survey to explore the motivations and intentions of former students who transitioned to residence as principal migrants through the Skilled Migrant Category. This chapter explores the motivations of international students who chose New Zealand as a study destination, their intentions to apply for permanent residence when they first came to New Zealand, and what motivated them to apply for permanent residence.

Consistent with the analysis of immigration administrative data described in chapter 3, most former students in the Transitions Survey were Asian. Former students from North Asia (predominantly China) made up just over half of all students, followed by students from South-east Asia (16 percent) and South Asia (15 percent). Most survey respondents (83 percent) were aged 20–34.

4.2 International students' motivations to study in New Zealand

There are several motivating factors for choosing a study destination. Additionally, different reasons for choosing to study in New Zealand may be associated with different outcomes.

Respondents in the Transitions Survey were students who had gained permanent residence. Therefore, we expect the factors that motivated them to be different from the factors that motivated students who did not stay on in New Zealand. For example, we would expect migration-related motivations to be higher among those who did become permanent residents than among those who left after completing their study.

Respondents were asked to rank the importance of various factors in influencing their decision to study in New Zealand.[31] These factors were categorised into logical groups and tested for consistency.[32]

The findings showed that international students who transitioned to permanent residence as skilled migrants were motivated to study in New Zealand by a variety of factors, including migration opportunities, education, New Zealand being an English-speaking country, and costs. Table 4.1 shows these category groupings and the percentage who chose at least one of the factors in the category as 'extremely important' or 'very important'.

Table 4.1 Factors motivating international students to study in New Zealand

Category	Motivating factor	Percentage choosing this factor (%)	Percentage choosing this category (%)
Migration opportunities	Opportunity to get a work permit after graduation	44.1	68.8
	Opportunity to obtain permanent residence in New Zealand at a later date	44.9	
	Opportunity to obtain New Zealand citizenship at a later date	29.7	
	Opportunity to move to a country other than New Zealand at a later date	21.5	
Education	Quality of New Zealand education	51.7	62.8
	International recognition of New Zealand qualifications	58.3	
English language	New Zealand being an English-speaking country	60.5	60.5
Costs	Living costs in New Zealand	37.8	59.4
	Cost of education in New Zealand	56.2	
Ease	Easy to get a student visa	37.8	37.8

Source: Department of Labour, Transitions Survey (2007-2008).

These findings correspond to the international literature that shows, among other factors, that English instruction and migration opportunities are key factors

[31] For question text and response options, see Appendix E.

[32] The logic of the groupings was tested using Cronbach's alpha. Some factors did not correlate well with other factors, so these have been reported on separately. For example, English language was initially in the education category, but these factors did not correlate well together, so English language was moved into another category.

in international students' choices about where to study.[33] The quality and cost of education were important drivers for over half of the respondents.

Different groups of students had different motivations. Students whose highest qualification was a bachelor's degree were more likely to be motivated to study in New Zealand by cost factors (68 percent) than students whose highest qualification was vocational (49 percent). The average tuition fee in 2007 for an international student at university was $17,000 compared with $12,000 at institutes of technology and polytechnics.[34] The differential in tuition fees may mean cost was a greater consideration for university students than for those enrolling at institutes of technology and polytechnics.

Students from Europe, South Africa, and North America (ESANA) and North Asia were less likely to be motivated by education factors than were students from South Asia, South-east Asia, and Other regions.[35]

4.3 International students' migration intentions

The availability of migration opportunities after study is an important aspect that international students consider when choosing their study destination. We examined the intentions of international students to apply for permanent residence when they first came to New Zealand to study.

Respondents were asked about their migration intentions when they first came to New Zealand. Just over one-third (37 percent) of former students who transitioned to residence as skilled principal migrants intended to apply for residence from the outset. This finding suggests that many international students do not intend to migrate at the outset of their study, but change their plans after they arrive in New Zealand.

Former students who had gained a qualification in New Zealand before being granted permanent residence were asked whether they had sought a qualification to help them gain permanent residence in New Zealand.[36] Thirty-six percent of students sought their qualifications for migration purposes, and half of these same respondents (51 percent) said they first came to New Zealand with the intention of applying for permanent residence. This means that for around 13 percent of former students who became skilled migrants qualifications were, at least in part, a means to gaining permanent residence.

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[33] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-operation and Development, p 315.

[34] The average tuition fee was derived from total tuition income divided by the number of equivalent full-time students, excluding GST: Ministry of Education. 2010. *Key Indicators for Export Education Levy for Full-Year*. Available at www.educationcounts.govt.nz/__data/assets/excel_doc/0008/74609/Key-Indicators-EEL-2003-2009.xls

[35] For information on region groupings, see Appendix G.

[36] For the question text, see Appendix E.

Students whose highest New Zealand qualification was vocational were more likely to report that they sought this qualification to help them gain permanent residence (Figure 4.1). The shorter length of time required, on average, to gain a vocational qualification and the lower average tuition fees at institutes of technology and polytechnics and private training establishments may be factors that contribute to this result.[37]

Figure 4.1 Proportion of respondents who sought qualifications to help gain permanent residence by highest qualification gained in New Zealand

Source: Department of Labour, Transitions Survey (2007-2008).

4.4 International students' motivation to apply for permanent residence in New Zealand

This section looks at what factors motivated former students to apply for permanent residence in New Zealand. Only one-third of former students who transitioned to residence as skilled migrants intended to apply for permanent residence when they first came to New Zealand to study.

A similar exercise to that described in section 4.2 (which grouped motivations to study in New Zealand) was conducted for motivations to apply for permanent residence in New Zealand. Table 4.2 shows the groupings and the percentage who chose at least one of the factors in each category as 'extremely important' or 'very important'.

For international students who transitioned to residence, the most important factors that influenced their decision to apply for permanent residence were lifestyle and safety and security (80 percent for each category). Within these broad categories the highest ranking factors were New Zealand's clean and green environment, the relaxed pace of life, and safety from crime and violence.

[37] Ministry of Education. 2010. *Key Indicators for Export Education Levy for Full-Year*. Available at www.educationcounts.govt.nz/__data/assets/excel_doc/0008/74609/Key-Indicators-EEL-2003-2009.xls

Table 4.2 Factors motivating international students to apply for permanent residence

Category	Motivating factors	Percentage choosing this factor (%)	Percentage choosing this category (%)
Lifestyle	New Zealand's clean and green environment	66.2	80.4
	New Zealand's relaxed pace of life	60.5	
	Good housing in New Zealand	32.6	
	New Zealand's small population	31.5	
	Availability of services in New Zealand	42.1	
	Recreation and leisure activities available in New Zealand	41.9	
	Climate (for example, weather)	40.9	
Safety and security	Political stability and lack of corruption in New Zealand	54.7	80.1
	Freedom of religious and political expression in New Zealand	51.2	
	New Zealand's safety from crime and violence	63.8	
	Inter-racial, ethnic, or religious harmony	45.6	
Education	Educational opportunities in New Zealand	54.1	67.6
	Educational opportunities for children in New Zealand	54.9	
Work and living costs	Job opportunities in New Zealand	55.5	59.3
	Living costs in New Zealand	38.2	
Family	Opportunities to bring family to New Zealand	40.9	56.2
	Securing a place for the family to live if desired in the future	48.3	

Source: Department of Labour, Transitions Survey (2007-2008).

Education considerations continued to play a role in former students' decision making, with around two-thirds of former students specifying educational opportunities (including education for children) as an extremely or very important factor. Former students from North Asia and ESANA were less likely to be motivated by education factors in their decision to apply for permanent residence in New Zealand.

Economic-related motivations were relatively weak pull factors for international students. Only 56 percent chose to migrate to New Zealand for job opportunities. Although job opportunities in New Zealand are not as attractive to international students as other features of New Zealand, employment is likely to be a key contributor to retaining these migrants in New Zealand. The following chapter examines labour force outcomes in more detail.

5 SETTLEMENT OUTCOMES OF INTERNATIONAL STUDENTS WHO GAINED RESIDENCE

Highlights

- Of Longitudinal Immigration Survey: New Zealand (LisNZ) respondents who were former international students, the two largest source countries were China (43 percent) and India (9 percent).
- Most former students were approved for residence through the skilled migration categories (63 percent).
- Around half of the students surveyed in LisNZ had a vocational qualification (25 percent) or bachelor's degree (23 percent) as their highest qualification gained in New Zealand.
- Management and commerce (51 percent) was the most common field of study across the range of qualifications gained in New Zealand.
- Almost half (49 percent) of the former students were employed full time 6 months and 18 months after taking up residence.
- The most common difficulty former students experienced when seeking work was a lack of New Zealand work experience (38 percent at 6 months and 21 percent at 18 months after taking up residence).
- The real median hourly earnings from wages and salaries for former students increased from $16.65 per hour at 6 months to $18.05 per hour at 18 months after taking up residence.
- Overall, former students reported high levels of satisfaction with life in New Zealand.

5.1 Introduction

This chapter examines the short- and medium-term settlement outcomes of former international students who transitioned to permanent residence. This analysis uses data from the Longitudinal Immigration Survey: New Zealand (LisNZ). By using a longitudinal survey to measure settlement outcomes for former international students we can track how outcomes change over time.

LisNZ is a survey of permanent migrants to New Zealand, some of whom were former international students.[38] LisNZ involved the interviewing of the same migrants at 6 months (wave 1), 18 months (wave 2), and 36 months (wave 3) after taking up permanent residence. The analysis in this report includes people who were interviewed at waves 1 and 2.[39] There were over 6,000 respondents at

[38] For further details, see section 1.4.

[39] LisNZ wave 3 data was not yet available.

wave 2, of whom 1,083 identified as students. The overall response rate was 66 percent at wave 1 and 86 percent at wave 2.[40]

5.2 Main characteristics of students in LisNZ

The attributes of former international students in LisNZ closely represent the attributes of students in both the immigration administrative data and the Transitions Survey.

In LisNZ, most former students were from Asia (71 percent), with just over half (52 percent) from North Asia, 10 percent from South Asia, and 9 percent from South-east Asia.[41] Within each of these broad categories, some countries of origin are more dominant than others (see Appendix G). Of LisNZ respondents who were former international students, the two largest source countries were China (43 percent) and India (9 percent).

Most former students were approved for residence through the skilled migration categories (63 percent), which is consistent with the transition pathways described in section 3.6. The other main pathways to permanent residence were through the Family Partner Category (22 percent) and Business categories (10 percent).

The mean age of former students at wave 2 of LisNZ was 28.

Most students had a good level of English language ability, which reflects the high proportion approved as skilled migrants and the language requirements associated with the skilled migrant policies. Thirty-eight percent reported that English was the main language they spoke, and a further 55 percent had very good or good English proficiency.

5.3 Qualifications and study of former international students

This section examines former international students' highest qualifications gained in New Zealand and the associated fields of study. This information, coupled with information on enrolments from section 2.1, allows us to better understand the types of study that contribute to students' success in gaining permanent residence.

[40] For more information on the calculation of response rates for this survey, see Statistics New Zealand. No date. *Longitudinal Immigration Survey: New Zealand – Wave 2, 2008*. Available at www.stats.govt.nz/browse_for_stats/population/Migration/LongitudinalImmigrationSurveyNewZealand_HOTPW208/Technical%20Notes.aspx

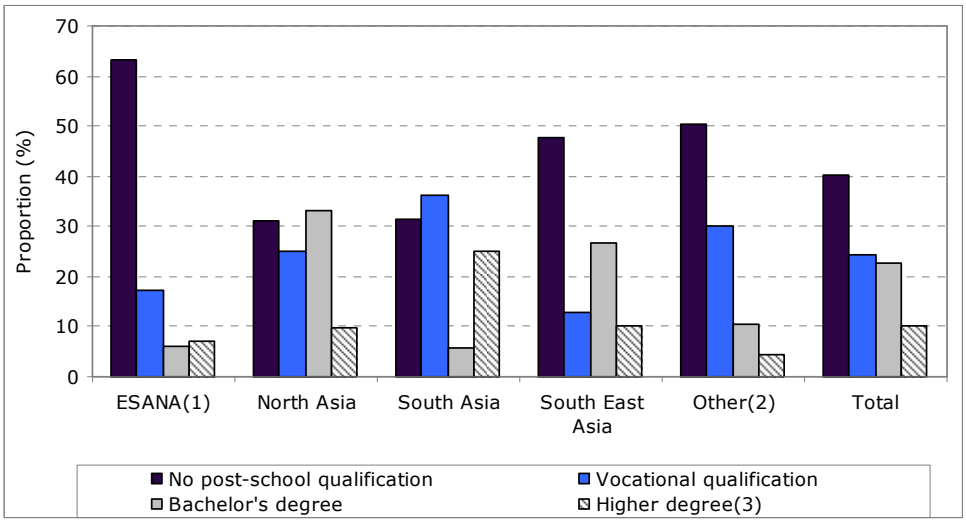
[41] Region of origin data has been aggregated due to the small sample size. The categories reported are ESANA (Europe, South Africa, and North America), North Asia, South Asia, South-East Asia, and Other (comprising the Middle East, Latin America, Africa (excluding South Africa), and the Pacific).

5.3.1 Highest qualification gained in New Zealand

Around half of the students surveyed in LisNZ had gained a vocational qualification (25 percent) or bachelor's degree (23 percent) as their highest qualification in New Zealand. A further 10 percent had gained a higher degree. The remaining 42 percent held no post-school New Zealand qualification when they gained residence.

Students from North Asia (33 percent) and South-east Asia (27 percent) were more likely to have gained a bachelor's degree as their highest qualification in New Zealand. Students from South Asia (25 percent) were the most likely to have gained a higher degree (see Figure 5.1).

Figure 5.1 Highest qualification gained in New Zealand by region of origin



(1) ESANA = Europe, South Africa, and North America.

(2) Other means the Middle East, Latin America, Africa (excluding South Africa), and the Pacific.

(3) Higher degree includes a postgraduate certificate or diploma, master's degree, and doctorate.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

Some of these trends are also evident in the administrative data on enrolments, which showed a higher proportion of students from China enrolled in universities and a higher proportion of students from India enrolled in postgraduate and diploma-level courses.

Of those former students without a post-school qualification, around half were approved through the Family Partner (31 percent) or Business (20 percent) Category. Most of the remainder came through the skilled migration categories – skilled secondary (28 percent) and skilled principal (16 percent).

5.3.2 Field of study of highest qualification gained in New Zealand

Management and commerce was the most common field of study for post-school qualifications gained in New Zealand, reported by just over half (51 percent) of all former students. Fifty-eight percent of former international students from China studied in this field. Table 5.1 shows the top five fields of study across the range of qualifications gained in New Zealand.

Table 5.1 Top five fields of study by respondents' highest qualification gained in New Zealand

Field of study	Highest qualification gained in New Zealand (%)			Total stated (%)
	Vocational qualification	Bachelor's degree	Higher degree(1)	
Management and Commerce	53.3	54.8	45.6	51.2
Information technology	8.8	23.0	12.3	14.6
Engineering and related technologies	16.8	..c	8.8	9.5
Society and culture	6.6	5.6	7.0	5.4
Health	4.4	5.6	5.3	5.1

Note: ..c = suppressed for confidentiality reasons.

(1) A higher degree includes a post-graduate diploma and certificate, an honour's degree, a master's degree, and a doctorate.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

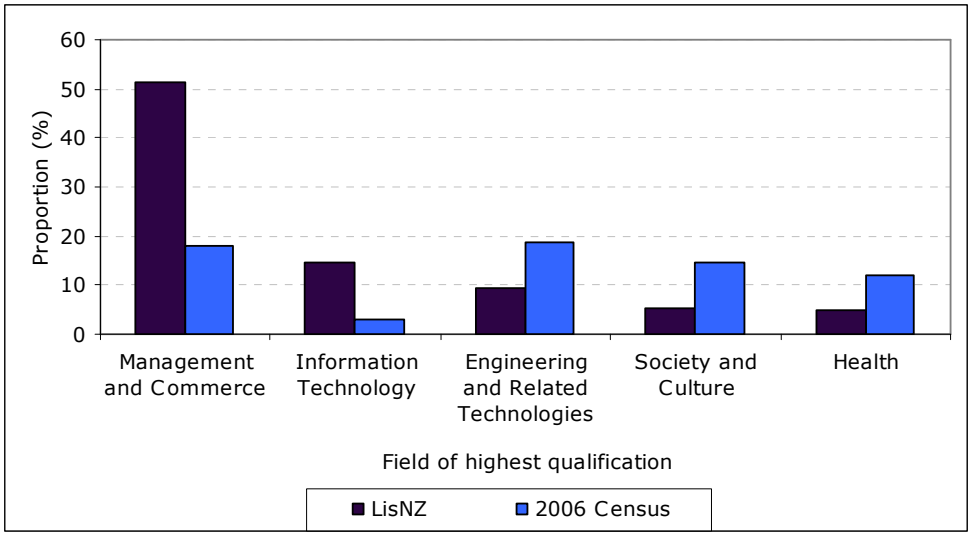
The second most common field of study overall was information technology (15 percent), followed by engineering and related technologies. One-fifth (20 percent) of former students from India gained their highest qualification in engineering and related technologies.

Management and commerce is also one of the top broad fields of study for the highest qualification gained by the New Zealand usually resident population, with 18 percent of the population having completed study in this field at the time of the 2006 census.[42] However, the proportion of international students who had studied in the field of management and commerce was larger than the proportion of the total usually resident population of New Zealand who had.[43] Figure 5.2 compares the top five fields of study for former international students with those of the census usually resident population.

[42] Usually resident population aged 15 years and over with a post-school qualification who stated their field of study (2006 Census of Population and Dwellings).

[43] Direct comparison with the census is problematic for several reasons. One limitation is that the LisNZ sample includes only those who have a qualification gained in New Zealand while the census includes all post-school qualifications, including those gained overseas. Another limitation is the reference period: the qualifications for the LisNZ sample will have largely been gained in the last 10 years (as the sample became permanent residents between 2004 and 2005 and most would have undertaken their New Zealand study in the 5 years before this), while the census reference period will be significantly larger.

Figure 5.2 Top five fields of study for former international students from the Longitudinal Immigration Survey: New Zealand and the 2006 Census of Population and Dwellings



Source: Longitudinal Immigration Survey: New Zealand (LisNZ) and 2006 Census of Population and Dwellings from Statistics New Zealand.

The top five fields of study for highest qualification gained in New Zealand from LisNZ broadly align with the top international student enrolments (see Table 2.3). Key differences are the absence of natural and physical sciences in the top fields of study for those who transitioned to permanent residence and the lower proportion of former students whose highest qualification was gained in the field of society and culture.

Some of these differences may be explained by the different reference years or students gaining another qualification in a higher field. However, these results suggest that transition rates to residence are lower for those who gained their highest qualification in the fields of society and culture and natural and physical sciences than in other fields of study.

5.3.3 Other qualifications held by former international students

Some international students who undertake post-school study in New Zealand have completed post-school qualifications in other countries. When assessing outcomes for students based on the study they have undertaken in New Zealand, we need to bear in mind outcomes also vary, depending on, among other things, the other qualifications these students hold and their work experience from overseas and New Zealand.

Overall, almost a quarter of former students (24 percent) had completed their highest post-school qualification overseas. Forty-one percent of former students from South Asia gained their highest post-school qualification overseas.

Former students who had no post-school qualification gained in New Zealand or a vocational qualification gained in New Zealand were more likely to have gained their highest post-school qualification overseas (35 percent and 32 percent respectively) than former students with a bachelor's degree (6 percent) or higher degree (7 percent).

5.3.4 Additional study undertaken in New Zealand since gaining permanent residence

Many former students continue or re-enter study after gaining permanent residence. This suggests that gaining residence is one goal but not the sole goal of many international students. New migrants experience an entry disadvantage in New Zealand with, on average, lower employment rates and lower incomes than those of New Zealand–born people.[44] Re-entering study to augment qualifications may be a way for international students to improve their employment prospects.

Several study patterns are possible after a student is approved for residence. For example, students may continue to study after gaining residence, they may re-enter study after taking up residence following a break from study (during which time they may or may not have been employed), or they may undertake study while employed.

By wave 2 of LisNZ, almost half (48 percent) the former students had done other study (excluding English language study) in New Zealand since gaining residence.[45] Six months after gaining residence (wave 1), 23 percent of former students were out of the labour force and studying, and 19 percent were out of the labour force and studying 18 months' post-residence (wave 2). Fourteen percent were studying at both waves.

Different groups of former students were more or less likely to be engaged in additional study. For example, around a third (35 percent) of former students with no post-school qualifications were out of the labour force and studying at wave 2, whereas 9 percent of former students who had transitioned to residence as skilled principal applicants were studying at wave 2.

Of those former students who had done other study, most (81 percent) had studied towards formal qualifications.[46] The main reasons given by former students for doing additional study towards formal qualifications were to get their qualification upgraded (44 percent), to get a job (30 percent), or to get a better job (37 percent).

University was the most common place of study (64 percent), followed by institutes of technology and polytechnics (22 percent). This may be because university qualifications generally take longer to complete (some students gained residence before completing their qualification) and are easier to upgrade (for example, from a bachelor's to a higher degree). Furthermore, international students pay domestic tuition fees after gaining residence, which could be a reason for their taking the more expensive university courses after being approved for residence.

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[44] S Stillman and D Maré. 2009. *The Labour Market Adjustment of Immigrants in New Zealand.* Economic Impacts of Immigration Working Paper Series. Wellington: Department of Labour.

[45] For the question text, see Appendix F.

[46] A formal qualification involves at least 3 months' full-time study or the equivalent.

5.4 Comparison of former students' employment and labour force outcomes with those of other migrants

The following sections assess the labour market outcomes of former students at 6 months (wave 1) and 18 months (wave 2) after gaining residence in New Zealand. For those former students who entered the labour force, LisNZ can be used to assess the types of jobs they hold, their income, and their job satisfaction.

When comparing the outcomes of former students with those of other migrants, we must consider the different compositions of migrant populations. Former students are typically younger than other migrants, tend to have relatively little work experience, and may be less proficient in English. Therefore, we expect former students to have less favourable labour market outcomes in the short to medium term.

5.4.1 Employment status

New Zealand generally achieves positive employment outcomes for new migrants. Positive labour market experiences for former international students play an integral role in New Zealand's ability to attract and develop students who have the skills and talents New Zealand needs.[47] LisNZ provides information on the labour market outcomes of former students who gained residence.

The proportion of former students in full-time employment increased from 55 percent at wave 1 to 68 percent at wave 2. A similar proportion of former students remained out of the labour force at wave 1 (31 percent) and wave 2 (26 percent). Five percent of former students were looking for work at wave 1 and 3 percent at wave 2.[48] Overall, around half of the former students (49 percent) were employed full time at both waves.

Table 5.2 Employment status of former students, waves 1 and 2 of the Longitudinal Immigration Survey: New Zealand

Employment status at wave 1	Employment status at wave 2 (%)				
	Full-time	Part-time	Looking for work	Other activity	Total
Full-time	49.4	1.1	0.9	3.7	55.3
Part-time	7.7	0.5	0.5	2.1	10.7
Looking for work	2.0	0.5	..c	0.5	3.2
Other activity(1)	9.1	1.4	1.1	19.4	31.0
Total	**68.3**	**3.6**	**2.5**	**26.0**	**100.0**

Notes: ..c = suppressed for confidentiality reasons. Due to rounding, percentages may not sum to 100.

[47] Immigration New Zealand's Operational Policy Manual is available online: Immigration New Zealand. No date. *Immigration New Zealand Operations Manual: Online operations manual*. Available at www.immigration.govt.nz/migrant/general/generalinformation/operationsmanual

[48] The proportion of students not in employment and looking for work out of the total of those employed (full time or part time) or looking for work.

(1) Other activities included studying, at home caring for dependants, getting set up in New Zealand (for example, organising housing and education), and other activities.
Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

Different groups of former students had different employment outcomes. Full-time employment at both waves was higher for former students who gained a vocational qualification (62 percent), a bachelor's degree (63 percent), or a higher degree (68 percent) in New Zealand than for those who held no post-school qualification in New Zealand (30 percent).

Across the main source countries, former students from India were more likely to be in full-time employment at both waves (85 percent) than were those from China (48 percent). At each wave, 90 percent of former students from India were in full-time employment. In comparison, at wave 1 just over half of the former students from China were in full-time employment (56 percent), although at wave 2 this had increased to 71 percent. Most of those former students from China who were not in full-time employment at wave 2 were out of the labour force (24 percent); two-thirds of these (66 percent) were studying.

Former students with no New Zealand post-school qualification were more likely to be out of the labour force at wave 1 (49 percent) and wave 2 (42 percent) than those who held a New Zealand post-school qualification. Former students who transitioned to residence as skilled principal migrants were more likely to be out of the labour force at wave 2 (10 percent) than other skilled principal migrants (4 percent).

The transition into full-time employment was higher for former students who transitioned to residence as skilled principal migrants: 85 percent were in full-time employment at wave 2, up from 78 percent in wave 1. This compared with 95 percent of all other skilled principal migrants in wave 2. The percentage of respondents looking for work was 1.9 percent for skilled former students and 0.5 percent for all other skilled migrants at wave 2.

5.4.2 Barriers to finding work that former international students face

This section looks at former students' perceptions of barriers to finding work in New Zealand. Former students' transition into employment is an important objective, and understanding the barriers they face in finding work in New Zealand can help us identify what assistance migrants might need in future.

Migrants were asked about the difficulties they faced when trying to find work in New Zealand.[49] Around half of the former students (54 percent) reported at wave 1 that they faced difficulties finding work in New Zealand. Those who had changed jobs or had spells of unemployment between waves were asked again at wave 2 about employment barriers. At wave 2, 41 percent reported facing difficulties.

The most common difficulty experienced was a lack of New Zealand work experience, which was reported by 38 percent of former students at wave 1.

[49] For the question text, see Appendix F.

Smaller proportions reported that they had experienced discrimination because of being a migrant (11 percent), they did not have the skills or experience for the jobs available (10 percent), or their skills and experience were not accepted by New Zealand employers (10 percent). At wave 2, a lack of New Zealand work experience was again the most commonly reported difficulty, reported by 21 percent of former students.

5.4.3 Occupation of former international students

The most common occupational group in which former students were employed at wave 2 was professionals (31 percent), followed by managers, sales workers, and clerical and administrative workers. The top ranking sub-major occupation group was sales assistants and salespersons (see Table 5.3).

Table 5.3 Ten most common occupations at wave 2 of the Longitudinal Immigration Survey: New Zealand

Rank	Occupation (sub-major group)[1]	Percentage (%)
1	Sales assistants and salespersons[2]	10.7
2	Business, human resource and marketing professionals[2]	9.8
3	Information and communication technology professionals	7.3
4	Hospitality, retail and service managers[2]	6.4
5	Specialist managers[2]	5.8
6	Numerical clerks	5.5
7	Health professionals[2]	4.6
8	Design, engineering, science and transport professionals	4.0
9	Engineering, Information and communication technology, and science technicians	4.0
10=	Chief executives, general managers and legislators[2]	3.0
10=	Hospitality workers	3.0
	All others	36.0

Notes: Due to rounding, percentages may not sum to 100.

[1] Occupation is a hierarchical classification with five levels. The sub-major group level of the Australian and New Zealand Standard Classification of Occupations has 43 categories. See Australian Bureau of Statistics. 2006. *1220.0 – ANZSCO – Australian and New Zealand Standard Classification of Occupations*. Revision 1. Available at www.abs.gov.au/AUSSTATS/abs@.nsf/mf/1220.0?OpenDocument

[2] This occupation was also in the top 10 occupations for the 2006 Census of Population and Dwellings usually resident population aged 15 and over.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

The main occupations for former students were comparable to main occupations for the 2006 census usually resident population. Sales assistants and salespersons was the second most common occupation for the New Zealand usually resident population, and, in total, six of the top 10 occupations were shared.

Minimal comparisons could be made between the top five fields of study (see Table 5.4).[50] Former students who studied in the health field were more likely to be employed in the broad occupation group professionals (65 percent) than were students who studied in the fields of engineering and related technologies (28 percent), society and culture (22 percent), or management and commerce (16 percent). Around three-quarters of former students (77 percent) were in the same occupational group at both waves.

Table 5.4 shows the top 10 occupational groups of former students approved as skilled principal applicants. At wave 2, the most common occupational groups were business, human resources, and marketing professional (13 percent), ICT professionals (10 percent), and specialist managers and health professionals (7 percent each).

Table 5.4 Ten most common occupations at wave 2 of former students approved as skilled principal migrants

Occupation (sub-major group)[(1)]	Percentage (%)
Business, human resource and marketing professionals	12.9
Information and communication technology professionals	10.3
Specialist managers	7.2
Health professionals	7.2
Numerical clerks	6.7
Design, engineering, science and transport professionals	5.7
Sales assistants and salespersons	5.2
Engineering, Information and communication technology, and science technicians	4.6
Hospitality, retail and service managers	4.1
Chief executives, general managers and legislators	3.6
All others	31.4
Total	100.0

Notes: Due to rounding, percentages may not sum to 100.

[(1)] Occupation is a hierarchical classification with five levels. The sub-major group level of the Australian and New Zealand Standard Classification of Occupations has 43 categories. See Australian Bureau of Statistics. 2006. 1220.0 – ANZSCO – *Australian and New Zealand Standard Classification of Occupations*. Revision 1. Available at www.abs.gov.au/AUSSTATS/abs@.nsf/mf/1220.0?OpenDocument

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

[50] Small numbers did not allow detailed analysis of the match between a former student's field of study and their current occupation. There does appear to be a good match between the five main occupation groups that were not shared with the 2006 census, and some of the main fields of study for former students' highest qualification gained in New Zealand (information technology and engineering and related technologies).

5.4.4 Skill level of main job

Another useful measurement of employment outcomes for former students is the skill level of the occupation in which the former student is employed. Skill levels range from skill level 1 for the highest skilled positions to skill level 5 for the lowest skilled.[51] For this analysis, jobs with a skill level of 1, 2, or 3 are reported as a 'high-skill job' and jobs with a skill level of 4 or 5 are reported as a 'low-skill job'. The skill level is associated with the students' main job at the time of the interview.

Around half of former students were employed in a high-skill job at both wave 1 and wave 2. Although 11 percent moved to a high-skill job from a low-skill job at wave 1, almost as many (10 percent) moved in the other direction.

Around two-thirds (65 percent) of former students who transitioned to residence as skilled principal migrants were employed in a high-skill job at both waves compared with 86 percent of other skilled principal migrants.

Former students with a higher degree (77 percent) or bachelor's degree (62 percent) gained in New Zealand were more likely to hold a high-skill job at both waves than were those with either no qualification or a vocational qualification gained in New Zealand (see Table 5.5).

Table 5.5 Skill level of employed former students' main job by highest qualification gained in New Zealand

	Highest qualification gained in New Zealand (%)					
Skill level	**No post-school**	**Vocational**	**Bachelor's degree**	**Higher degree(1)**	**Post-school undefined**	**Total**
High skill at both waves	38.9	41.2	62.2	76.9	25.0	50.3
Low skill at wave 1, high skill at wave 2	15.6	13.4	6.7	7.7	..c	11.3
High skill at wave 1, low skill at wave 2	3.3	12.4	13.3	..c	25.0	9.8
Low skill at both waves	41.1	33.0	17.8	12.8	25.0	28.4
Total (percent)	100.0	100.0	100.0	100.0	100.0	100.0

Notes: ..c = suppressed for confidentiality reasons. Due to rounding, percentages may not sum to 100.

(1) A higher degree includes post-graduate diplomas and certificates, honours degrees, master's degrees and doctorate degrees.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

At wave 2, 85 percent of former students with a higher degree gained in New Zealand were employed in high-skill jobs compared with 69 percent of

[51] Skill levels are assigned to occupations based on the ANZSCO classification. For more information about ANZSCO skill levels, see the LisNZ page on the Statistics New Zealand website: www.stats.govt.nz/Publications/StandardOfLiving/lisnz-survey-information.aspx

former students with a bachelor's degree and 55 percent with a vocational qualification. There were no significant differences in job skill level based on region of origin.

Sample numbers were too small for us to analyse job skill level and the field of study of the highest qualification gained in New Zealand for all but the four largest fields of study.

On average, around half of the former students who gained their highest New Zealand qualification in the field of engineering and related technologies (54 percent), information and communication technology (58 percent), or management and commerce (44 percent) were in a high-skill job at both waves compared with around two-thirds of the other fields combined. There were no significant differences between these three different fields of study. While numbers were small, former students whose highest qualification in New Zealand was in the field of health were more likely to be in a high-skill job at both waves (see Table 5.6).

Table 5.6 Skill level of employed former students' main job by field of study for highest qualification gained in New Zealand

	Field of study of highest New Zealand qualification (%)				
Skill level	**Engineering and related technologies**	**Information and communication technology**	**Management and commerce**	**Health**	**All other fields**
High skill at both waves	53.8	57.9	43.8	100.0	66.7
Low skill at wave 1, high skill at wave 2	11.5	7.9	11.6	..c	5.6
High skill at wave 1, low skill at wave 2	11.5	7.9	16.5	..c	5.6
Low skill at both waves	26.9	23.7	27.3	..c	16.7
Total (%)	100.0	100.0	100.0	100.0	100.0
Total (weighted)	**260**	**380**	**1,210**	**130**	**360**

Notes: ..c = suppressed for confidentiality reasons. Due to rounding, percentages may not sum to 100.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

5.4.5 Income from wages and salaries

Satisfactory remuneration plays an important role in migrants' settlement in New Zealand. The income former students earn from wages and salaries gives an indication about how employed former students are performing in the labour market.

The real median hourly earnings from wages and salaries for former students increased from $16.65 per hour at wave 1 to $18.05 per hour at wave 2, an increase of 8.4 percent. At wave 1, median hourly earnings were highest for students who had gained a higher degree ($19.34 per hour) or a bachelor's degree in New Zealand ($18.03 per hour) and ranged from $14.00 to $16.16 per

hour for students with no qualification or a vocational qualification gained in New Zealand.

Former students reported English to be their main language or have very good or good English language ability had higher median hourly earnings than those with moderate or poor English language ability. Real wages decreased between wave 1 and wave 2 for former students with moderate or poor English language ability (Table 5.7).

Table 5.7 Median hourly earnings from wages and salaries by selected characteristics

Selected characteristics	Median hourly earnings[1] ($)		Change from wave 1 to wave 2 (%)
	Wave 1	Wave 2	
Highest New Zealand qualification			
No post-school qualification	14.00	13.71	-2.1
Vocational qualification	16.16	16.29	0.8
Bachelor's degree	18.03	20.93	16.1
Higher degree	19.34	21.48	11.1
Post-school undefined	13.44	13.62	1.3
Region of origin			
ESANA[2]	15.86	18.05	13.8
North Asia	16.02	17.27	7.8
South Asia	17.82	19.10	7.2
South-east Asia	17.19	20.18	17.4
Other[3]	16.54	16.36	-1.1
Gender			
Male	16.77	18.32	9.3
Female	16.02	16.70	4.3
English language ability			
English is a main language spoken	17.04	18.05	5.9
Very good/good English language ability	16.46	18.23	10.8
Moderate/poor English language ability	15.03	13.44	-10.6
Total	16.65	18.05	8.4

[1] This analysis includes respondents who were earning wages or salaries at both waves. The hourly rate is calculated as the weekly income from wages and salaries divided by the number of hours worked. Nominal hourly earnings have been inflation-adjusted to reflect real wages in 2010.

[2] ESANA = Europe, South Africa, and North America.

[3] Other means the Middle East, Latin America, Africa (excluding South Africa), and the Pacific.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

Former students who transitioned as skilled principal migrants had lower median hourly earnings than other skilled principal migrants at both waves. Skilled students earned, on average, 70–75 percent of the median hourly earnings of all other skilled principal migrants.

5.4.6 Job satisfaction

Job satisfaction is also an important employment outcome contributing to New Zealand's ability to retain migrants. Overall, 77 percent of former students who were employed said they were satisfied or very satisfied with their job at wave 2 compared with 74 percent at wave 1. Just over 60 percent said they were satisfied or very satisfied at both waves.

Former students whose highest New Zealand qualification was a higher degree were more likely to report being satisfied or very satisfied with their job at wave 2 (92 percent) than were those with lower-level qualifications.

Former students from North Asia were less likely to be satisfied or very satisfied with their job at wave 2 (67 percent) than were those from other regions.

The main reason given by those former students reporting dissatisfaction with their job at wave 2 was that the pay was too low (68 percent).

5.5 Settlement and satisfaction with life in New Zealand

Former students' positive settlement into life in New Zealand and their satisfaction with their life here are important indicators of their wellbeing and adjustment. Their intention to stay on in New Zealand is also an important indicator of New Zealand's ability to retain international students after they have transitioned to permanent residence.

5.5.1 Former students' settlement in New Zealand

Three-quarters of former students reported feeling very settled or settled at both waves (86 percent at wave 1 and 84 percent at wave 2). Very few reported feeling unsettled or very unsettled at both waves (less than 1 percent). It is possible, however, that migrants with poor settlement experiences had left New Zealand, so were not captured in the survey data.

At wave 2, former students who had transitioned to residence as skilled principal applicants were less likely to report feeling very settled or settled (81 percent) compared with other skilled principal applicants (92 percent). Most of those who did not feel settled reported that they felt neither settled nor unsettled (15 percent).

Former students from North Asia (78 percent) were less likely to report feeling very settled or settled compared with former students from ESANA (98 percent), South-east Asia (91 percent), and Other regions (93 percent).

5.5.2 Satisfaction with life in New Zealand

Overall, former students reported high levels of satisfaction with life in New Zealand, with 91 percent reporting feeling satisfied or very satisfied at wave 1 and 87 percent at wave 2. Around four-fifths (83 percent) reported feeling satisfied or very satisfied at both waves.

Former students from North Asia were also less likely than students from other regions to report feeling satisfied or very satisfied with life in New Zealand at wave 2 (79 percent).

5.5.3 Former students' intentions to stay in New Zealand

Measuring former students' intentions to stay in New Zealand after gaining permanent residence is a useful gauge of whether New Zealand will retain these migrants. Former students were asked at waves 1 and 2 whether they intended to stay in New Zealand for less than 3 years or for 3 years or more. Most (97 percent) intended to stay in New Zealand for 3 years or more at wave 1, but at wave 2 this was slightly lower (91 percent).

Table 5.8 Years respondents intended to stay in New Zealand at wave 1 and wave 2

	Intentions at wave 2		
Intentions at wave 1	**Less than 3 years**	**Three years or more**	**Total**
Less than 3 years	2.3	0.6	2.9
Three years or more	6.6	90.3	96.9
Total	**8.9**	**91.1**	**100.0**

Note: Due to rounding, percentages may not sum to 100.

Source: Longitudinal Immigration Survey: New Zealand (LisNZ).

6 CONCLUSION

International students play an important role in New Zealand's economy, generating an economic benefit of over $2.3 billion annually and supporting over 32,000 jobs. In addition to these economic benefits, international education can also build institutions' academic reputation and improve the cost-efficiency of education provision.[52]

The long-term trends show that almost one-third (31 percent) of fee-paying international students transition to work and/or permanent residence in New Zealand. Through their studies and time spent in New Zealand, international students can gain knowledge of local work practices and regulations, improve their proficiency in English, and develop their understanding of local social and cultural norms. This experience makes international student graduates highly attractive as potential migrants to New Zealand.

Understanding the factors relating to the successful retention and settlement of international students in New Zealand will contribute to policies and services that can better support this segment of the migrant population. This research shows that policies that facilitate international students' staying on in New Zealand have been important in attracting international students and provide an avenue through which to retain these students as skilled migrants.

Positive employment and settlement outcomes are important for the host country and the new migrant. This report shows that former international students perform well in the labour market and have high rates of settlement and satisfaction with their life in New Zealand.

In general terms, former international students who gain a bachelor's degree or higher qualification in New Zealand achieve better labour market outcomes than those who gain lower-level qualifications. Students from India have high rates of transition from study to residence and high rates of employment.

The results show that international students make a positive contribution to the economic and social fabric of New Zealand.

Future research in this area could pursue several avenues. Wave 3 of LisNZ will allow further analysis of settlement outcomes with particular attention to change over time. Regression analysis would be a useful technique to explore the factors that contribute to various outcomes. Immigration administrative data could be used to examine student retention in New Zealand through the analysis of long-term departure data. Given the international interest in export education, it may be worth comparing the migration experiences of international students in New Zealand with those in other countries.

[52] OECD. 2009. *Education at a Glance: OECD indicators*. Paris: Organisation for Economic Co-Operation and Development, p 310.

APPENDICES

Appendix A: Additional notes on the data sources

Definition of the student population

Each of the three primary data sources determines the student population slightly differently (see Table 1.3). Although it would be more desirable to use a consistent approach to defining this population, the limitations of the data sets prevent this.[53] For simplicity of reporting, respondents who have been identified as students in the survey data sets are referred to as 'former students', regardless of whether they were still studying.

Regional groupings

Due to smaller numbers in sample surveys compared with administrative records, more-detailed analysis is sometimes limited. To accommodate the smaller numbers, reporting units for region of origin have been grouped into the broader regions of ESANA (Europe, South Africa, and North America), North Asia (including China, Japan, and South Korea), South Asia (including India), South-east Asia, and Other countries for most of the survey analysis.[54]

Qualification groupings

Reporting units for highest qualification gained in New Zealand have also been combined in the sample survey analysis for similar reasons of small survey numbers, as well as to allow consistency of reporting between the surveys. For most reporting in the sample survey analysis, qualifications gained are reported as:

- no post-school qualification (study may not have resulted in a qualification, study may be incomplete, the student may still be studying)
- vocational (basic to advanced certificates and diplomas)
- bachelor's degree
- higher degree (postgraduate certificate or diploma, master's degree or doctorate).[55]

[53] For example, no single variable in the LisNZ data set identified whether migrants had accessed a study permit in New Zealand.

[54] For more information, see Appendix G

[55] For information, see Appendix H. More detailed information about the classification is available from Statistics New Zealand in the LisNZ Data Dictionary (see Qualification code list tab): Statistics New Zealand. No date. *Longitudinal Immigration Survey: New Zealand – Survey information*. Available from www.stats.govt.nz/Publications/StandardOfLiving/lisnz-survey-information.aspx

Tests of statistical significance

All group comparisons discussed in the survey data analysis have been tested for statistical significance at the 95 percent confidence level. Any group differences reported are statistically significant unless stated otherwise.

Survey questions

The survey questions referenced in this report are in Appendices E and F.

Appendix B: Description of Work Policy

Table B.1 Key features of the work policies described in the report

Temporary work groups and key features of the policies
Study to work The study to work policies are the Graduate Job Search and Post-Study Practical Experience Policies.
Essential skills Facilitates the entry of people required on a temporary basis to fill shortages in occupations that are included in the Long Term Skill Shortage List or the Immediate Skill Shortage List. Also includes the Approved In Principle and Essential Skills – Skill Level 1 Policies.
Family The main policies in the family group are the: • Partnership Policy – for partners of a New Zealand citizen or resident who have been living with the New Zealand citizen or resident in a genuine and stable relationship for more than 12 months • Partner of a Worker Policy – partners of those holding work permits valid for more than 6 months may be issued with a work permit for the same length of time. Other policies in this group include the Partner of Student, Partner of NZAID Student, and Partnership Deferral Policies.
Working Holiday Schemes New Zealand has Working Holiday Schemes with 34 countries. The schemes allow young people, whose primary intention is to holiday in New Zealand, to undertake employment and study during their stay. Most schemes allow 18-30-year-olds to spend a maximum of 12 months in New Zealand to undertake work of a temporary nature during their visit or to study for up to 3 months.

Source: Department of Labour.

Appendix C: Description of permanent residence categories

Table C.1 Key features of the residence policies described in the report

Category	Key policy features
Skilled Migrant Category	To apply under the Skilled Migrant Category, applicants must meet the requirements (be aged 20–55 and meet Immigration New Zealand standards of health, character, and English language proficiency) before they start the process. Applicants submit an expression of interest in which they claim points for skills, experience, and other factors. If they have claimed 100 points or more on their expression of interest, it goes into a pool. Expressions of interest are selected from the pool based on a selection point and other criteria set by the Minister of Immigration. After initial verification, applicants are invited to apply through the Skilled Migrant Category. If they meet the criteria and Immigration New Zealand believes they will settle successfully and contribute to New Zealand, they are offered a residence permit.
Residence from Work Category	The Residence from Work Category is for people who are already in New Zealand on a work to residence permit for at least 2 years and want to apply for residence through the relevant work policy: The Talent (Accredited Employers) Work Policy, Long Term Skill Shortage List Policy, and Talent (Arts, Culture and Sports) Work Policy.
Business Immigration Policy	The Business Immigration Policy aims to contribute to New Zealand's economic growth by increasing New Zealand's levels of human and investment capital, encouraging enterprise and innovation, and fostering international links.
Uncapped Family Sponsored Stream	The Uncapped Family Sponsored Category allows New Zealand citizens and permanent residents to sponsor their close family members for residence.
Partnership Category	The Partnership Category enables the partner (including the spouse, de facto, or same-sex partner) of a New Zealand citizen or resident to apply for residence. Applicants must provide evidence that they have been living in a partnership that is genuine and stable for 12 months or more.
Dependent Child Category	The Dependent Child Category enables dependent children of parents with New Zealand residence to gain residence. The applicant must have been: • born or adopted before his or her parents applied for residence and have been declared on his or her parents' application for residence, or • born after his or her parents applied for residence, or • adopted by his or her parents as a result of a New Zealand adoption or an overseas adoption recognised under New Zealand law.
Parent and Sibling/Adult Child Stream	The Parent and Sibling/Adult Child Stream allows New Zealand citizens and permanent residents to sponsor their close family members for residence. It currently allocates 4,950–5,500 places per year.

Source: Department of Labour.

Appendix D: Logistic regression model estimates

Table D.1 Logistic regression model estimates of the effects of individual characteristics on transition rates

	Transition pathway from study							
	Transition to work		Transition from work to residence		Transition to residence		Skilled Residence	
Characteristic	Coef.	Std error	Coef.	Std error	Coef.	Std error	Coef.	Std error
Nationality/region								
South Korea	-1.7854*	0.0348	-0.5864*	0.0711	-1.4715*	0.0400	-1.3491*	0.0494
Europe (incl UK)	-1.3937*	0.0347	0.0745	0.0635	-0.9008*	0.0384	-1.0598*	0.0471
Japan	-1.8589*	0.0463	-1.0188*	0.1013	-2.2804*	0.0739	-2.2339*	0.1008
North America	-2.0276*	0.0464	-0.9572*	0.0973	-1.5768*	0.0584	-1.9082*	0.0746
South-east Asia	-0.9514*	0.0357	0.0250	0.0639	-0.5367*	0.0412	-0.6737*	0.0509
India	1.0772*	0.0413	0.7987*	0.0525	1.1384*	0.0402	1.2076*	0.0424
All other source countries	-0.9523*	0.0330	0.2259*	0.0584	-0.3031*	0.0359	-0.6110*	0.0459
Education sector								
Institutes of technology/poly technic	0.5859*	0.0375	0.1632	0.0556	0.4586*	0.0410	0.2337*	0.0452
Private training establishment	0.2877*	0.0271	-0.2509*	0.0428	-0.0854	0.0317	-0.2926*	0.0354
English language	-0.1114	0.0322	-0.2557*	0.0577	-0.3897*	0.0388	-0.9977*	0.0507
School	-0.5695*	0.0473	-0.4887*	0.0813	0.1401	0.0490	-0.2114	0.0597
Gender								
Female	0.2803*	0.0196	0.3104*	0.0336	0.3540*	0.0222	0.1119*	0.0266
Age at first student permit approval								
Aged 0–17	-1.5064*	0.0399	-1.2355*	0.0702	-1.0283*	0.0437	-1.1209*	0.0542
Aged 18–22	-0.4292*	0.0220	-0.7123*	0.0366	-0.6913*	0.0262	-0.6337*	0.0303
Years since first student permit								
7 years (2003 cohort)	0.2472*	0.0265	1.6741*	0.0495	1.0433*	0.0329	1.1003*	0.0400
6 years (2004 cohort)	0.1347*	0.0291	1.2335*	0.0527	0.8054*	0.0357	0.8397*	0.0437
5 years (2005 cohort)	0.0653	0.0301	0.7363*	0.0539	0.4626*	0.0380	0.4171*	0.0471
Model summary statistics								
Number of observations	88,452		17,968		88,452		88,452	
Likelihood ratio	20,200.2		2,505.1		9,989.3		9,047.4	
R2	0.20		0.13		0.11		0.10	

Note: We used the recycled prediction method to estimate and compare marginal effects. See Z Li and G Mahendra. 2010. Using 'recycled predictions' for computing marginal effects. Paper 272-2010 presented at the SAS Global Forum 2010. Available at http://support.sas.com/resources/papers/proceedings10/272-2010.pdf

* The coefficient (Coef.) was statistically significant at the 95 percent confidence level.

Appendix E: Transitions Survey questions

<table>
<tr><td colspan="2">Q13 How important were the following factors in influencing your decision to choose New Zealand as a place to study?
Selection: Multiple
Subject population: Respondents who stated they had previously held a permit to study in New Zealand</td></tr>
<tr><td>Question Options
1. Not at all Important
2. Slightly Important
3. Important
4. Very Important
5. Extremely Important
6. Not Applicable</td><td>Possible Answers
1. Financial support from your government or employer
2. A scholarship from New Zealand
3. Advertisements for study in New Zealand
4. New Zealand being an English speaking country
5. Having family members or friends in New Zealand
7. The quality of New Zealand education
8. The international recognition of New Zealand qualifications (e.g. degrees, diplomas, certificates)
9. The cost of education in New Zealand
10. It’s easy to get a student visa
12. The opportunity to move to another country later
13. The opportunity to get a work permit after graduation
14. The opportunity to obtain permanent residence in New Zealand at a later date
15. The opportunity to obtain New Zealand citizenship at a later date
16. It was not possible to study in your home country
17. It was not possible to study in another country
18. Living costs in New Zealand
19. Other</td></tr>
<tr><td colspan="2">Q19 When you first came to New Zealand on a temporary permit, was it your intention to apply for permanent residence?
Selection: Single
Subject population: All respondents
o Yes
o No</td></tr>
<tr><td colspan="2">Q25 When you decided to apply for permanent residence in New Zealand, how important were the following reasons in influencing the decision?
Selection: Multiple
Subject population: All respondents</td></tr>
</table>

Question Options 1. Not at all Important 2. Slightly Important 3. Important 4. Very Important 5. Extremely Important 6. Not Applicable	**Possible Answers** 1. Job opportunities in New Zealand 2. Living costs in New Zealand 3. The political stability and lack of corruption in New Zealand 4. Freedom of religious and political expression in New Zealand 5. Educational opportunities in New Zealand 7. Educational opportunities for children in New Zealand 8. The climate (e.g., weather) 9. New Zealand's clean and green environment 10. New Zealand's relaxed pace of life 11. New Zealand's safety from crime and violence 13. Good housing in New Zealand 14. New Zealand's small population 15. The availability of services in New Zealand 16. Recreation and leisure activities available in New Zealand 18. Joining family or relatives already living in New Zealand 19. Living in New Zealand with your partner 20. Having friends in New Zealand 21. Parent's or partner's decision to live in New Zealand 22. Opportunities to bring family to New Zealand 24. Securing a place for the family to live if desired in the future 25. Inter-racial, ethnic or religious harmony 26. Other

Q 34 Other than English courses, did you complete any other course(s) in NZ before you were granted permanent residence?
Selection: Single

Subject population: All respondents

- o Yes
- o No

Q36 What qualifications, if any, have you gained in New Zealand?
Selection: Multiple

Subject population: Respondents who answered 'yes' to question 34

1. No formal qualification
2. Secondary school qualification
3. Trade or advanced trade certificate
4. Technician's certificate
5. Nursing certificate or diploma
6. Teacher's certificate of diploma
7. Technical College or polytechnic certificate or diploma
8. University certificate or diploma below bachelor level
9. Bachelor's degree
10. Postgraduate certificate or diploma
11. Master's degree
12. PhD degree
13. Other qualifications (Please Specify)

Q37 Did you seek these qualifications because they would help you gain permanent residence?

Selection: Single

Subject population: Respondents who had gained a qualification in New Zealand

- o Yes
- o No

Appendix F: Longitudinal Immigration Survey: New Zealand questions and derived variables

D53 Since [residence approval date], have you done any other study or training in New Zealand? Selection: Single Subject population: Respondents who are not at school o Yes o No o Don't know o Refused
D54 Was any of that study towards formal qualifications in New Zealand? A formal qualification involves at least 3 months' full-time study, or the equivalent Selection: Single Subject population: Respondents who are not at school and have done study in New Zealand o Yes o No o Don't know o Refused
D58 Please use card D58 to tell me through which organisations you were doing that study. Selection: Multiple Subject population: Respondents who are not at school and have done study in New Zealand o school o polytechnic o university o private training establishment o other – please state o Don't know o Refused
D59 Please use card D59 to tell me why you were doing that study. Selection: Multiple Subject population: Respondents who are not at school and have done study in New Zealand o to get a job o to get a better job o to get qualification upgraded so I can work in my profession o to change career o leisure activity or personal interest o to learn the English language o other – please state o Don't know o Refused

E182 Now looking at card E182, can you tell me if you have experienced any of these difficulties getting work in New Zealand since [wave 1: RAD or first arrival, wave 2: last interview date]?

Selection: Multiple

Subject population: Respondents who have a job or had a job or have looked for a job since RAD or first arrival in New Zealand

- o I have difficulties with English language
- o my skills or experience are not accepted by New Zealand employers
- o I lack New Zealand work experience
- o there is not enough suitable work for someone with my skills or experience
- o I don't have enough skills or experience for the jobs that are available
- o there are not jobs available in the area that I live
- o I do not have a family or friends in New Zealand who can help me to get a job
- o I have experienced discrimination because I am a migrant
- o I have experienced discrimination because of my age, gender, religion
- o other – please state
- o no difficulties
- o Don't know
- o Refused

E189 Looking at card E189, please tell me how satisfied or dissatisfied you are with your main job.

Main job is the one the respondent spends the most hours in

Selection: Single

Subject population: Respondents who have a job

- o very satisfied
- o satisfied
- o neither satisfied nor dissatisfied
- o dissatisfied
- o very dissatisfied
- o Don't know
- o Refused

E190 Please use card E190 to tell me the main reasons why you are dissatisfied with your main job. I can record up to 3 reasons.

Selection: Multiple (up to 3)

Subject population: Respondents who have a job, who answer dissatisfied or very dissatisfied to E189

- o not using my skills or experience
- o this job is not my preferred occupation
- o pay is too low
- o want more hours of work
- o want to work different hours but no more hours
- o experiencing discrimination from my employer because I am a migrant
- o other – please state
- o Don't know
- o Refused

J5 How many years do you now think you will live in New Zealand?

Include years living in New Zealand part of the time as well as full time

Subject population: All respondents

J10 Please use card J10 to tell me overall how satisfied or dissatisfied you are with living in New Zealand

Selection: Single

Subject population: All respondents

- o very satisfied
- o satisfied
- o neither satisfied no dissatisfied
- o dissatisfied
- o very dissatisfied

M1 Thinking about all the things we have talked about, please use card M1 to tell me how settled or unsettled you feel in New Zealand.

Selection: Single

Subject population: All respondents

- o very settled
- o settled
- o neither settled nor unsettled
- o unsettled
- o very unsettled

Derived variables

English language ability

English language ability is derived from respondents' self-reported capability about speaking, understanding, reading, and writing English. The derived classification is:

- o English is a main language spoken
- o Good English language ability
- o Moderate or poor English language ability
- o Not specified

Hourly earnings

Hourly earnings are calculated as the respondents' weekly income reported from salary and wages divided by the number of working hours per week.

Region of origin

Region of origin is derived from the respondents' country of nationality or citizenship and classified into various world regions specified in Appendix G.

Labour force status

Labour force status was derived from respondents' labour market activities at each interview date. Respondents were classified as employed, not employed but looking for work, or not in the labour force, as follows:

Labour force status	Labour force
Paid work	Employed
Unpaid work[1]	Employed
Casual work	Employed
Combination of paid	Employed
Combination of unpaid	Employed
Looking for work	Looking for work
Overseas	Not in the labour force
Other activity[2]	Not in the labour force

[1] Working without pay in a family business or farm.

[2] Neither working nor looking for work.

Main activity of those absent from labour market at interview date

Please look at card E176 and tell me which of these activities you were doing during that time.

Selection: Multiple

Subject population: Respondents who are not in the labour market in the last spell

- studying
- at home caring for dependants
- retired or at home without dependants
- doing voluntary work
- suffering ill health
- taking steps to set up or buy a business in New Zealand
- on holiday or visiting friends or relatives
- getting set up in New Zealand – organising housing education, etc
- trying to get qualifications recognised
- other – please state
- Don't know
- Refused

Which of those activities did you spend the most time doing during that time?

Derivation output

- studying
- at home caring for dependents
- getting set up in NZ (organising housing, education etc)
- other
- multiple activities
- unspecified

Appendix G: Region of origin classification

Reporting units for region of origin have been grouped into the broader regions of ESANA (Europe, South Africa, and North America), North Asia (China, Japan, and South Korea), South Asia (including India), South-east Asia, and Other countries for most of the survey analysis.

Table G.1 shows the main countries included in the region groupings for the Longitudinal Immigration Survey: New Zealand.[56] The Transitions Survey uses the same categorisation, but proportions within each region will be slightly different.

Table G.1 Top countries of nationality within each category

Category	Selected countries	Percentage of each category (%)
ESANA(1)	South Africa	30.4
	Great Britain	26.1
	United States	9.8
	Germany	7.6
	All others	26.1
North Asia	China	81.7
	South Korea	9.5
	Japan	3.7
	Hong Kong	2.7
	All others	2.4
South Asia	India	90.7
	Sri Lanka	5.6
	All others	3.7
South-east Asia	Malaysia	34.0
	Thailand	12.8
	Indonesia	12.8
	Philippines	10.6
	All others	29.8
Other(2)	Fiji	43.8
	Zimbabwe	15.1
	Tonga	9.6
	Samoa	6.8
	All others	24.7

(1) ESANA = Europe, South Africa, and North America.

(2) Other means the Middle East, Latin America, Africa (excluding South Africa), and the Pacific.

[56] This includes those who responded to the first 2 waves LisNZ.

Appendix H: Qualification classification used in the survey data

Table H.1 Coding for highest qualification gained in New Zealand for the Transitions Survey and Longitudinal Immigration Survey: New Zealand (LisNZ)

Transitions Survey question response option[1]	LisNZ code[2]	Highest qualification derivation
No formal qualification	00000000	No post-school qualification
Secondary school qualification	00000000	No post-school qualification
Trade or advanced trade certificate	04010000–07777777	Vocational qualification
Technician's certificate		
Nursing certificate or diploma		
Teacher's certificate of diploma		
Technical College or polytechnic certificate or diploma		
University certificate or diploma below bachelor level		
Bachelor's degree	08010000–08777777	Bachelor's degree
Postgraduate certificate or diploma	09010000–09777777	Higher degree
Master's degree		
PhD degree		
n/a	33010000–33110399	Post-school undefined

[1] For the question text, see Appendix E.

[2] For the question text, see Appendix F. See the qualification code list in the data dictionary for the code file used to derive highest qualification in the LisNZ survey: Statistics New Zealand. No date. *Longitudinal Immigration Survey: New Zealand – Survey information*. Available from www.stats.govt.nz/Publications/StandardOfLiving/lisnz-survey-information.aspx

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