



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Living with a student loan

A profile of student loan debt and repayment, post-study income and going overseas

Report

Living with a student loan: A profile of student loan debt and repayment, post-study income and going overseas.

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The integrated dataset on Student Loan Scheme Borrowers is based on the integration of data from the Ministry of Social Development, the Inland Revenue Department and the Ministry of Education. This project has been approved by Statistics New Zealand as a data integration project with data access provided through the Data Laboratory under relevant legislation and policy. Only approved researchers who have signed Statistics New Zealand's declaration of secrecy can access the integrated data in the Data Laboratory. For further information about confidentiality matters in regard to this study please contact Statistics New Zealand.

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1 Summary

The Student Loan Scheme was introduced in 1992, to enable those wanting to study the ability to borrow in order to finance the costs of their tuition. In part, this was a consequence of the introduction of student fees in 1990. The Student Loan Scheme was seen as a mechanism to remove barriers to participation resulting from the introduction of student fees.

Tertiary education brings with it many opportunities and benefits for individuals over time. Open access to the Student Loan Scheme, coupled with its income-contingent repayment features, has reduced the financial obstacles to tertiary education and lowered the risks of investing time and money in studies. By sharing the cost of tuition, the Student Loan Scheme has acted to significantly improve access to tertiary education. Between 1991 and 1995, the sector grew by 86 percent, (an extra 122,000 students), the highest growth in both numerical and percentage terms in any five-year period before or since. Since 2000, there has also been a period of significant growth in participation, in particular, in students attending wānanga.

As a result both the number of Student Loan Scheme borrowers and the amounts borrowed have risen over time. By June 2004, over 418,000, or 13 in every 100 New Zealanders aged 15 and over had a student loan debt, with a median debt of just under \$10,000, and a combined total debt of \$5.96 billion¹.

There has always been a level of public criticism of the Student Loan Scheme and student loan debt remains an area of controversy. Many of the concerns centre around the high level of debt that some students acquire, and how long it will take for them to repay². In particular, there has been concern about the differences in the impact of debt repayment for particular groups - such as women, Māori and Pasifika people - who on average tend to have lower lifetime incomes. Other concerns have been expressed about the possible impact on home ownership, to marriage and family formation, saving for retirement and mental health effects. One of the largest areas of criticism has been the concern that students with a student loan debt are more likely to go overseas long-term enticed, either by high incomes overseas in response to their repayment obligations, or as a way to avoid or defer repayment³.

Much of the debate around the impacts of debt repayment, however, has been conducted in the absence of suitable research⁴. In 2000, the Auditor-General conducted a review of publicly available accountability information on the Student loan Scheme. The report outlined a series of key stakeholder questions for which there was a lack of information (page 7) and one of the key findings (page 8) was a "lack of information on the impact of the Scheme on intended and unintended socio-economic outcomes". One of the report's recommendations was that Statistics New Zealand undertake a trial integration of selected datasets with a view to providing statistics to inform strategic policy, financial risk management, financial reporting, and forecasting⁵.

¹ See chapter 3, figure 3.3.

² Chapter 3 explores the distribution of debt. It shows a distribution highly skewed to the right, that is, very few people with very high debt. At 30 June 2004, less than 6% of people with debt owed more than \$40,000. Chapter 5 explores repayment. Average loan repayment time is estimated at 9.3 years.

³ ³ See *Inquiry into student fees, loans, allowances and the overall resourcing of tertiary education*, Report of the Education and Science Committee, October 2001, eg pages 9-10.

⁴ For a good summary of the arguments for and against and available literature refer to Baxter R. and S. Birks (2004), *The Student Loan Debate: An Economic Investigation of the Issues*. Massey University, Centre for Public Policy Evaluation.

⁵ Office of the Controller and Auditor-General (2000) *Student Loan Scheme, Publicly Available Accountability Information*.

As a result, the integrated student loan dataset was developed, with the first release of data from the dataset occurring in December 2002. This dataset integrates education, debt, repayment and income data for student loan scheme borrowers. Information from this dataset has appeared in the Student Loan Scheme Annual Report and has been used to inform government and policy in a number of areas⁶.

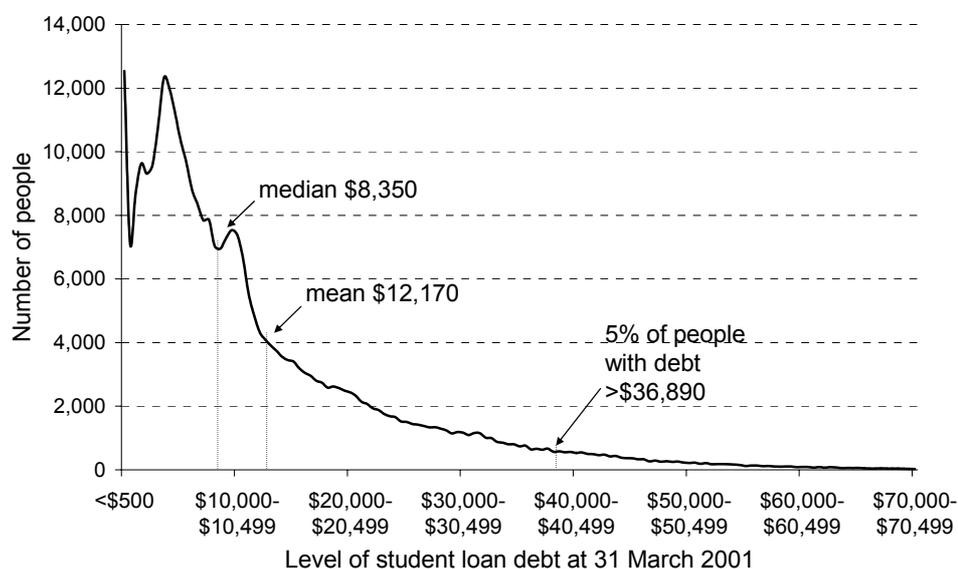
This report is the first dedicated, comprehensive release from the dataset. It reports on a wide ranging analysis of student loan debt. It covers four main areas:

- people with debt
- debt and income
- debt and repayment, and
- debt and going overseas.

Highlights from these chapters include:

People with debt

- There were 418,761 people with a student loan debt at 30 June 2004. This was 13.2 percent of the population 15 and over, up from 7.6 percent in 1998 and 1.6 percent in 1993.
- An estimated 18 percent of all those who studied between 1992 and 2000 had a student loan debt at March 2001.
- The distribution of student loan debt is highly skewed to the right; that is, there is a very small number of people who have very high debt.



- More than one in every 10 (10.7 percent) New Zealanders aged 15 or over had a student loan debt at 31 March 2001 while 3 in every 100 had a student loan debt over \$20,000.

⁶ Statistics New Zealand (2002a, 2004) Hot Off the Press, *Integrated data on student loan borrowers*. Ministry of Education, Inland Revenue, Ministry of Social Development (2003, 2004), *Annual Report Student Loan Scheme*. Also Ministry of Education (2003, 2004) *New Zealand's Tertiary Education Sector Profile and Trends*.

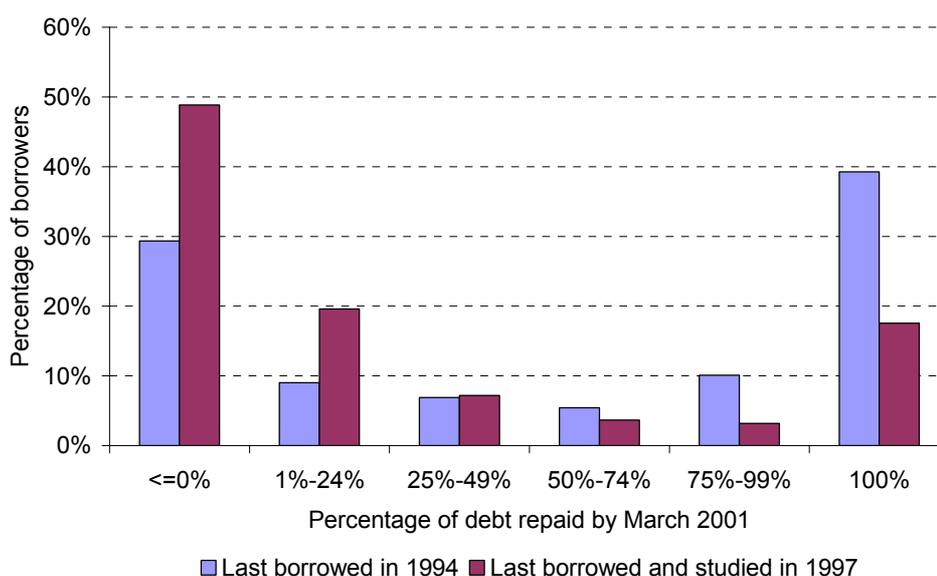
- The median student loan leaving⁷ debt for those who last borrowed and studied in 1997 was \$8,750. The median student loan graduating debt for those who last borrowed and studied *and gained a qualification* in 1997 was \$11,080. Overall, those who completed a qualification left with 27 percent higher median student loan debt than those who didn't, in large part due to the longer length of study undertaken by those who completed.

Debt and income

- The median income of people with a student loan debt six years after last borrowing in 1994 was \$28,160, while the median income of people with a student loan debt three years after last studying and borrowing in 1997 was \$22,840.
- There is a clear, positive relationship between income and debt. Higher debt tends to be associated with longer duration qualifications of a higher level, and these qualifications are associated with higher earnings.
- Students who left study with over \$25,000 of debt, on average, were earning more than \$10,000 (or 40 percent) more than those with debt between \$15,000 and \$24,999, and nearly \$31,000 (or 130 percent) more than those leaving with a small debt (less than \$5,000).

Debt and repayment

- Progress to repayment of student loan debt is bimodal and U-shaped. This means that many of those with student loan debt fall into two categories: those who have made no progress in repaying debt, and those that have completely repaid their debt. Over time, the number in the no progress category reduces, while the number in the completely repaid category increases.
- The trend is illustrated in the following graph that looks at the progress to repayment by March 2001 of those who last borrowed in 1994 and compares it with the progress of those who last borrowed and studied in 1997. Of the 1994 group, nearly 30 percent are in the no progress category while nearly 40 percent are in the completely repaid category. Among the 1997 group, the proportions are close to 50 percent and 20 percent respectively.



⁷ The term 'leaving debt' refers to the student's loan balance at the end of his/her study regardless of whether they successfully completed or not. The term 'graduating debt' refers to the 'leaving debt' of those students that successfully completed a qualification at the end of their study.

- While almost half of those who last borrowed and studied in 1997 had not reduced their debt by March 2001, half of those who last borrowed in 1994 had repaid at least three quarters of their debt by March 2001 (ie after six years). This tends to corroborate June 2004 Ministry estimates of the average repayment time of 9.3 years, compared with 9.6 years a year earlier and 10.3 years in June 2002. Most borrowers repay in about eight years.
- The proportion of the 1994 borrowers who had fully repaid their debt by March 2001 was more than twice that of the 1997 borrowers (39 percent compared with 18 percent), indicating an accelerating repayment rate as borrowers' careers advance.
- The average debt of students leaving with a debt in 1994 had reduced by 47 percent.
- Forty-seven percent of people leaving with a debt in 1994 of less than \$5,000 had fully repaid six years later, compared with 36 percent owing between \$5,000 and \$15,000, 21 percent owing between \$15,000 and \$25,000 and 29 percent of people owing more than \$25,000.

Debt and going overseas

- Around 8 percent of the people who last studied and borrowed in 1997 had declared that they were residing overseas in 2000.
- People with higher debt are more likely to go overseas than those with lower debt. Nearly one in five of those whose debt on leaving study in 1997 was over \$25,000 was overseas in 2000, compared with 3 percent of those with a debt of under \$5,000.
- The proportions overseas are higher for those at the bachelors level. Roughly one in eight was declared overseas in 2000, compared with one in 12 of all those who last studied and borrowed in 1997. Those who were successful in completing a bachelors degree were more inclined to travel (14 percent).
- The percentage of bachelor graduates going overseas rose with level of debt. Seventeen percent of bachelors graduates with a debt between \$15,000 and 25,000 were overseas in 2000, while over 20 percent of graduates with a debt over 25,000 were overseas in 2000.
- Those overseas repay their student loan debt more slowly in the first three years after study than those in New Zealand. The median debt for those overseas was 9 percent lower three years after study compared with 23 percent for those in New Zealand while nearly three in five of those overseas three years after study had made no progress in repaying their student loan, compared with around half of those resident in New Zealand. Similarly 3 percent of those resident overseas three years after study had repaid their loan fully compared with 19 percent for those in New Zealand.
- Nearly half (48 percent) of those who successfully completed a bachelors degree in 1997 and were declared overseas in 2000 had made no progress at all in reducing their loan balance. This contrasted with 29 percent for those resident in New Zealand in 2000.

Qualification Level

- A student graduating with a bachelors degree in 1997 left with a median debt of \$17,110, compared with \$14,110 for all those who last studied and borrowed at bachelors level in 1997. A bachelors graduating debt was 3.1 times the median graduating debt of a student at certificate level, 1.3 times the median graduating debt for a student at diploma level, and slightly higher than the median graduating debt for a student at honours or masters level (\$16,900).

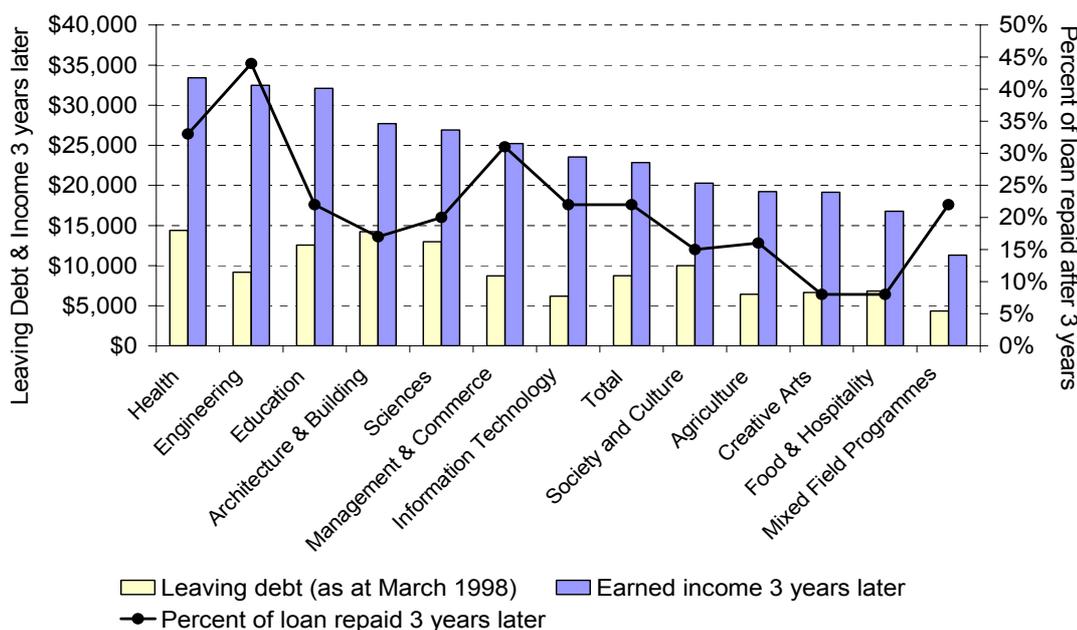
- At certificate level, there was almost no difference in the leaving debts of those who studied, and those who completed, and at a postgraduate certificate/diploma level, those completing their qualification left with less debt than all those who last studied and borrowed at this level in 1997. Study for many students at this level is often linked with vocation, and employer assistance for fees is often linked to successful completion.
- Those who successfully completed a qualification earned 39 percent more than those who had a debt and did not complete a qualification.
- Those studying at bachelors level earned 1.8 times the income of those studying at certificate level. Those studying at masters or honours level earned 1.2 times the income of those studying at bachelors level, and 2.2 times the income of those studying at certificate level.
- Students who studied for a bachelors degree but did not complete had a lower income than those who did, but a higher income than certificate students who did complete their qualification.
- The median earned income of masters/honours students who abandoned without completing was very similar to that of those who successfully completed a bachelors degree.
- Those with higher debt on leaving study, in general had earned more three years after study. However, this was not true at masters/honours level, or for those who successfully completed a bachelors degree, where incomes were similar regardless of the loan balance.
- Over one in five students who successfully completed a qualification in 1997 had fully repaid their loan three year later, compared with 15 percent of those who did not complete a qualification. This difference was present all qualification levels.
- Those not completing a qualification were significantly more likely to have made no progress in repaying their loan, than those who completed a qualification (56 percent compared with 37 percent).
- Students borrowing to study at postgraduate certificate or diploma level had made the most progress to repayment. Median debt for this group reduced by 47 percent after 3 years, compared with 31 percent for masters/honours students, 23 percent for bachelors, 19 for diploma students, 18 percent for doctorate students, and just 8 percent for certificate students.

Qualification Field

- People who studied in architecture and building left study with the highest median debt. Study in sciences, health and education also had higher median debts than the overall median. The higher level of debt in these fields of study reflects the fact that there is a relatively high proportion of degree level study in these fields and higher levels of study are associated with higher debt.
- Study in information technology, agriculture, food and hospitality and creative arts had debts lower than the overall median in March 2001. Around 27 percent of people with debt studied in these fields during 2000.
- The field of study with the highest overall median income post-study was health. People who borrowed and studied in this field earned around 46 percent (or \$10,600) more than the median income overall (\$22,840). Other fields of study with high post-study income

were engineering and education, with post-study income 41 percent to 42 percent higher than the overall median.

- Over all fields of study median debt had reduced 22 percent and 18 percent had fully repaid after 3 years. Health and engineering students had made most progress in repaying their debt. The median debt for engineering students had reduced 44 percent after 3 years and 28 percent had fully repaid their debt. For health students, the median debt after 3 years had reduced 33 percent and 24 percent had fully repaid their debt. Those who took out medical degrees had by far the fastest repayment rate in the first three years post-study, reflecting high starting salaries for doctors. Those with nursing degrees also repaid more quickly than others with bachelors degrees. Holders of degrees in arts, however, repaid more slowly than those who were successful in completing other bachelors degrees.



- Eleven percent of nursing graduates who completed in 1997 were declared overseas in 2000, compared with 14 percent for all bachelors graduates. This varied from 3 percent for nursing graduates with less than \$5,000 debt to 21 percent for graduates with more than \$25,000 debt.
- Twenty-six percent of medicine graduates who completed in 1997 were declared overseas in 2000. This ranged from 14 percent for graduates with debts between \$15,000 and \$25,000, to 28 percent for those with debts over \$25,000. The very high proportion for the medicine field reflects the strong employment market internationally for medical graduates, as well as a long tradition among New Zealand doctors spending several years working in overseas hospitals in the early years of their careers. There are also some areas of specialisation where doctors travel overseas to complete further postgraduate study.
- Graduates with bachelors degrees in commerce, law and arts were also more inclined to be overseas in 2000 than bachelors graduates in general.
- Around 11 percent of the 1997 medical graduates had spent three years overseas by 2000, compared with 9 percent for arts, 7 percent for law and commerce and 3 percent for nursing.

- Forty percent of the 1997 arts graduates who had declared themselves overseas in 2000 had spent three years away from New Zealand, compared with 35 percent for commerce, 30 percent for medicine, and about 20 percent for nursing and law.

Ethnic Group

- Per capita, more Māori have a student loan debt than other groups (17 percent compared with 11 percent for all groups). The median debt of Māori is similar to the overall level. Both Pasifika and Asian people borrow at a higher rate than Europeans (13 percent of the population aged 15 and over compared with 8 percent for Europeans). European and Pasifika groups have the highest level of debt (around 15 percent higher than the overall median). The median debt of Asian students is similar the overall median.
- Overall, annual income three years post-study was highest for Europeans (8 percent higher than the overall median income), Asian and Pasifika incomes were about 1 percent to 2 percent (\$200- \$500) below the overall median. Māori incomes were significantly lower than all other groups (over \$8,000 or 35 percent lower than the overall median). The lower income found among Maori in this study reflects the fact that many Maori were studying at lower qualification levels that are associated with lower earnings.
- Māori and Pasifika had significantly lower progress to repayment than Asian or Europeans. Over three in five Māori and Pasifika students (63 percent and 65 percent respectively) had made no progress, compared with 41 percent and 47 percent for European and Asian students respectively.
- Eight percent of Pasifika and 10 percent of Māori had fully repaid their debt compared with 20 percent and 29 percent for European and Asian borrowers respectively.

Gender

- While a higher proportion of the female population had a debt (11.0 percent compared with 10.4 percent for males), median debt was around 6 percent higher for men.
- Men earned around 7 percent more than women three years post study.
- There was almost no difference in repayment rates between men and women, except for debts over \$25,000, where 34 percent of men have fully repaid their debt compared to 24 percent of women. Almost 40 percent of women in this debt band had made no progress compared with about a quarter of men.

Age

- Over 45 percent of people aged 20 to 24, and over 30 percent of people aged 25 to 29 had a debt in March 2001. People in their 20s made up over 60 percent of all people with debt. This group also owed the most, in fact, between \$1,500 and \$2,200 more than all other groups.
- Around 2 percent of people with debt were aged 40 or over, with a median debt of around \$5,400. Borrowers over 55 owed between \$300 and \$500 more than borrowers between 40 and 55.
- Those in older age groups repaid their debt faster than borrowers in younger age groups. The youngest age group (under 25) had the lowest proportion to have fully repaid their debt (13 percent), the highest proportion to have repaid less than a quarter of their debt (74 percent) and the highest proportion to have made no progress (52 percent).

2 About the Integrated Student Loan Dataset

The Student Loan Scheme is managed by three government agencies: the Ministry of Education, the Ministry of Social Development and Inland Revenue.

- The Ministry of Education is responsible for providing policy advice to government on the scheme. It also collects and acts as custodian of information on enrolments in and completion of tertiary education.
- StudyLink (a service of the Ministry of Social Development) is responsible for the delivery and administration of the payment of student loans.
- Inland Revenue is responsible for the assessment of student loan balances and for the collection of student loan repayments.

The agencies have each developed information systems necessary to run their parts of the system. Those systems are not connected, however. None of the systems contains all of the important information on borrowers, their tertiary education, their borrowing and their loan balances and their repayments. It is not possible, using those transactional systems, to analyse student loan debt and repayment characteristics by (for instance) qualification level and by demographic characteristics, such as ethnic group.

The integrated dataset on Student Loan Scheme borrowers combines:

- information collected by tertiary education providers on students and on their enrolments and courses
- information collected by StudyLink on students' borrowings under the Student Loan Scheme
- data on student loan balances and repayments from Inland Revenue, and
- Inland Revenue data on income and tax status.

By making linkages between information drawn from the systems of the three agencies, the integrated dataset enables us to study the effects of the Student Loan Scheme. In this way, it gives us a better understanding of, for example, the borrowing levels and repayment rates of different groups of borrowers.

The dataset currently contains linked records for the years 1997 to 2000. The dataset also contains Inland Revenue data on income and debt for those who used the Student Loan Scheme between 1992 and 1996. That earlier data has not been linked to education or borrowing data.

In this report and other analyses from the integrated dataset, we are able to examine the educational records of those who borrow, their ethnic group, gender and age, their loan balance, their income and their repayments. The dataset allows us to focus on subgroups of borrowers – for instance, women, Pasifika or older people – and examine how their incomes change over time and how they make progress towards repayment of their loans. We can explore the different impacts of certain qualification types – such as certificates or bachelors degrees - on borrowing, repayment and income patterns. And we have been able to focus on particular qualifications – such as nursing qualifications or law degrees – and see how people with those qualifications progress to repayment and how their incomes grow.

Because the linked records in the dataset cover only the years 1997 to 2000, our full analysis is confined to those people who used the Student Loan Scheme in any of those years. We are able to do a certain amount of analysis on the debt, income and repayments of those who used the scheme before 1997, but in those cases, we are unable to say what qualifications they studied and whether they were successful in their studies or to examine their demographic characteristics.

The dataset was updated in late November 2004 to include data from 2001 and 2002. It will then be extended annually with new waves of data. In time, this time-series will mature so that the borrowing, debt, repayment and income history of every borrower will be recorded, linked to a record of their tertiary education. Over time, the integrated dataset will give us a longitudinal, multidimensional view of the scheme and hence will enable us to analyse and report on its impacts more fully.

Data from the three agencies was integrated at the unit-record level by Statistics New Zealand. The data-set, with identifiers (such as name, address and IRD number) removed, has been analysed under confidential and secure conditions in Statistics New Zealand's datalab. Under the protocols set by Statistics New Zealand, analytical results are expressed in terms of medians, percentiles and other statistical measures or as sums of groups. No individuals' records will be able to be identified.

The data integration exercise is a critical element of a strategy to improve the quality and quantity of available data on tertiary education. It is a means of providing better information to the public and to the government about the Student Loan Scheme and about other aspects of tertiary education. The purpose of this report is to contribute to our understanding of the impacts of the loan scheme on different groups of students and hence, on our society.

The integrated dataset is also being used for:

- forecasting;
- understanding the cost of the Student Loan Scheme to the Crown;
- costing policy change; and
- assessing the socio-economic impact of, and the return on, education.

For more technical information on the matching methodology and the quality of the linking refer to Statistics New Zealand (2002b) *Report on the Matching and Results of the Student Loans Integration Project*.

3 People with Debt

Introduction

The Student Loan Scheme was introduced in 1992. In the 13 years to June 2004, over half a million New Zealanders have used the scheme in order to gain access to tertiary education. While some students repay will their loan quickly, the majority carry a debt over several years⁸.

The household savings survey⁹ conducted by Statistics New Zealand in 2001 for the Retirement Commission gives an idea of the scale of student loan debt in relation to other forms of debt. The survey showed that student loan debt represented about 5 percent of all debt held by New Zealanders. Mortgages constituted 80 percent of total debt, bank debt 10 percent and credit card debt 3 percent. The median student loan debt of those surveyed (\$8,500) was higher than the median bank debt (\$3,000) and median credit card debt (\$1,000).

This chapter looks at the demographic and study characteristics of those people with student loan debt. The level and distribution of student loan debt for different sub-groups can provide useful insights into how different groups of New Zealanders access the scheme and, indirectly, how these groups access tertiary education.

Apart from figures 3.1 and 3.2 which source official published information on student loan debt, the rest of this chapter analyses information from the integrated student loan dataset. This dataset covers students enrolled in the years 1997 to 2000¹⁰. As the majority of students' borrowings is transferred from the Ministry of Social Development to Inland Revenue at 31 March of the year following borrowing, the debt information in this report covers the period 31 March 1998 to 31 March 2001. Because of this, the way the integrated student loan dataset is constructed, and differences in the two data sources¹¹, data in this report will not necessarily correspond to that from official published sources. Nevertheless, the dataset does provide new information on the demographic and study characteristics of people with student loan debt, that has not been available previously.

Trends in total student loan debt

As the Student Loan Scheme matures, an increasing proportion of the population will have a student loan debt. The 418,761 borrowers with student loan debt held by Inland Revenue on 30 June 2004 represent 13.2 percent of the population aged 15 and over. This compares with 12.5 percent in 2003 and 11.8 percent in 2002. On 30 June 2004, 3.2 percent of the population aged 15 and over had a student loan balance of greater than \$20,000, compared with 2.8 percent in 2003 and 2.5 percent in 2002.

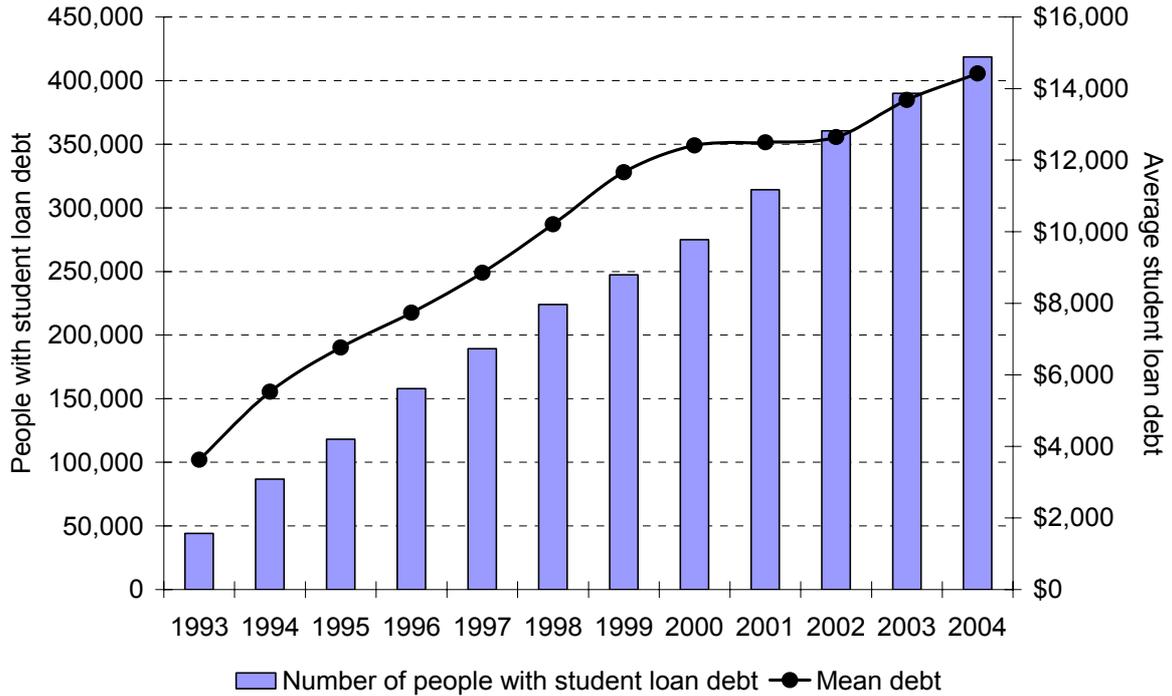
⁸ The 2004 Annual Student Loan Report (Ministry of Education, Inland Revenue, Ministry of Social Development, 2004) provides an estimated overall average repayment time of 9.3 years.

⁹ Refer to Statistics New Zealand and the Retirement Commission, *The Net Worth of New Zealanders – a Report on their Assets and Debts*, www.stats.govt.nz, 2002.

¹⁰ The dataset is scheduled to be updated with 2001 and 2002 data in late 2004, and annually thereafter.

¹¹ See also chapter 2 of this report. The dataset was created by linking data from three agencies. For more information on how this was done and the quality of the data see and Statistics New Zealand (2002a, 2004, technical notes sections) and Statistics New Zealand (2002b), *Report on the Matching and Results of the Student Loans Integration Project*.

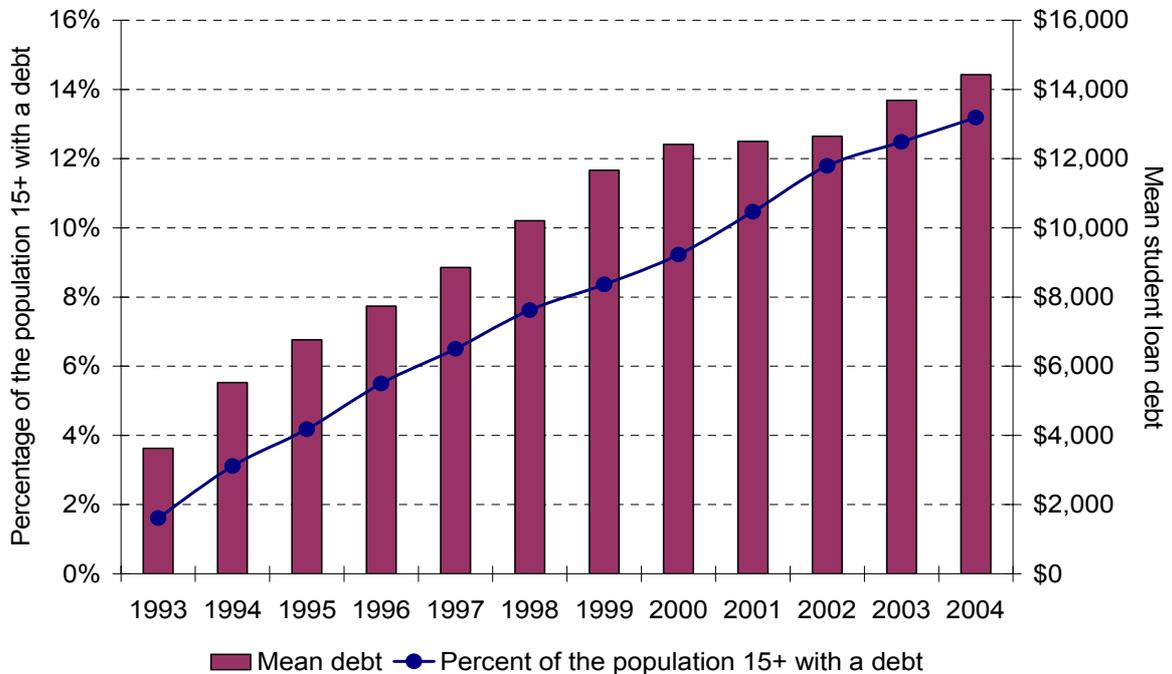
Figure 3.1: Number of people with student loan debt and average debt at 30 June 1993-2004



Notes:

1. Figures are nominal dollars.
2. Debt is the student loan balance held by the Inland Revenue Department as at 30 June each year.
3. 1993 and 1994 figures are estimates. Other figures are from Annual Student Loan Reports 1999 to 2004.

Figure 3.2: Percentage of the population aged 15 and over with a student loan debt and their mean debt 1993-2004



Notes:

1. Dollar figures are nominal dollars as at 30 June.
2. Debt is the student loan balance held by the Inland Revenue Department, and so excludes any loan balance held by the Ministry of Social Development.
3. 1993 and 1994 figures are estimates. All other debt figures are sourced from Annual Student Loan Reports 1999 to 2004.
4. Population relates to 30 June resident population estimates. Source: Statistics New Zealand.

Figure 3.3: Student loan debt summary statistics 1993-2004

| Year ending 30 June | Value of debt outstanding (\$m) | Number of students with debt outstanding | Mean debt | Percent of the population 15+ with a debt |
|---------------------|---------------------------------|--|-----------|---|
| 1993 | \$160 | 44,202 | \$3,628 | 1.6% |
| 1994 | \$480 | 86,800 | \$5,525 | 3.1% |
| 1995 | \$799 | 118,100 | \$6,765 | 4.2% |
| 1996 | \$1,222 | 157,900 | \$7,734 | 5.5% |
| 1997 | \$1,676 | 189,300 | \$8,854 | 6.5% |
| 1998 | \$2,255 | 224,000 | \$10,207 | 7.6% |
| 1999 | \$2,886 | 247,368 | \$11,665 | 8.4% |
| 2000 | \$3,412 | 274,871 | \$12,413 | 9.2% |
| 2001 | \$3,928 | 314,280 | \$12,497 | 10.5% |
| 2002 | \$4,559 | 360,612 | \$12,643 | 11.8% |
| 2003 | \$5,267 | 390,027 | \$13,680 | 12.5% |
| 2004 | \$5,964 | 418,761 | \$14,424 | 13.2% |

Notes:

1. Dollar figures are nominal dollars as at 30 June.
2. Debt is the student loan balance held by the Inland Revenue Department, and so excludes any loan balance held by the Ministry of Social Development.
3. 1993 and 1994 figures are estimates. All other debt figures are sourced from Annual Student Loan Reports 1999 to 2004.
4. Population relates to 30 June resident population estimates. Source: Statistics New Zealand.

Figure 3.4: People with student loan debt as a percentage of selected populations

| | |
|---|---------|
| Number of people with a debt at 31 March 2001 | 322,206 |
| % of the population aged 15 and over with a debt at 31 March 2001 | 10.7% |
| % of all people who studied between 1992 and 2000, with a debt at 31 March 2001 | 18.1% |

| | |
|---|--------|
| Number of people with a debt over \$20,000 at 31 March 2001 | 61,410 |
| % of the population aged 15 and over with a debt at 31 March 2001 | 2.0% |
| % of all people who studied between 1992 and 2000, with a debt at 31 March 2001 | 3.5% |

| | |
|---|--------|
| Number of first-year students with a debt at 31 March 2001 | 27,255 |
| % of all first-year students in 2000 with a debt at 31 March 2001 | 30.8% |

Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts data has been randomly rounded to base 3 according to Statistics New Zealand confidentiality provisions.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand
3. The number of people who studied between 1992 and 2000 has been estimated from the matched enrolments dataset at Ministry of Education.

While an estimated 10.7 percent of the population aged 15 and over had a student loan debt at 31 March 2001, around 2.0 percent of the population aged 15 and over had a debt over \$20,000.

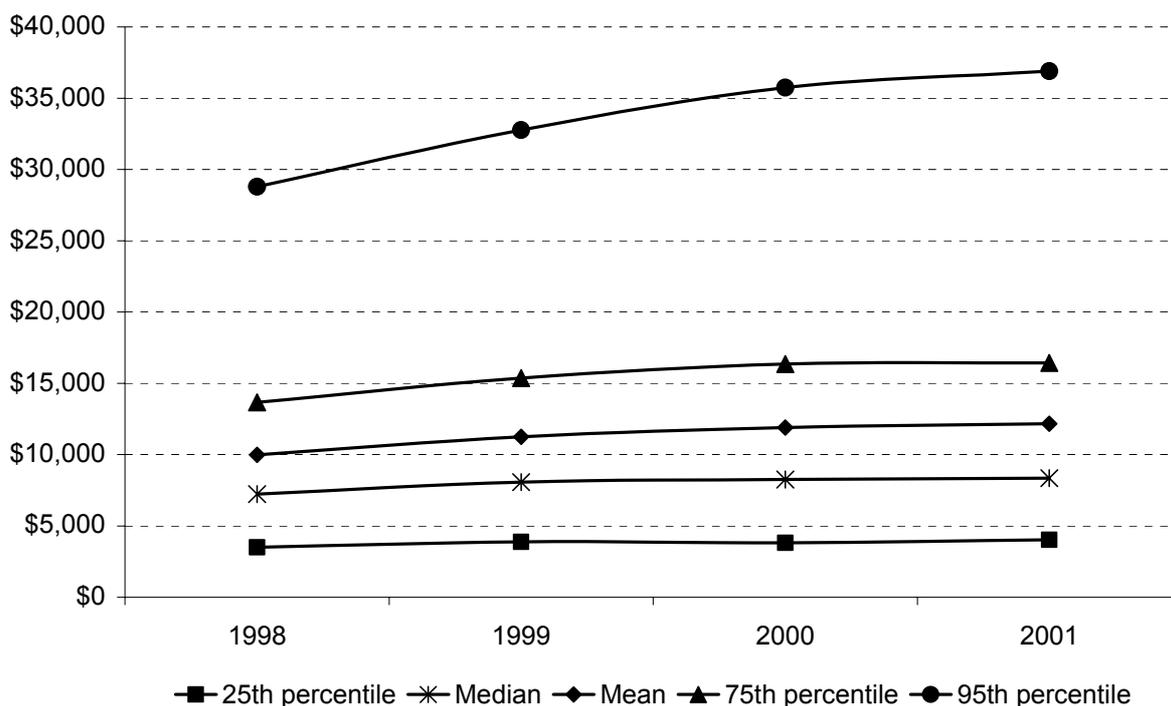
Of all students that enrolled in formal qualifications between 1992 and 2000, nearly one in five (18.1 percent) had acquired a student loan, while 3.5 percent had acquired a student loan debt over \$20,000.

In 2000, the number of people with student loan debt included around 27,260 first-year students who took out a loan. This represented nearly 31 percent of all first-year students in 2000. When first-year and returning students are considered, around 39 percent of enrolled students borrowed in 2000.

Not all students (for example part-time, part-year students) are eligible to use the student loan scheme. The proportion of students eligible to draw down a student loan and who have done so, increased from 50 percent in 1999 to 56 percent in 2001, and 57 percent in 2002. In 2003, around 60 percent of eligible students drew down a student loan¹².

The number of people with student loan debt at 31 March grew 44 percent between 1998 and 2001. The median debt increased by \$1,100 (or 16 percent) while the mean or average debt increased by \$2,200 (or 21 percent) over this same period. This indicates that debt increased for students with the highest debt balances more than for the majority of students. This is shown in the figures for the 95th percentile¹³, where debt for the 5 percent of people with the highest debt grew by \$8,100, or 28 percent between 1998 and 2001.

Figure 3.5: Summary characteristics of student loan debt at 31 March 1998-2001



Notes:

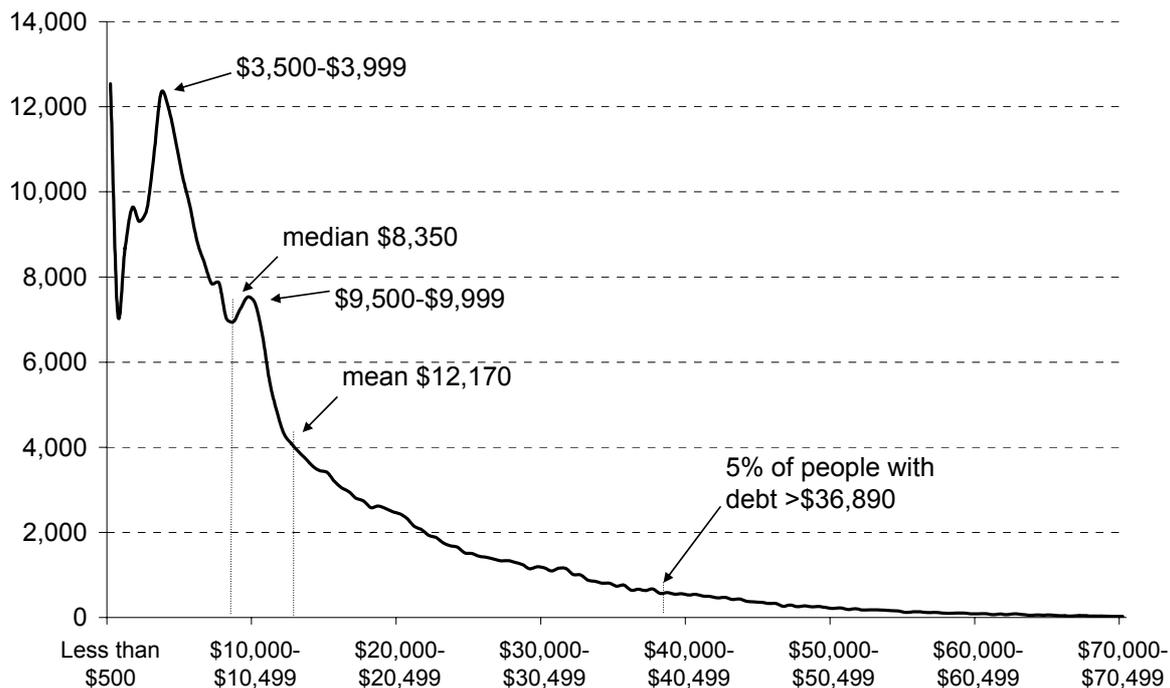
1. The median debt is that value at which 50 percent of debtors have a debt below, and 50 percent of debtors have a debt above. The mean or average debt is the total value of student loan debt divided by the total number of people with a debt. The nth percentile is that value at which n percent of all people have a debt below and 100-n percent have a debt above.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

¹² 2004 Annual Student Loan Report, page 20. Some part-time, part-year students will be eligible to borrow from 1 January 2005.

¹³ See note 2, figure 3.4.

Figure 3.6: Distribution of people with student loan debt at 31 March 2001 by debt band



Note: The graph excludes people with a debt over \$70,500 at 31 March 2001 (approximately 700 people, or 0.2 percent of all people with debt).

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The distribution of student loan debt is strongly skewed to the higher end, that is, the range of debt held by the people with high debt is much wider than the range held by the people with low debt. While 57 percent of people with debt owed less than \$10,000, less than 9 percent owed more than \$30,000, and less than 2 percent owed more than \$50,000.

There are two main peaks in this distribution of student loan debt. The first represents a group of around 12,500 (3.9 percent) of students with a debt of less than \$500 at 31 March 2001. The second main peak represents a group of 12,300 of students (or 3.7 percent) with a debt between \$3,500 and \$3,999. There is a secondary peak of around 7,500 of students (2.3 percent) who have a debt between \$9,500 and \$9,999.

To a degree, these peaks (apart from those owing less than \$500) reflect the number of years of study. The majority of people in the \$3,500 to \$3,999 debt band had studied for one year and were still studying, while the majority of people in the \$9,500 to \$9,999 debt band had studied for two years and were still studying.

This distribution is very similar in each of the years from 1998 to 2001. In some years there are noticeable small peaks around \$18,500 to \$18,999 (1998) and \$31,000 to \$31,499 (1999 and 2001). Each year shows a gradual shift to the right, reflecting the marginally increasing percentage of students in high debt bands.

It is interesting to compare the distribution of student loan debt in 1998 with that in 2001 in real or constant dollars, that is, allowing for the effects of inflation¹⁴. Inflation has been relatively low over this period (1.3 percent in 1998, -0.1 percent in 1999, 1.5 percent in 2000

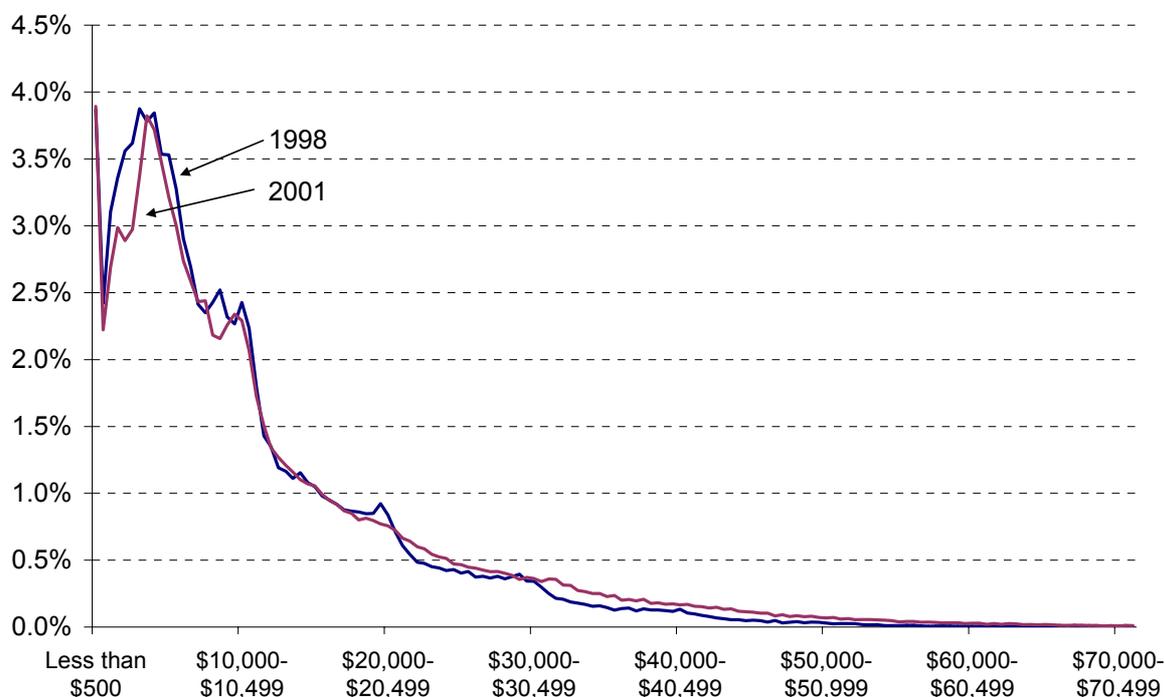
¹⁴ Real or constant value is the value if the dollar is worth the same in each year. A common measure used to adjust dollars for inflation is the Consumers Price Index produced quarterly by Statistics New Zealand.

and 3.1 percent in 2001)¹⁵. Figure 3.7 shows the distribution of people with debt in percentage terms with their debt balance in 2001-dollar terms. The two resulting distributions appear reasonably closely aligned, but the presence of more people in the higher debt bands is still evident. After adjusting for inflation, 14 percent of people had a debt greater than \$20,000 at 31 March 1998, compared with 19 percent at 31 March 2001.

In real terms, the major peak (representing the debt of mainly one-year borrowers) shifted upwards by \$500 between 1998 and 2001. Around 18 percent of people with debt at 31 March 2001 owed less than \$3,000, compared with 20 percent at 31 March 1998.

Over the period from 1997 to 2000, the average student fee per equivalent full-time student in public tertiary education providers rose from \$2,560 to \$3,550 an increase of 38 percent in nominal terms, and 33 percent when adjusted for inflation¹⁶.

Figure 3.7: Percentage distribution of people with student loan debt at 31 March 1998 and 2001 in 2001 dollars



Notes:

1. Dollar figures are have been adjusted by the percentage change in CPI between March 1998 and March 2001. Source: Statistics New Zealand.
2. The graph excludes people with a debt over \$70,500 at 31 March 2001 (approximately 700 people, or 0.2 percent of all people with debt).

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

¹⁵ These figures represent the annual percentage change in Consumer Price Index at March each year. Source: Statistics New Zealand.

¹⁶ See also Ministry of Education, 2004a, *New Zealand Tertiary Education Sector, Profile and Trends 2003*, chapter 10, for more analysis of trends in student fees. The source of these figures is TEI annual reports, and so excludes private provider fees. In 2001, the government introduced a policy of 'fee stabilisation' which resulted in quite a different trend for the three years following the period analysed in this report.

Student loan debt by gender

Women made up 53 percent of all people with a debt at 31 March 2001, up from 51 percent in 1998. This largely reflects the make-up of tertiary enrolments, where women as a percentage of all students rose from 52 percent in 1994 to 56 percent in 2000.

A higher percentage of the female population aged 15 and over had a student loan debt at 31 March 2001 compared with the male population (11.0 percent compared with the 10.4 percent for men). To some extent, the difference reflects higher female participation rates in tertiary education. However, the percentage of men in the population with a debt over \$20,000 was about the same for women. This also partly reflects the fact that male and female rates of participation are more similar at higher level qualifications (which, in general, cost more and so incur higher debt).

Figure 3.8: Percentage of the population aged 15 and over with student loan debt at 31 March 2001 by gender

| Gender | Number of people with a debt at 31 March 2001 | Number of people with a debt over \$20,000 at 31 March 2001 | % of population aged 15+ with a debt at 31 March 2001 | % of population aged 15+ with a debt over \$20,000 at 31 March 2001 |
|---------|---|---|---|---|
| Males | 151,338 | 30,186 | 10.4% | 2.1% |
| Females | 170,868 | 31,224 | 11.0% | 2.0% |
| Total | 322,206 | 61,410 | 10.7% | 2.0% |

Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts data has been randomly rounded to base 3 according to Statistics New Zealand confidentiality provisions.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand.

On average, women had a lower student loan debt than men. The mean debt held by men was about 7 percent higher, while the median debt was about 3 percent higher. This difference has been widening since 1998, and reflects a number of factors, including the fact that *proportionately* more women study for shorter, lower-level qualifications.

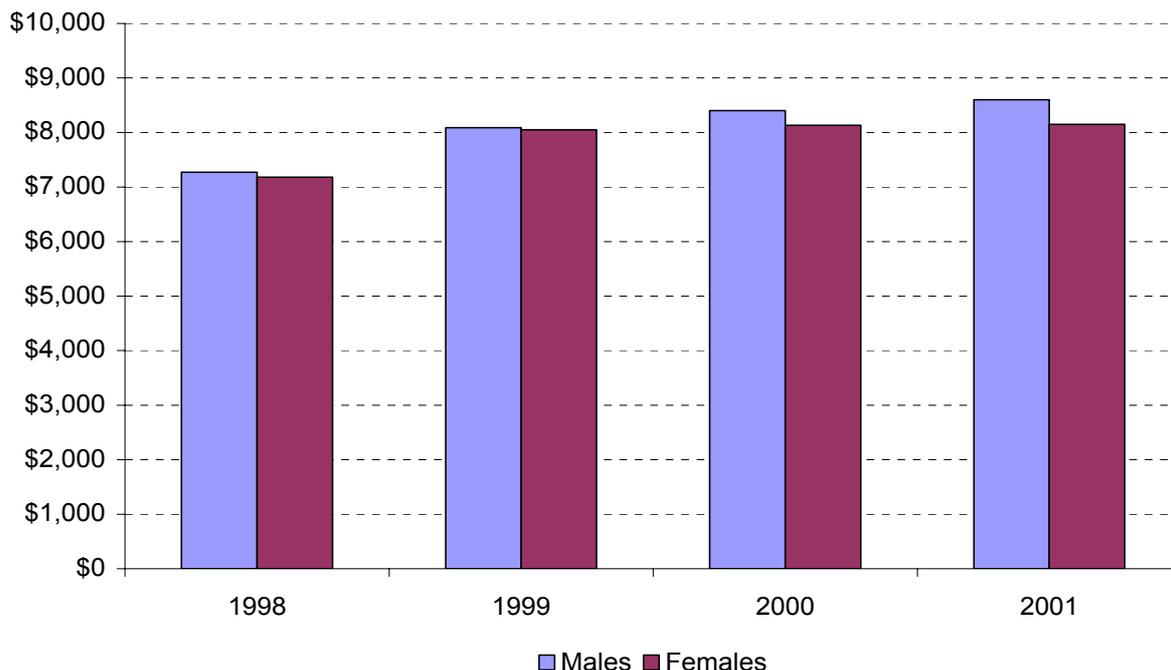
Figure 3.9: Student loan debt by gender at 31 March, 1998-2001

| Gender | 1998 | 1999 | 2000 | 2001 | % of all people with debt in 2001 | % change 1998-2001 |
|---------------|----------|----------|----------|----------|-----------------------------------|--------------------|
| <i>Median</i> | | | | | | |
| Males | \$7,270 | \$8,090 | \$8,400 | \$8,600 | 47.0% | 18.3% |
| Females | \$7,180 | \$8,050 | \$8,130 | \$8,150 | 53.0% | 13.5% |
| Total | \$7,220 | \$8,070 | \$8,250 | \$8,350 | 100.0% | 15.7% |
| <i>Mean</i> | | | | | | |
| Males | \$10,230 | \$11,510 | \$12,270 | \$12,610 | 47.0% | 23.3% |
| Females | \$9,750 | \$11,000 | \$11,570 | \$11,780 | 53.0% | 20.8% |
| Total | \$9,980 | \$11,250 | \$11,900 | \$12,170 | 100.0% | 21.9% |

Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data has been rounded to the nearest \$10.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand.

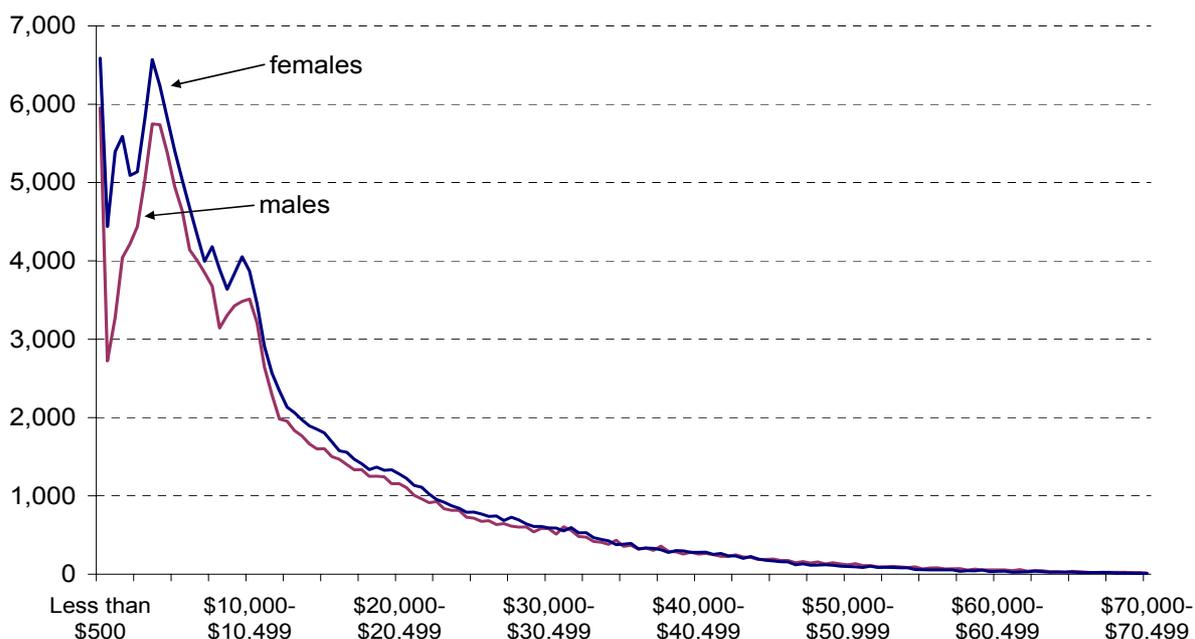
Figure 3.10: Median student loan debt by gender as at 31 March 1998-2001



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 3.11 shows that the distribution of student loan debt between men and women is similar. There is a smaller peak for women around the \$1,500 to \$2,000 range of debt. This, in part, reflects a higher proportion of enrolments by women in shorter lower-level courses. A higher proportion of women (26.1 percent) than men (23.4 percent) had a debt below \$4,000. A higher proportion of men (1.9 percent) than women (1.2 percent) had a debt above \$50,000.

Figure 3.11: Distribution of people with student loan debt at 31 March 2001 by gender and debt band



Note: The graph excludes people with a debt over \$70,500 at 31 March 2001 (approximately 700 people, or 0.2 percent of all people with debt).

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

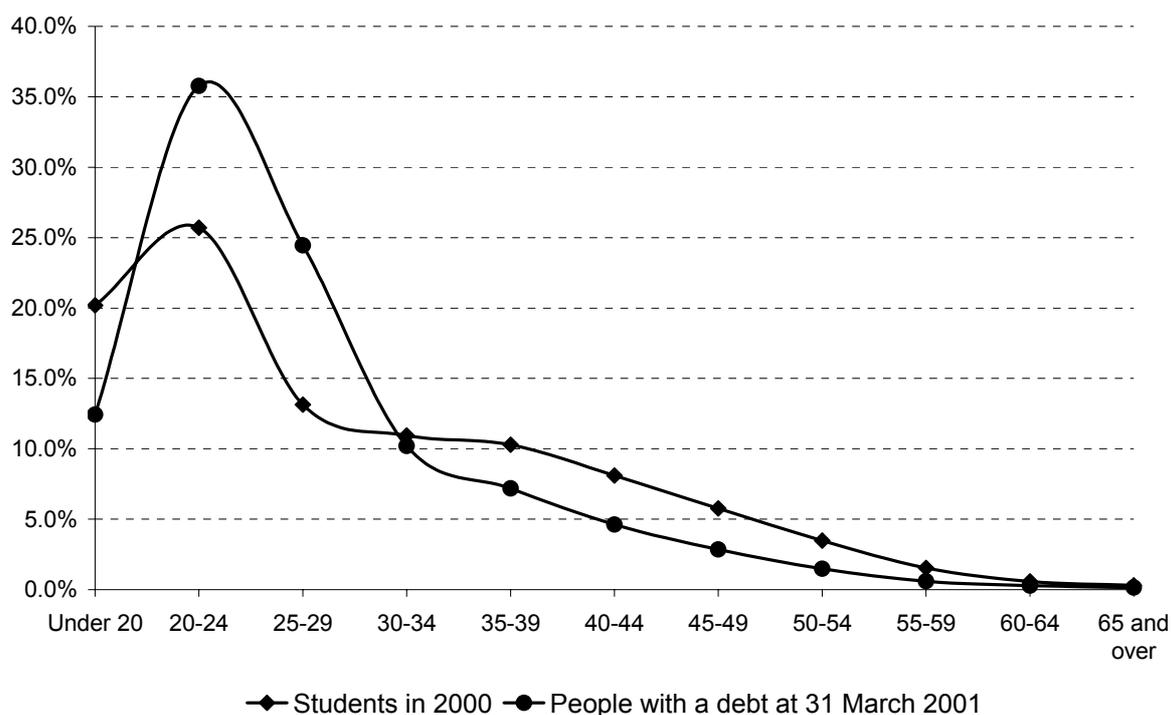
Student loan debt by age

People with a student loan debt are younger than students as a whole. The average age of a person with a student loan debt at 31 March 2001 was 27.1, compared with 29.1 for all students enrolled in 2000. Almost three in four (72.6 percent of) people with debt were under 30 compared with 60.3 percent of students in 2000.

It might be expected that younger students would have a higher propensity to borrow than older students, as younger students are less likely to be able to fund their education through paid employment or other sources, and there are proportionately more, younger students studying full-time towards longer, more expensive qualifications.

This is offset, to an extent, by the fact that the people with a student loan debt include those who were students from 1992 onwards. Therefore, while the loan scheme matures, this group will always be ageing. At the same time, the student population has also been getting older. The average age of a student in 1994 was 27.6 years compared with 29.1 in 2000. At 31 March 1997, 45 percent of all debt holders were aged between 20 and 24. This had fallen to 36 percent by 31 March 2001.

Figure 3.12: Distribution of people with debt at 31 March 2001 compared with students in 2000 by age group



Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand
2. Data on students from 2000 is from the Ministry of Education.

The largest group of debt holders is aged between 20 and 24. This group accounted for 35.8 percent of all people with student loan debt at 31 March 2001. The highest levels of debt were also held by this group. This reflects the facts that there are proportionately more students in the 18 to 24 age group studying full-time, higher-level, multi-year qualifications, such as degrees, and that this group has had less time in the work force after study and so less time to repay their loans.

The number of people with student loan debt increased in every age group over the four years between 1998 and 2001, with the strongest growth in percentage terms in the older age groups. While the number of people aged 60 and over with a debt tripled between 1998 and 2001, this was from a very small base, as people aged over 60 made up less than half a percent of all people with a debt at 31 March 2001¹⁷.

Figure 3.13: Median student loan debt by age group at 31 March 1998-2001

| Age group | 1998 | 1999 | 2000 | 2001 | Percent of all people with debt in 2001 | % change 1998 to 2001 |
|-------------|---------|----------|----------|----------|---|-----------------------|
| Under 20 | \$6,340 | \$7,190 | \$6,840 | \$6,730 | 12.4% | 6.2% |
| 20-24 | \$9,350 | \$10,270 | \$10,610 | \$10,580 | 35.8% | 13.2% |
| 25-29 | \$6,850 | \$8,210 | \$9,210 | \$9,890 | 24.5% | 44.4% |
| 30-34 | \$4,710 | \$5,590 | \$5,900 | \$6,330 | 10.2% | 34.4% |
| 35-39 | \$4,490 | \$5,050 | \$5,220 | \$5,640 | 7.2% | 25.6% |
| 40-44 | \$4,430 | \$5,040 | \$4,980 | \$5,290 | 4.6% | 19.4% |
| 45-49 | \$4,470 | \$5,080 | \$5,210 | \$5,370 | 2.9% | 20.1% |
| 50-54 | \$4,320 | \$5,110 | \$5,410 | \$5,580 | 1.5% | 29.2% |
| 55-59 | \$4,270 | \$4,790 | \$5,240 | \$5,690 | 0.6% | 33.3% |
| 60-64 | \$3,370 | \$4,220 | \$5,070 | \$5,700 | 0.3% | 69.1% |
| 65 and over | \$3,060 | \$3,560 | \$4,960 | \$5,780 | 0.1% | 88.9% |
| Total | \$7,220 | \$8,070 | \$8,250 | \$8,350 | 100.0% | 15.7% |

Note: Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Median debt increased for most age groups in all years, with particularly strong growth occurring for people aged 25 to 34, and 55 and over. Median debt decreased in 2000 and 2001 for people aged 19 years and under, and decreased very slightly in 2001 for 20 to 24 year olds. Average debt followed a very similar pattern.

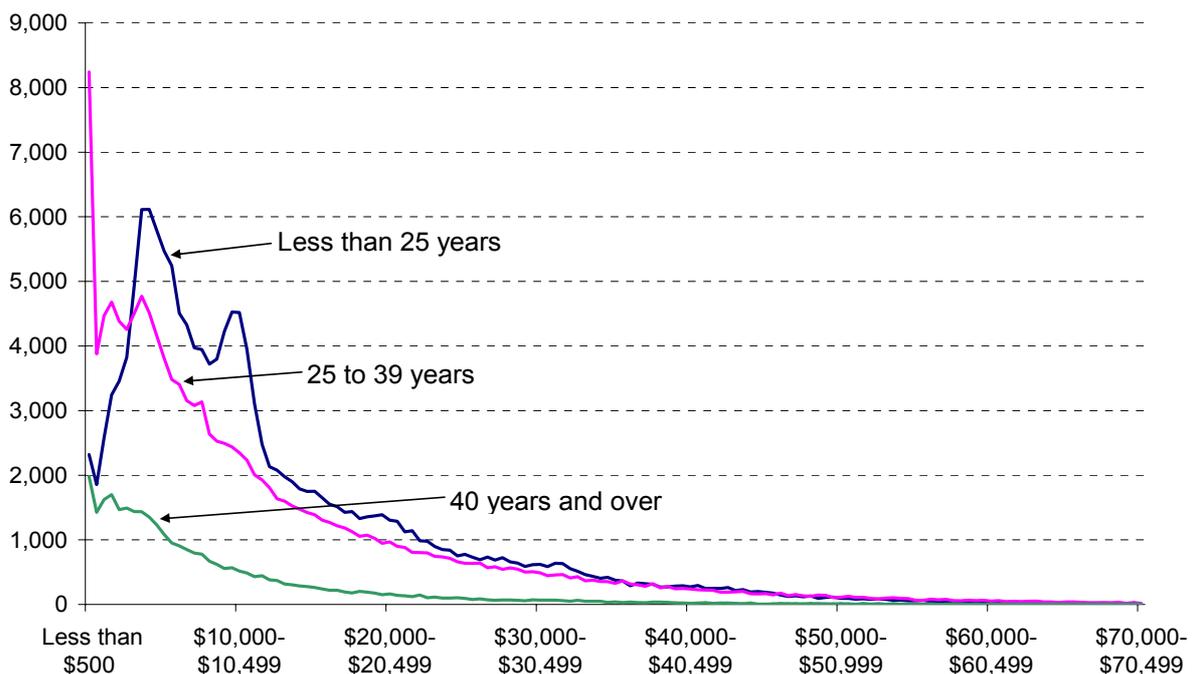
Older age groups had lower median debt balances than the youngest age groups, but there was very strong growth in the median debt of the 65 years and over age group, and to a slightly lesser extent, in the 60 to 64 age group.

The median debt for the 19 years and under age group peaked in 1999 and fell in 2000 and 2001. In 2001, the median debt for this age group was only 6.2 percent higher than it was in 1998, by far the slowest growth of any age group.

Figure 3.14 shows some different debt distribution patterns by age group. The youngest group has a strong double peak (around \$3,000 and \$10,000) that is not evident in the older age groups. The older age groups have a much higher proportion of people in the lowest debt bands. The oldest group shows a smooth descent, even though it has a higher percentage in the \$3,000 mark than the youngest group. There is a small peak around \$3,000 in the 25 to 39 age group, but it is not as pronounced as the peak for the younger group. These reflect both the differences between the age groups in qualification and duration of study, as well as the increase in wealth and ability to pay as people age.

¹⁷ The number of people of older ages enrolling in tertiary education has increased significantly in recent years. For example, students aged 60 and over increased over 200 percent between 1998 and 2001, while students aged 50 and over increased by 75 percent over this period. See Ministry of Education, 2004a, *New Zealand's Tertiary Education Sector, Profile and Trends 2003*, chapter 8.

Figure 3.14: Distribution of people with student loan debt by age group and debt band at 31 March 2001



Note: The graph excludes people with a debt over \$70,500 at 31 March 2001 (approximately 700 people, or 0.2 percent of all people with debt).

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The distribution of the over 40 age group remained relatively constant between 1998 and 2001, but there were some minor differences in the other two age groups. In 1998, 41 percent of all debt balances for those aged 25 to 39 were between \$1,000 and \$6,000. This dropped to 32 percent in 2001. In 2001, 27 percent of debt balances held by those aged 25 to 39 were between \$15,000 and \$50,000, compared with 17 percent in 1998.

Figure 3.15: Number of people with debt as a percentage of the population by age group in 2000

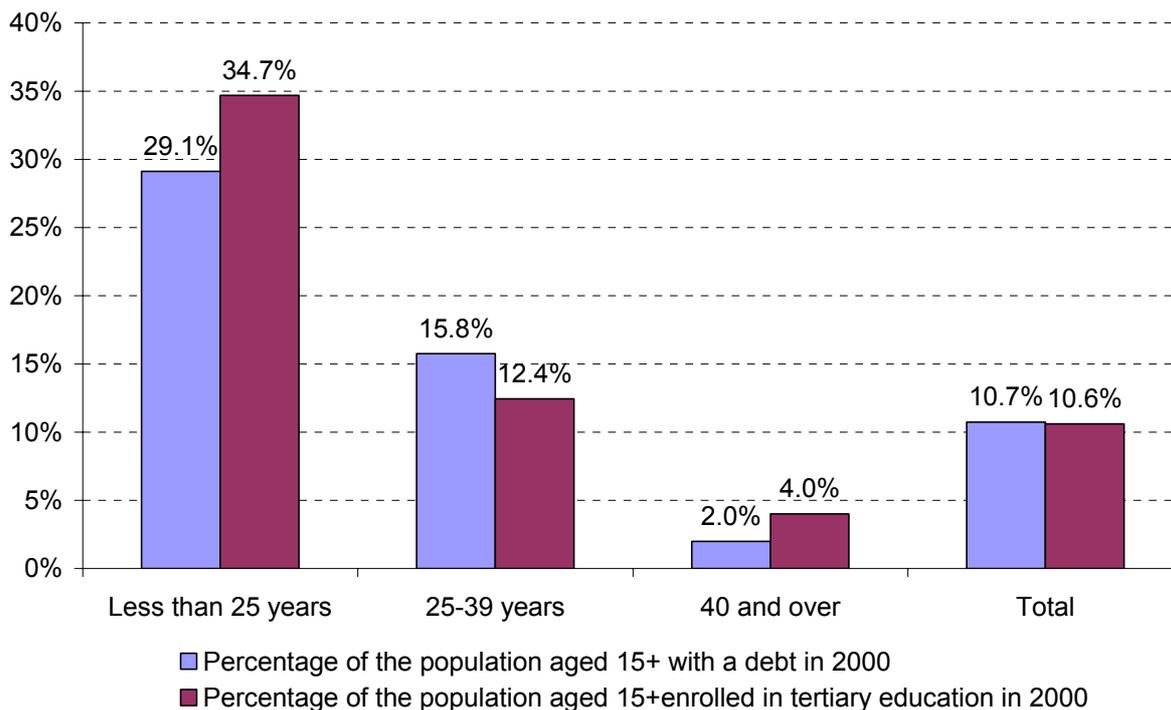
| Age group | Number of people with a debt at March 2001 | Number of people with a debt over \$20,000 at 31 March 2001 | % of the population in this age group with a debt | % of population in this age group with a debt over \$20,000 |
|-------------|--|---|---|---|
| Under 20 | 40,053 | 1,191 | 14.4% | 0.4% |
| 20-24 | 115,254 | 29,676 | 45.1% | 11.6% |
| 25-29 | 78,792 | 20,937 | 30.6% | 8.1% |
| 30-34 | 32,856 | 4,026 | 11.3% | 1.4% |
| 35-39 | 23,163 | 2,256 | 7.6% | 0.7% |
| 40-44 | 14,898 | 1,554 | 5.0% | 0.5% |
| 45-49 | 9,183 | 957 | 3.5% | 0.4% |
| 50-54 | 4,746 | 519 | 1.9% | 0.2% |
| 55-59 | 1,893 | 186 | 1.0% | 0.1% |
| 60-65 | 891 | 75 | 0.6% | 0.0% |
| 65 and over | 477 | 33 | 0.1% | 0.0% |
| Under 25 | 155,307 | 30,867 | 29.1% | 5.8% |
| 25-39 | 134,811 | 27,219 | 15.8% | 3.2% |
| 40 and over | 32,088 | 3,324 | 2.0% | 0.2% |
| Total | 322,206 | 61,410 | 10.7% | 2.0% |

Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts data has been randomly rounded to base 3.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand

Nearly 30 percent of the population aged between 15 and 24 had a student loan debt at 31 March 2001. This compares with nearly 16 percent of the population aged between 25 and 39, and 2 percent of the population aged over 40.

Figure 3.16: Percentage of the population aged 15 and over with a debt at 31 March 2001 and enrolled in tertiary education in 2000 by age group



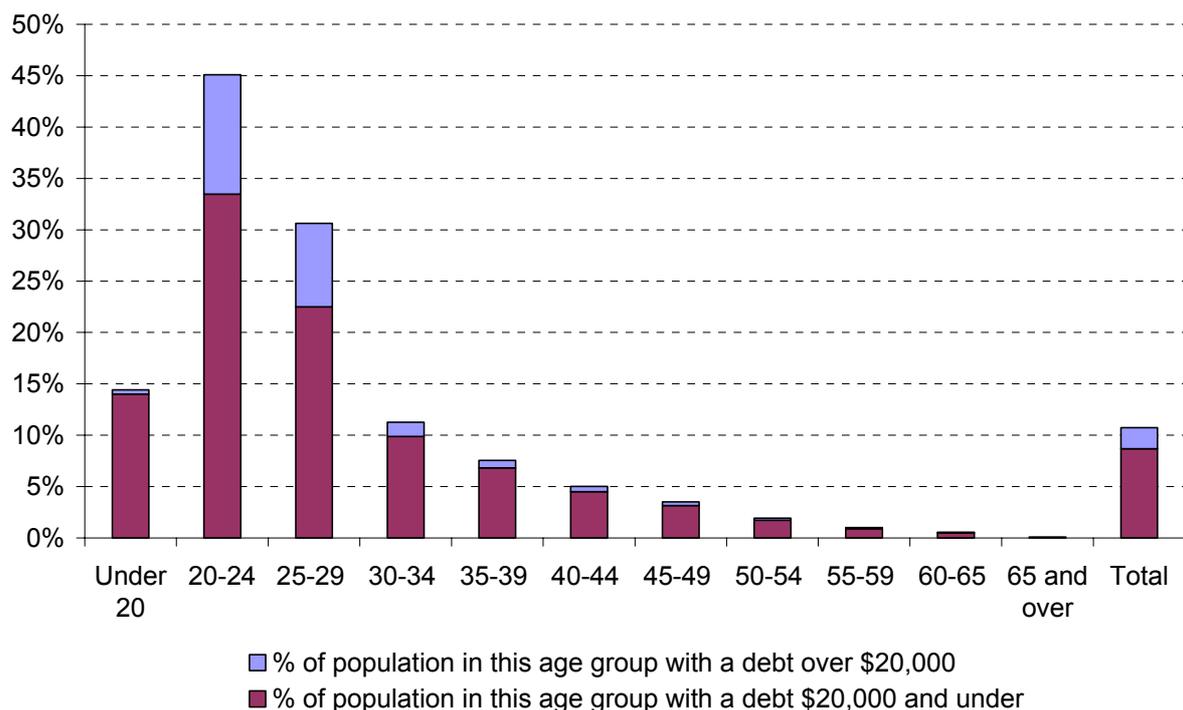
Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand

There were more people aged 15 to 39 with a student loan debt than were studying in 2000 in this age group. This was the only age group for which this was true and reflects the main core of former students aged 18 to 24, who borrowed in the past from 1992 to 1999, and are now in their mid to late twenties.

The group aged between 15 and 24 also had the largest proportion of the population with a debt of over \$20,000 (almost 6 percent), compared with 3 percent of 25 to 39 year olds and 0.2 percent of those aged 40 and over. This is shown in more detail in figure 3.17 which plots the percentage of people with debt who have a debt over \$20,000. Over a quarter of people with debt aged 20 to 29 had a debt over \$20,000. This compared with around 10 percent for those aged 30 to 59, and 19 percent overall.

Figure 3.17: Percentage of the population aged 15 and over with a debt at 31 March 2001 by five-year age groups



Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources.
2. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand.

Student loan debt by ethnic group

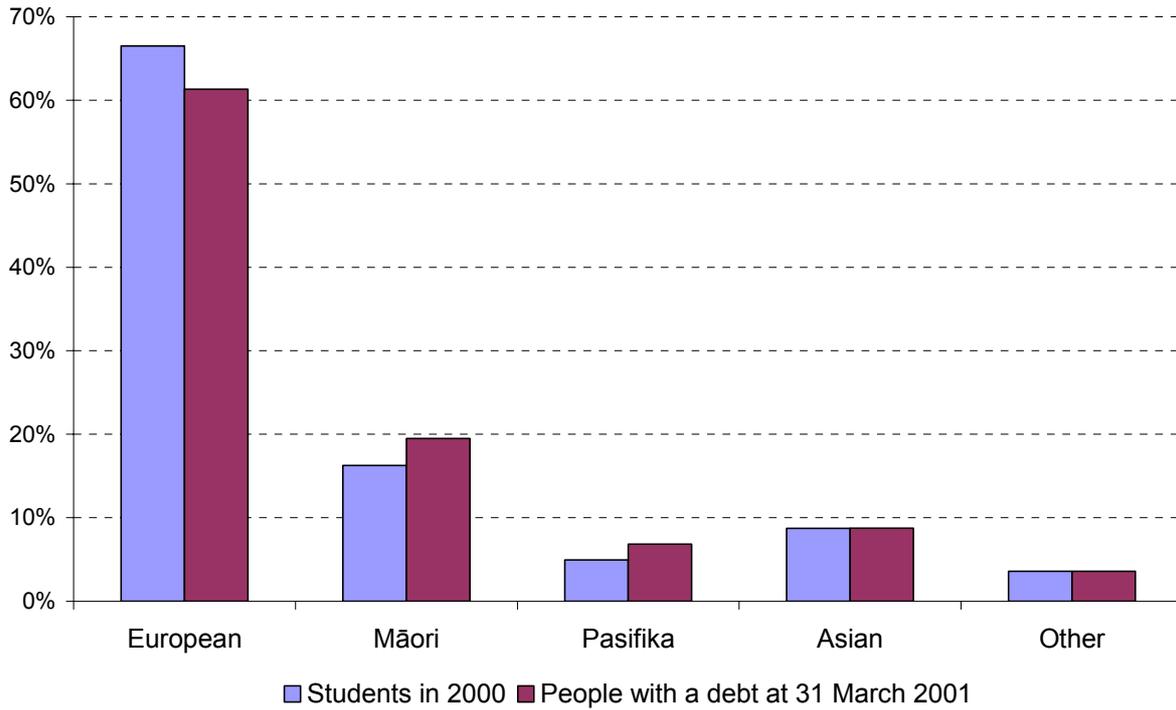
The distribution of people with student loan debt by ethnic group is largely reflects the distribution of domestic¹⁸ enrolments by ethnic group. Māori and Pasifika are slightly under-represented in the group of people with student loan debt, and Europeans are slightly over-represented.

However, caution is needed in interpreting this distribution, as there is a high proportion of people with an unknown or unreported ethnic group in the integrated student loan dataset¹⁹. There are also differences in the methods used to collect student data and debt data. More importantly, student data reflects domestic students enrolled in 2000 (including those not eligible to borrow), whereas debt data reflects those people who were students between 1992 and 2000. Over this period, the share of non-European domestic students increased noticeably, from 24 percent in 1994 to 33 percent in 2000.

¹⁸ Only domestic students are eligible for student loans. Domestic students also include students who are permanent residents or Australian citizens.

¹⁹ The ethnicity of people who last borrowed or studied before 1997 is not available from the integrated student loan dataset. This group, along with a small percentage of post-1997 borrowers whose ethnic group is unknown, accounts for around 93,500 (or 29 percent) of the 322,000 people with a debt at 31 March 2001.

Figure 3.18: Distribution of people with debt at 31 March 2001 and students in 2000 by ethnic group



Notes:

1. Ethnic group is based on the single prioritised method of reporting.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand
3. Source of student numbers: Ministry of Education

To better estimate the true population rates by ethnic group, the people with an ‘unknown’ ethnic group have been distributed across the other groups. In the absence of further information, this was done by allocation according to the distribution of people with a specified ethnic group value. This may provide a better indication of the true rate, but becomes less accurate if there is a bias in the ‘unknown’ group towards particular ethnic groups.

In the analyses below, both rates are presented, that is, those based on the actual numbers (with ‘unknowns’ excluded), and those based on the numbers with ‘unknowns’ redistributed.

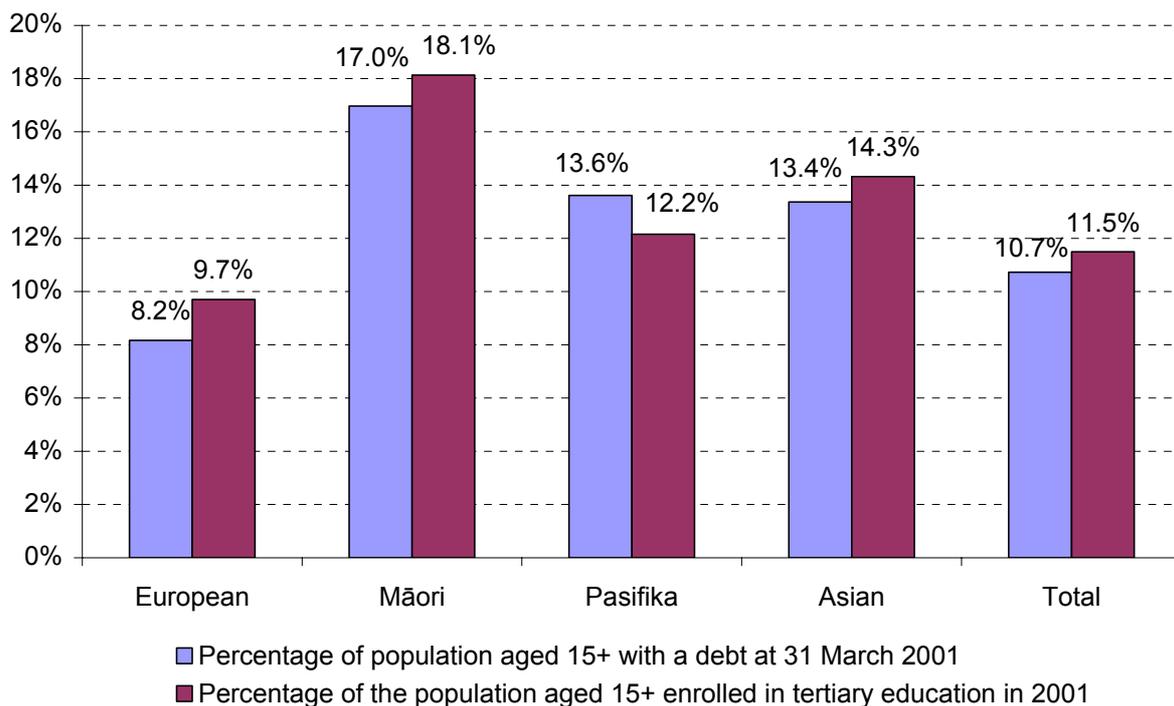
Figure 3.19: Percentage of the population aged 15 and over with a student loan debt at 31 March 2001 by ethnic group

| Ethnic group | People with debt | | People with debt over \$20,000 | | Percentage of population of this ethnic group with debt | | Percentage of population of this ethnic group with debt over \$20,000 | |
|--------------|------------------|---------|--------------------------------|--------|---|-------|---|------|
| | A | B | A | B | A | B | A | B |
| European | 140,247 | 197,626 | 34,986 | 40,975 | 5.8% | 8.2% | 1.4% | 1.7% |
| Māori | 44,547 | 62,772 | 8,379 | 9,813 | 12.0% | 17.0% | 2.3% | 2.7% |
| Pasifika | 15,627 | 22,020 | 3,825 | 4,480 | 9.7% | 13.6% | 2.4% | 2.8% |
| Asian | 20,019 | 28,209 | 3,348 | 3,921 | 9.5% | 13.4% | 1.6% | 1.9% |
| Other | 8,217 | 11,579 | 1,896 | 2,221 | | | | |
| Unknown | 93,546 | | 8,976 | | | | | |
| Total | 322,206 | 322,206 | 61,410 | 61,410 | 10.7% | 10.7% | 2.0% | 2.0% |

Notes:

1. 'A' represents the reported number of people with debt in each ethnic group and, therefore, excludes people with 'unknown' ethnic groups.
2. 'B' estimates the true number of people in each ethnic group, by redistributing those with an 'unknown' ethnic group according to the distribution of people in known ethnic groups.
3. Ethnic group is based on the single prioritised method of reporting.
4. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources.
5. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand.

Figure 3.20: Percentage of the population aged 15 and over with a student loan debt at 31 March 2001 and enrolled in tertiary education in 2001 by ethnic group



Notes:

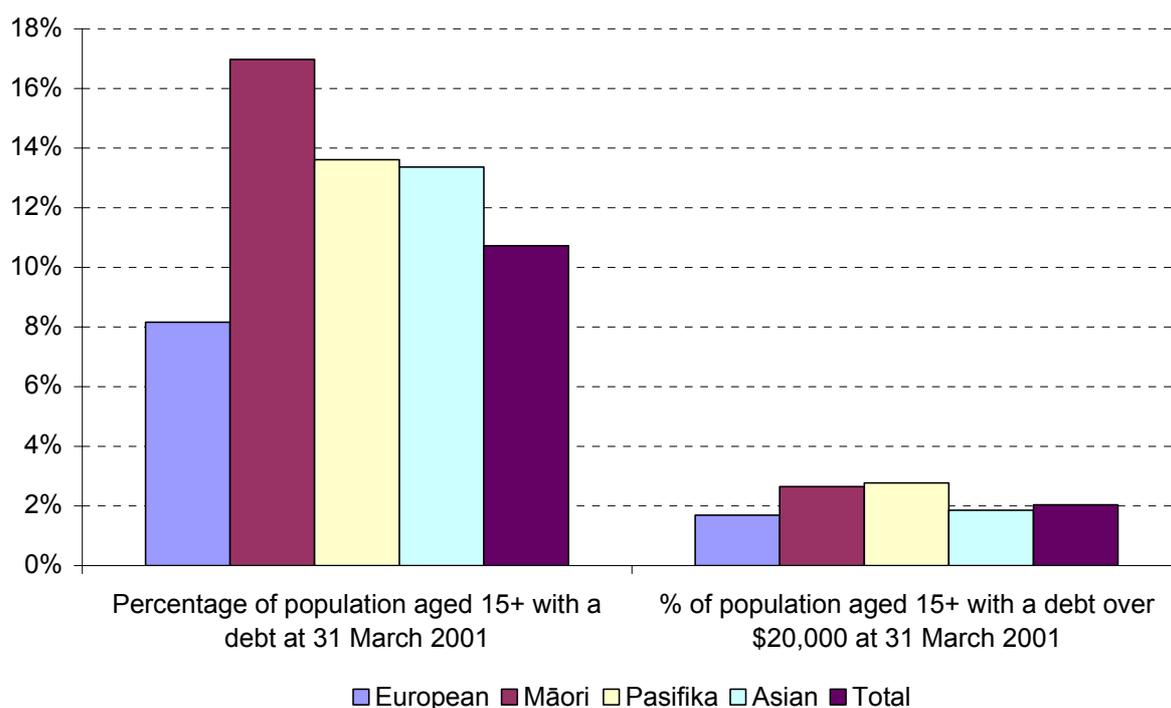
1. 'A' represents the reported number of people with debt in each ethnic group and, therefore, excludes people with 'unknown' ethnic groups.
2. 'B' estimates the true number of people in each ethnic group, by redistributing those with an 'unknown' ethnic group according to the distribution of people in known ethnic groups.
3. Ethnic group is based on the single prioritised method of reporting.
4. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources.
5. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand

Māori had the highest percentage of the population with a student loan debt. An estimated 17 percent of Māori aged 15 and over had a student loan debt at 31 March 2001, compared with 11 percent for all ethnic groups. This, in part, reflects higher participation rates in tertiary education. Around 18 percent of Māori aged 15 and over were enrolled in some form of tertiary education during 2001, the highest of any ethnic group.

Up to 1999, Māori participated in tertiary education at a lower rate than non-Māori, and much of the growth in Māori participation occurred in wānanga from 2001. Borrowing by students enrolled in wānanga is low because many courses in the wānanga have zero fees, thereby reducing the borrowing entitlement of students. Thus, the high incidence of student loan debt in the Māori population is also partly due to higher borrowing uptake rates. In 2000, for example, an estimated 42 percent of all Māori students borrowed. This compared with 39 percent for European students, 57 percent for Pasifika and 44 percent for Asian students²⁰. Māori also had the highest proportion of the population with a debt over \$20,000 (an estimated 2.7 percent compared with 2.0 percent for the population as a whole).

Pasifika peoples were the only group where the percentage of people aged 15 and over with a student loan debt at 31 March 2001 was higher than the percentage of the same population participating in tertiary education (13.6 percent compared with 12.2 percent). Pasifika also have the highest proportion of the population with a debt over \$20,000 (an estimated 2.8 percent of all Pasifika people aged 15 and over). This, in part, reflects higher uptake rates, as an estimated 57 percent of all Pasifika students borrowed from the scheme in 2000, compared 39 percent for European students, 42 percent for Māori and 44 percent for Asian students. It also partly reflects the increased representation of Pasifika students at private providers, where fees are generally higher. Another factor is differences in repayment time after study has been completed. Progress to repayment is lower for Pasifika than for other groups (see chapter 5).

Figure 3.21: Percentage of the population aged 15 and over with a student loan debt at 31 March 2001 by ethnic group



²⁰ These percentages are based on all part-time and full-time domestic students, whether eligible to borrow or not.

Notes:

1. Caution is needed in interpreting results. Around 29 percent of the people with a debt had an 'unknown' ethnicity. These are not shown separately, but are included in the 'Total'. The column 'percentage of people with debt at 31 March 2001' is based just on those with a specified ethnic group.
2. Ethnic group is based on the single prioritised method of reporting.
3. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand
4. Population rates have been estimated using 30 June resident population estimates. Source: Statistics New Zealand.

Figure 3.22: Median and mean student loan debt by ethnic group 31 March 1998-2001

| Ethnic group | 1998 | 1999 | 2000 | 2001 | % of all people with debt at 31 March 2001 | % change 1998-2001 |
|---------------|----------|----------|----------|----------|--|--------------------|
| <i>Median</i> | | | | | | |
| European | \$9,710 | \$10,510 | \$10,490 | \$10,080 | 61.3% | 3.8% |
| Māori | \$7,730 | \$8,500 | \$8,060 | \$8,200 | 19.5% | 6.1% |
| Pasifika | \$9,240 | \$10,340 | \$9,740 | \$9,850 | 6.8% | 6.6% |
| Asian | \$5,680 | \$6,940 | \$8,090 | \$8,470 | 8.8% | 49.1% |
| Other | \$7,850 | \$8,970 | \$9,550 | \$9,630 | 3.6% | 22.7% |
| Total | \$7,220 | \$8,070 | \$8,250 | \$8,350 | 100.0% | 15.7% |
| <i>Mean</i> | | | | | | |
| European | \$12,510 | \$14,000 | \$14,510 | \$14,330 | 61.3% | 14.5% |
| Māori | \$10,410 | \$11,690 | \$11,890 | \$12,170 | 19.5% | 16.9% |
| Pasifika | \$12,310 | \$13,990 | \$14,170 | \$14,470 | 6.8% | 17.5% |
| Asian | \$8,800 | \$10,340 | \$11,650 | \$11,990 | 8.8% | 36.3% |
| Other | \$10,970 | \$12,530 | \$13,640 | \$13,930 | 3.6% | 27.0% |
| Total | \$9,980 | \$11,250 | \$11,900 | \$12,170 | 100.0% | 21.9% |

Notes:

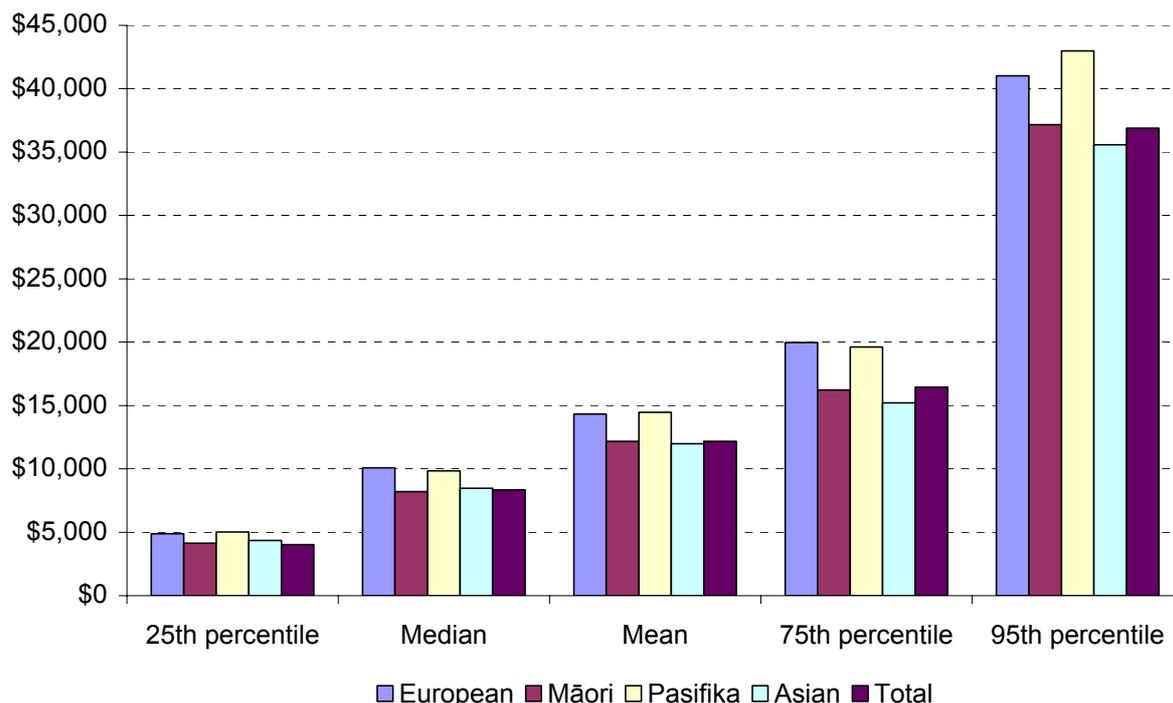
1. Caution is needed in interpreting results. Around 29 percent of the people with a debt had an 'unknown' ethnicity. These are not shown separately, but are included in the 'Total'. The column 'percentage of people with debt at 31 March 2001' is based just on those with a specified ethnic group.
2. Ethnic group is based on the single prioritised method of reporting.
3. Figures may not necessarily correspond to official published sources. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

European students had the highest level of debt, 21 percent higher than the median for all groups. Māori had the lowest, with a median debt around 2 percent (or \$200) lower than the median for all groups. These differences largely reflect the relative proportions of these two groups studying in longer, higher-level qualifications which attract higher fees.

at 31 March 2001, Pasifika people had the highest average debt, and second highest median debt. This may reflect a number of factors, including longer completion times for Pasifika students, and higher proportions of Pasifika students studying in private providers, which on average charge higher fees than do public providers. It may also indicate higher uptake rates from students in this group, and slower repayment (see chapter 5).

Figure 3.23: Summary of student loan debt at 31 March 2001 by ethnic group



Notes:

1. Caution is needed in interpreting results. Around 29 percent of the people with a debt had an unknown ethnicity. These students are not shown separately, but are included in the total.
2. Ethnic group is based on the single prioritised method of reporting.
3. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand

Median debt has been increasing for all groups except for Europeans, which fell slightly between 2000 and 2001. Asian students experienced the fastest growth in median debt over the four years (almost 50 percent), albeit from a smaller base than other groups. The European, Māori and Pasifika median debt balances increased by 4 percent, 6 percent and 7 percent, respectively, over this time. The differences in median debt between each group were subsequently much less in 2001 than they were in 1998.

Figure 3.24: Median student loan debt by ethnic group 31 March 1998-2001

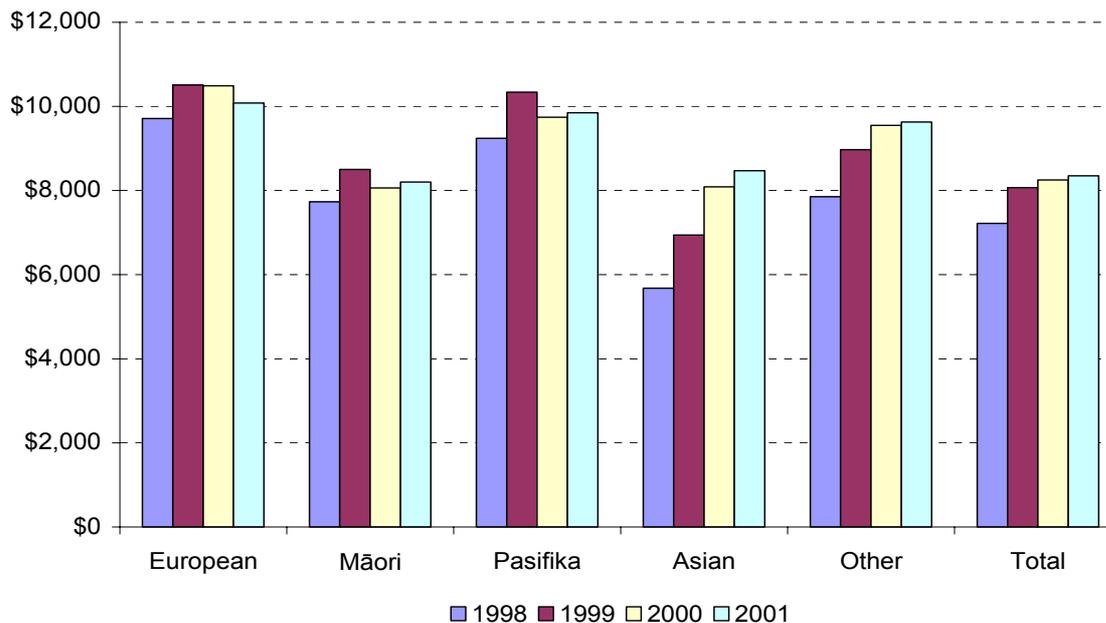
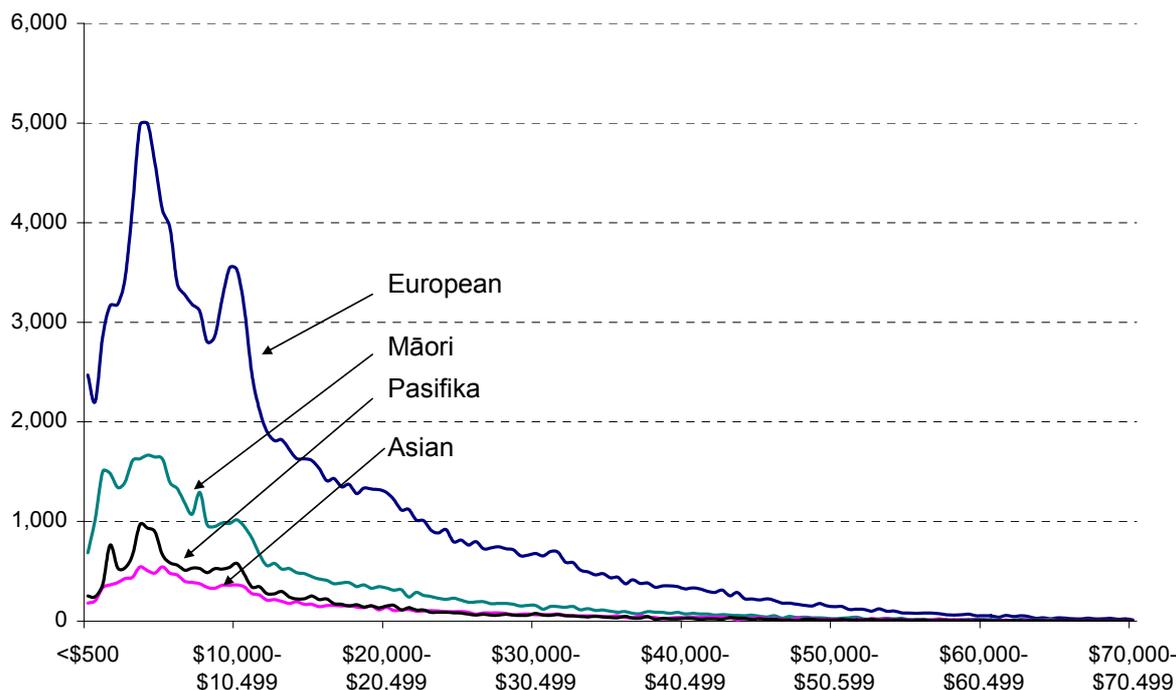


Figure 3.25: Number of people with student loan debt at 31 March 2001 by debt band and ethnic group



Notes:

1. Caution is needed in interpreting results. Around 29 percent of the people with a debt had an unknown ethnicity.
2. Ethnic group is based on the single prioritised method of reporting.
3. Figure 3.25 excludes people with a debt over \$70,500 at 31 March 2001. This comprises around 700 people, or 0.2 percent of all people with debt.

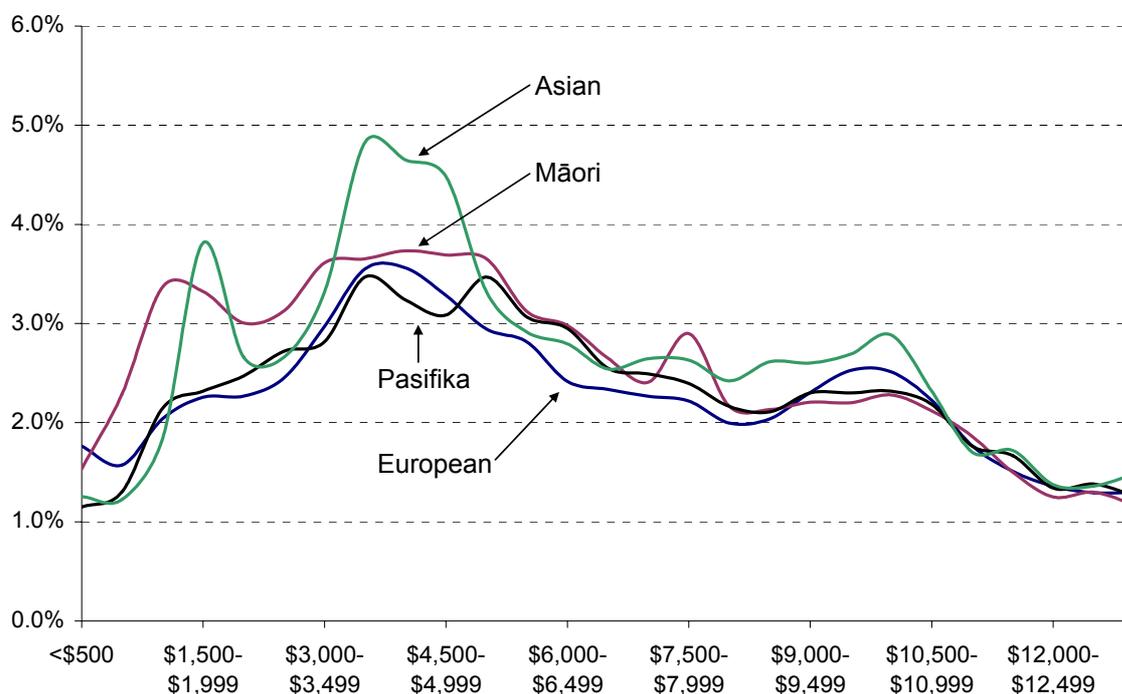
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Over the four years, the distribution of debt for the European group did not change a great deal. There was a peak around \$18,500 in 1998 that in the other years was smaller and at a slightly higher dollar amount. In the Māori debt distribution, there were also only small changes over time. In 1998 and 1999, the peak around \$10,000 was more significant than in

the other two years, in 2000 there was a strong peak at \$1,500 that was not evident in the other years, and in 2001 there was a peak at \$7,500 that did not occur in the other years.

The main differences in Pasifika debt over the four years were large peaks at \$10,500 in 1999 and at \$19,000 in 1998 that did not occur in any of the other years. There were some minor differences in where the peaks occurred between \$2,000 and \$7,000, but in all four years the proportion of debts within these bounds was similar (29.4 percent in 2000 to 32.5 percent in 1998). The median loan balance held by Asian students rose strongly between 1998 and 2001, with the strongest growth in the first two years. There was a large difference between 1998 and the following years at the low end of balances. This median loan balance increased over 20 percent between 1998 and 1999, but then by only 7 percent and 8 percent in the next two years.

Figure 3.26: Percentage distribution of student loan debt by ethnic group at 31 March 2001 for people with a debt below \$13,000



Notes:

1. Caution is needed in interpreting results. Around 29 percent of the people with a debt at 31 March 2001 had an unknown ethnicity.
2. Ethnic group is based on the single prioritised method of reporting.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 3.26 shows the higher proportions of Māori in virtually all debt ranges below \$8,500, with proportionately fewer Pasifika debt holders with debts under \$6,000. The highest proportion of students in the \$1,000, \$3,500 and \$10,000 peaks were of Asian ethnicity, as were the lowest proportion of students in the bands from \$17,000 to \$60,000.

As discussed above, a significant percentage (29 percent) of people with debt at 31 March 2001 had an ‘unknown’ ethnic group in the integrated student loan data. In terms of analysing the proportions of the general population that have a debt for each ethnic group, the ‘unknowns’ act to significantly under-estimate the true population rate.

Student loan debt by disability status

People with a disability, on average, had a lower student loan debt than those with no disability. The median debt for people with a disability was 6 percent lower than for people without a disability, while the mean debt was 9 percent lower for people with a disability. This, in part, reflects the fact that there are proportionately more students with a disability studying shorter, lower-level qualifications.

Of the people with a student loan debt at 31 March 2001, 4.4 percent identified as having a disability. This compares with 4.1 percent for all domestic students in 2000.

Figure 3.27: Student loan debt by disability status at 31 March 2001

| Disability status | 25 th percentile | Median | Mean | 75 th percentile | 95 th percentile | % of all people with debt in 2001 |
|--------------------------|-----------------------------|---------|----------|-----------------------------|-----------------------------|-----------------------------------|
| Disability identified | \$4,710 | \$8,830 | \$13,040 | \$18,990 | \$39,150 | 4.4% |
| No disability identified | \$4,240 | \$9,650 | \$13,840 | \$17,740 | \$40,660 | 95.6% |
| Total | \$4,020 | \$8,350 | \$12,170 | \$16,440 | \$36,890 | 100.0% |

Notes:

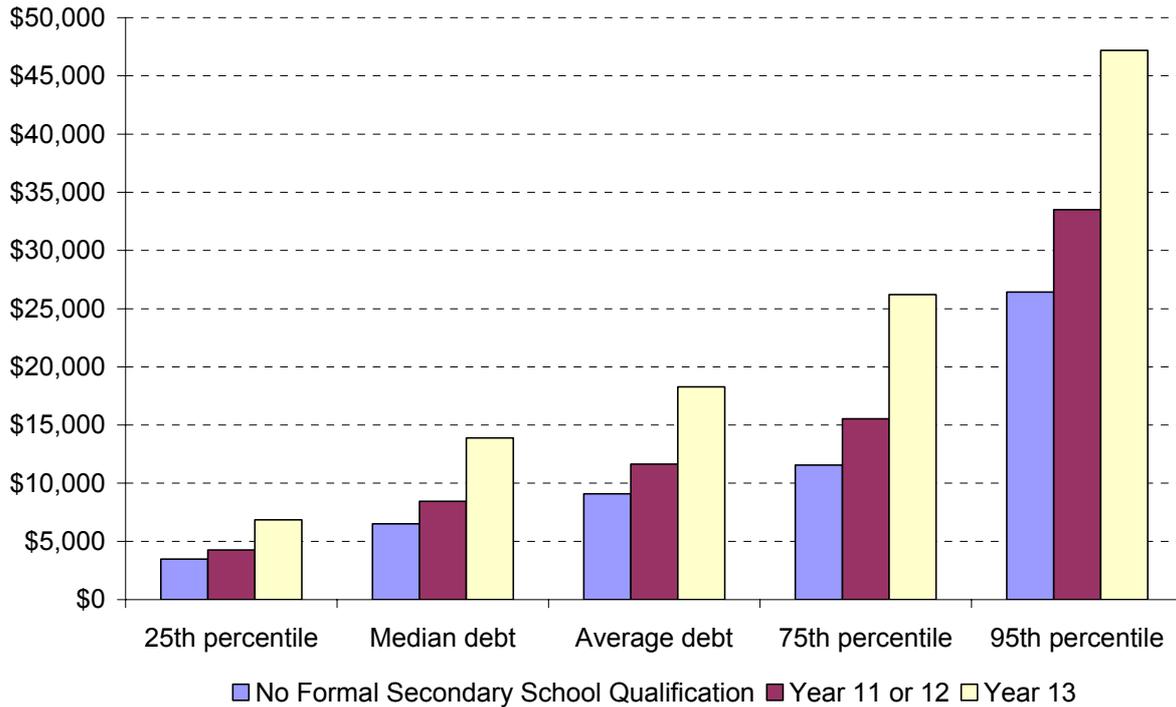
1. Care is needed in interpreting these figures. Disability data was first collected in 1998. Hence there is a large number (38 percent) of people with debt whose disability status was unknown. In the table above, the 'Total' row includes people whose disability status was unknown. The percentage of people with debt by disability status is based on known responses only.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

Student loan debt by highest school qualification

In general, the level of debt rises with the level of highest qualification obtained at school. People who had obtained year 13 school qualifications had a debt around 60 percent higher than those with year 11 or 12 school qualifications, and around 100 percent higher than those with no school qualification. Those who had left school with no formal qualifications had a median debt nearly 22 percent lower than the overall median. This reflects in large part, the relationship between academic ability at school and level of study at tertiary, and the higher costs of longer, higher-level qualifications.

People who had year 13 school qualifications were also more likely to have a student loan debt than people with lower school qualifications. Nearly 40 percent of people with debt had year 13 level school qualifications. Around 34 percent of students enrolled in 2000 had year 13 qualifications. By contrast, people with no formal school qualifications made up 16.5 percent of students in 2000, compared with 8.8 percent of people with student loan debt at 31 March 2001.

Figure 3.28: Student loan debt by highest secondary qualification at 31 March 2001



| Highest school qualification | 25 th percentile | Median | Mean | 75 th percentile | 95 th percentile | % of all people with debt in 2001 |
|--|-----------------------------|----------|----------|-----------------------------|-----------------------------|-----------------------------------|
| No formal secondary school qualification | \$3,480 | \$6,520 | \$9,090 | \$11,550 | \$26,420 | 8.8% |
| Year 11 or 12 | \$4,270 | \$8,440 | \$11,650 | \$15,530 | \$33,490 | 25.0% |
| Year 13 | \$6,850 | \$13,890 | \$18,270 | \$26,200 | \$47,190 | 27.1% |
| Other qualification (including overseas) | \$2,840 | \$6,220 | \$8,970 | \$11,840 | \$27,710 | 39.1% |
| Total | \$4,020 | \$8,350 | \$12,170 | \$16,440 | \$36,890 | 100.0% |

Notes:

- Care is needed in interpreting these figures. There is a large number (over a third) of people with debt whose highest school qualification was unknown. In the table above, the 'Total' row includes people whose highest school qualification was unknown. The percent of people with debt by highest school qualification is based on known responses only.
- Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

Student loan debt by last school decile

In general, the level of student loan debt rose in relation the decile²¹ rating of the last secondary school attended. Decile has been used in the past to provide a proxy for socio-economic status, particularly for secondary school students. However, its applicability to post-secondary school study is significantly reduced as the period since leaving school lengthens.

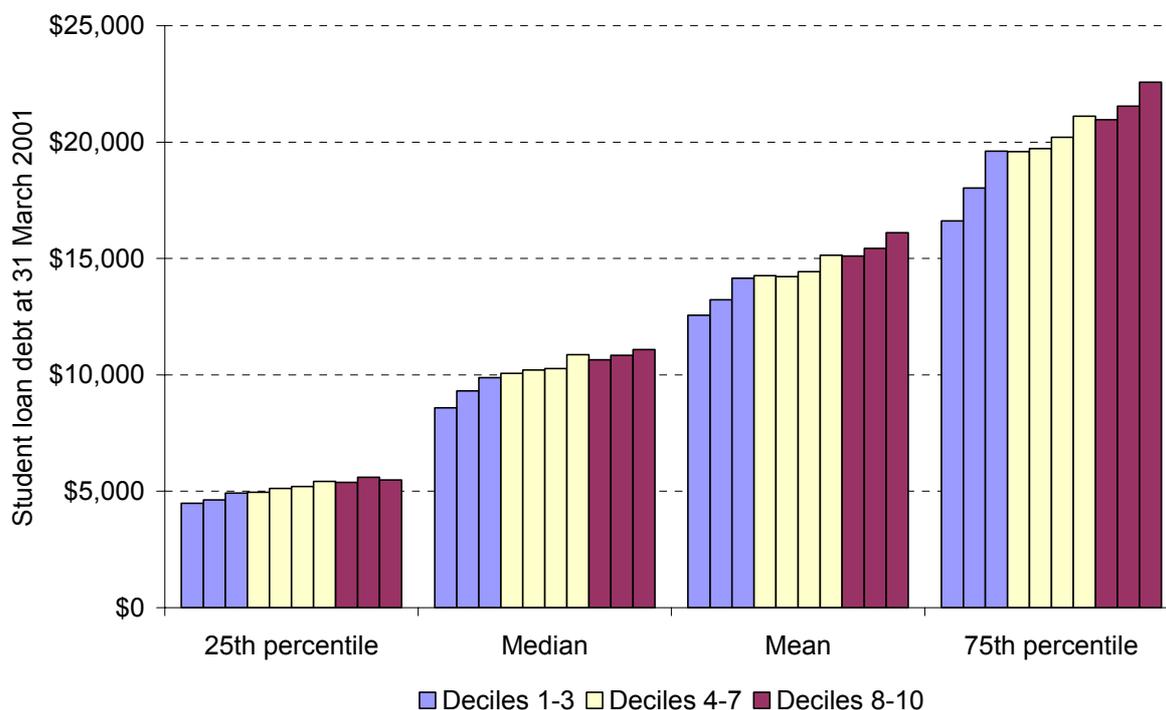
The school decile rating field is also subject to a very high level of non-response (46 percent in 2001), which further reduces its utility. There is also a large bias in the non-response group towards lower debt. For these reasons, absolute statistics by decile are not generally reliable and are, therefore, not presented here. Nevertheless, decile remains one of the few proxies of

²¹ A school's decile indicates the extent to which a school draws its students from low socio-economic communities. Decile 1 schools are the 10 percent of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10 percent of schools with the lowest proportion of these students. A school's decile does not indicate the overall socio-economic mix of the school.

socio-economic status, and so relative trends by decile are presented below, in order to provide some indicative information of how the student loan scheme impacts differently on students from areas with different socio-economic characteristics.

In general, median debt rose with decile of last school attended, on average \$250 dollars with each higher decile. The median debt for the lowest decile was around 23 percent less than for the highest decile. The gap increases at higher debt bands, where debt rises by \$600 for each decile at the 75th percentile, and nearly \$700 at the 95th percentile. This may suggest greater aversion to borrowing by students from lower decile schools. As there are proportionately more students from lower deciles studying in shorter, lower-level qualifications²², this needs further investigation.

Figure 3.29: Indicative summary statistics on student loan debt at 31 March 2001 by decile of last secondary school attended



Notes:

1. Dollars are indicative only and represent relative differences only. Care is needed in interpreting these figures. There is a large number (46 percent) of people with debt whose decile was unknown.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand

Student loan debt on leaving study

This section provides information on loan balances at the end of study. It looks at the cohort of those students who last studied and borrowed in 1997. Therefore, the actual loan balances are somewhat lower than balances of those leaving study in subsequent years. Relativities between levels and fields of study are of interest, however. This is particularly so, when leaving debt is considered alongside other post-study outcomes for this cohort such as income (chapter 4), debt repayment (chapter 5) and going overseas (chapter 6).

²² Ministry of Education, 2004b, *New Zealand Schools Ngā Kura o Aotearoa 2003*, page 24.

Figure 3.30: Student loan debt on leaving study by qualification level for those last borrowed and studied in 1997

| Highest qualification level enrolled in during 1997 | Mean debt at 31 March 1998 | | Median debt at 31 March 1998 | |
|---|----------------------------|-----------------|------------------------------|-----------------|
| | Leaving debt | Graduating debt | Leaving debt | Graduating debt |
| Certificate | \$6,720 | \$6,950 | \$5,330 | \$5,530 |
| Diploma | \$12,050 | \$14,540 | \$9,960 | \$12,840 |
| Degree | \$16,580 | \$19,520 | \$14,110 | \$17,110 |
| Postgraduate Cert/Dip | \$15,870 | \$14,310 | \$12,540 | \$10,320 |
| Masters/Honours | \$18,670 | \$19,140 | \$16,710 | \$16,890 |
| Total | \$11,920 | \$14,540 | \$8,750 | \$11,080 |

Notes:

1. Leaving debt includes all students who last studied and borrowed in 1997. Graduating debt only includes those who last studied and borrowed and successfully completed a qualification in 1997.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data has been rounded to the nearest \$10.
3. Highest qualification level excludes those enrolled in more than one qualification either at the same level or a different level.
4. Information for doctorates is not available.

As might be expected, leaving debt rises with qualification level, and is largely associated with the duration of study. Students at bachelors level left study with over three times the level of debt of students who took certificate level study. Similarly, a diploma level student left with over twice the debt of a certificate level student, and three-quarters the leaving debt of a bachelors student. Students at postgraduate level had lower leaving debts than those at graduate level. This may reflect the fact that many students at these levels were borrowing in the early years of the Scheme, when fees were lower. Also, many postgraduates, and postgraduate certificate and diploma students in particular, are more likely to combine work with study than those studying at undergraduate levels.

Overall, those who completed a qualification left with 27 percent higher median student loan debt than those who didn't. This is in large part due to the longer length of study undertaken by those who completed. A student graduating with a bachelors degree in 1997 left with a median debt of \$17,110, compared with \$14,110 for all those who last studied and borrowed at bachelors level in 1997. At certificate level, there was almost no difference in leaving debt for those who studied, and those who completed, and at a postgraduate certificate/diploma level, those completing their qualification left with less debt than all those who last studied and borrowed at this level in 1997. Study for many students at this level is often linked with vocation, and employer assistance for fees is often linked to successful completion.

Figure 3.31: Student loan debt on leaving study by field of study for those last borrowed and studied in 1997

| Field of Study in 1997 | Mean debt at 31 March 1998 | | Median debt at 31 March 1998 | |
|--|----------------------------|-----------------|------------------------------|-----------------|
| | Leaving debt | Graduating debt | Leaving debt | Graduating debt |
| Architecture and Building | \$16,590 | \$21,010 | \$14,230 | \$19,380 |
| Natural and Physical Sciences | \$15,680 | \$18,780 | \$12,980 | \$17,580 |
| Health | \$18,590 | \$21,160 | \$14,390 | \$16,780 |
| Education | \$14,810 | \$16,400 | \$12,570 | \$14,710 |
| Management and Commerce | \$11,900 | \$14,420 | \$8,730 | \$11,320 |
| Engineering and Related Technologies | \$12,270 | \$14,660 | \$9,170 | \$10,980 |
| Society and Culture | \$13,280 | \$14,140 | \$9,980 | \$10,690 |
| Creative Arts | \$9,950 | \$11,800 | \$6,650 | \$8,400 |
| Food, Hospitality and Personal Services | \$8,470 | \$8,790 | \$6,810 | \$7,320 |
| Agriculture, Environmental and Related Studies | \$9,860 | \$11,600 | \$6,420 | \$6,980 |
| Information Technology | \$9,130 | \$9,730 | \$6,180 | \$6,390 |
| Mixed Field Programmes | \$8,550 | \$8,560 | \$4,340 | \$4,000 |
| Total | \$11,920 | \$14,540 | \$8,750 | \$11,080 |

Notes:

1. Leaving debt includes all students who last studied and borrowed in 1997. Graduating debt only includes those who last studied and borrowed and successfully completed a qualification in 1997.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data has been rounded to the nearest \$10.

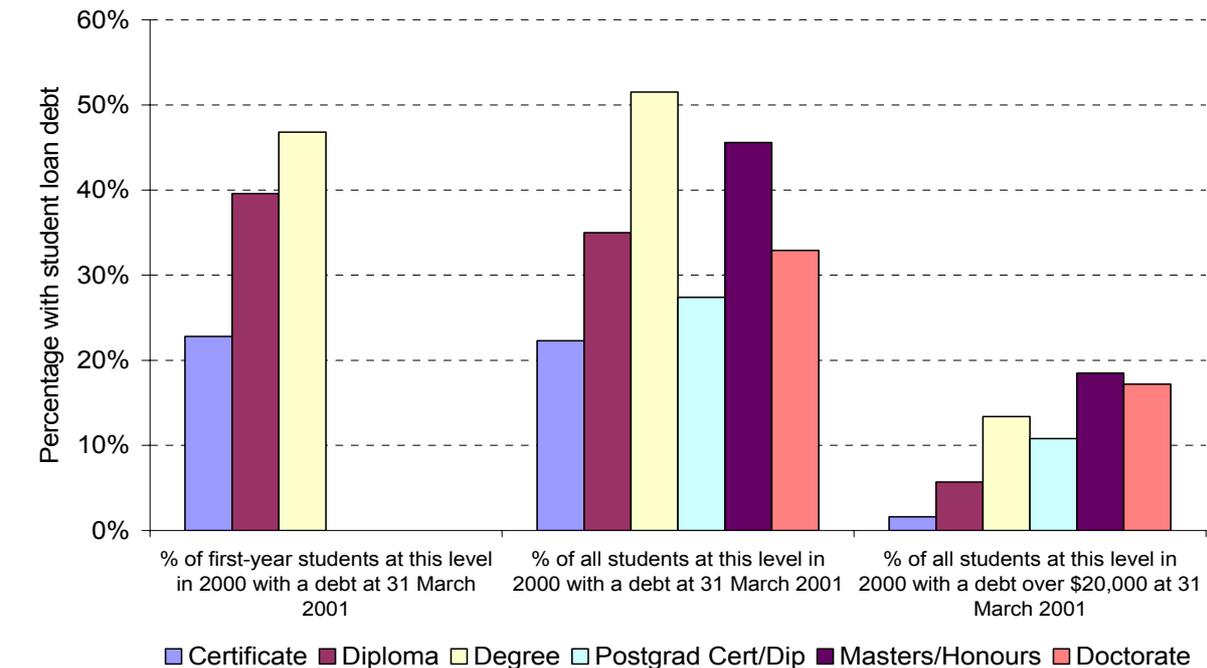
Students in architecture and building, natural and physical sciences, health, and education have the highest leaving debts (between 30 percent and 70 percent higher than the overall rate for the sector), influenced by the fact that a high proportion of the formal tertiary education in those fields is at the degree and postgraduate levels. These fields of study were also associated with higher levels of post-study income (see chapter 4) and faster rates of repayment (see chapter 6).

Student loan debt by qualification level

Not surprisingly, the proportion of students with a debt rises with the level studied, reflecting both the longer time of study and the fees required for study at higher levels. Around 52 percent of all degree students and 47 percent of first-year degree students in 2000 had a debt at 31 March 2001. The respective figures for certificate-level study were 23 percent and 22 percent.

The percentage of postgraduate students (excluding those studying at honours or masters level) with a debt was lower than for those studying at undergraduate level. This, in part, reflects the fact that a higher proportion of study at these levels is undertaken by older students who are combining work with study, and have, therefore, been able to make some progress towards repayment, or avoid borrowing at all. Study at honours or masters level is more likely to follow directly from undergraduate study, and hence students at these levels have had less opportunity to make repayments.

Figure 3.32: Percentage of students in 2000 with a student loan debt at 31 March 2001 by highest qualification level studied



| Highest qualification level | Number of first-year students in 2000 with a debt at 31 March 2001 | % of first-year students at this level in 2000 with a debt at 31 March 2001 | All students in 2000 with a debt at 31 March 2001 | % of all students at this level in 2000 with a debt at 31 March 2001 | % of all students at this level in 2000 with a debt over \$20,000 at 31 March 2001 |
|-----------------------------|--|---|---|--|--|
| Certificate | 12,459 | 22.8% | 29,634 | 22.3% | 1.6% |
| Diploma | 3,999 | 39.6% | 18,879 | 35.0% | 5.7% |
| Degree | 10,488 | 46.8% | 64,740 | 51.5% | 13.4% |
| Postgraduate Cert/Dip | - | - | 3,282 | 27.4% | 10.8% |
| Masters/Honours | - | - | 6,720 | 45.6% | 18.5% |
| Doctorate | - | - | 1,206 | 32.9% | 17.2% |
| Total | 27,255 | 30.8% | 124,458 | 36.3% | 7.8% |

Notes:

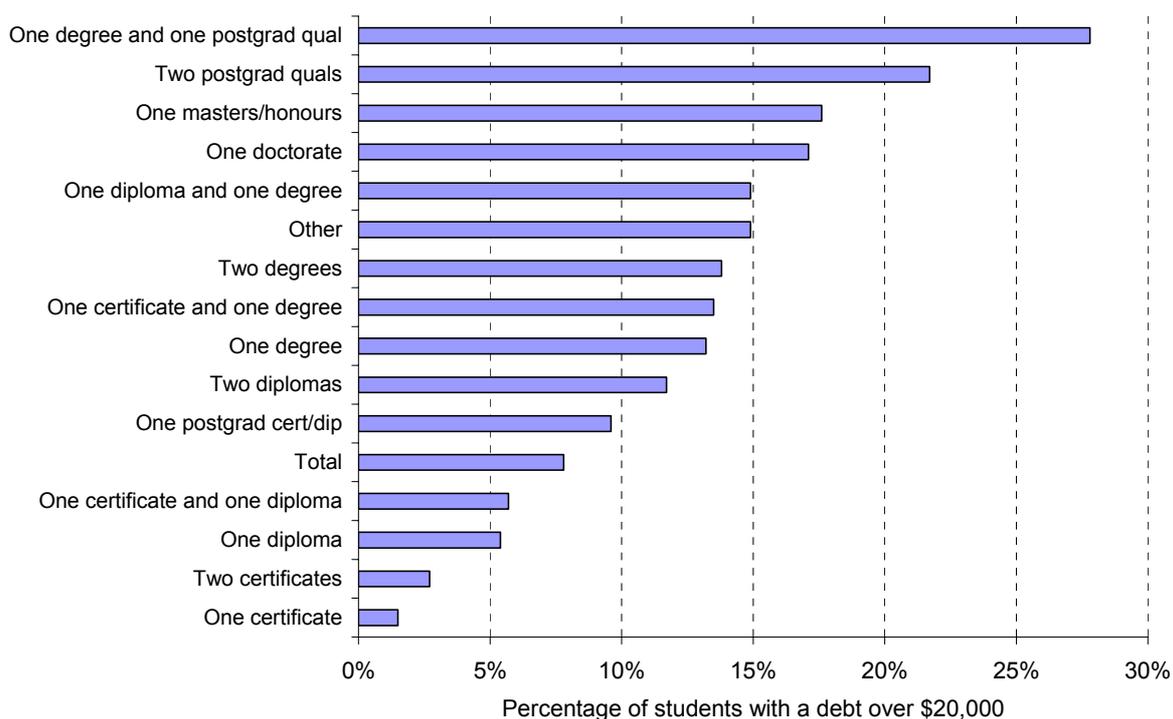
1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts have been randomly rounded to base 3.
2. Data on students enrolled in 2000 is from the Ministry of Education.
3. Total first-year students with a debt also includes 309 students starting at postgraduate level.

Not surprisingly, students enrolled in multiple qualifications were more likely to have a student loan debt than students enrolled in a single qualification of the same level, and also were more likely to have a debt over \$20,000. Students enrolled in two postgraduate qualifications (albeit a small group) were the most likely to have a debt, and the second most likely to have a debt over \$20,000. The percentage of students with a student loan debt over \$20,000 is also closely associated with both the level and number of qualifications studied. Students enrolled in one degree and one postgraduate qualification were the most likely to have a debt over \$20,000. This is shown further in figure 3.33.

Figure 3.33: Percentage of students in 2000 with a student loan debt at 31 March 2001 by all qualification levels studied

| Qualification level | First-year students in 2000 with a debt at 31 March 2001 | % of first-year students at this level in 2000 with a debt at 31 March 2001 | All students in 2000 with a debt at 31 March 2001 | % of all students at this level in 2000 with a debt at 31 March 2001 | % of all students at this level in 2000 with a debt over \$20,000 at 31 March 2001 |
|--------------------------------------|--|---|---|--|--|
| One certificate only | 11,043 | 21.7% | 25,716 | 21.7% | 1.5% |
| One diploma only | 3,465 | 38.7% | 15,885 | 38.7% | 5.4% |
| One degree only | 8,829 | 45.5% | 56,133 | 45.5% | 13.2% |
| One postgraduate cert/dip only | | | 2,781 | 38.3% | 9.6% |
| One Masters/Honours only | | | 5,865 | 47.5% | 17.6% |
| One doctorate only | | | 1,107 | 56.7% | 17.1% |
| Two certificates | 1,257 | 38.3% | 3,423 | 45.7% | 2.7% |
| Two diplomas | 84 | 47.5% | 1,023 | 50.0% | 11.7% |
| Two degrees | 1,176 | 56.7% | 5,364 | 46.4% | 13.8% |
| Two postgraduate quals | | | 357 | 29.3% | 21.7% |
| One certificate and one diploma | 381 | 45.7% | 1,533 | 21.7% | 5.7% |
| One certificate and one degree | 306 | 50.0% | 1,458 | 38.7% | 13.5% |
| One diploma and one degree | 96 | 46.4% | 1,089 | 45.5% | 14.9% |
| One degree and one postgraduate qual | | | 744 | 38.3% | 27.8% |
| Other | 621 | 29.3% | 1,980 | 47.5% | 14.9% |
| Total | 27,255 | 30.8% | 124,458 | 56.7% | 7.8% |

Figure 3.34: Students with a debt over \$20,000 at 31 March 2001 as a percentage of all students in 2000 by qualification level



Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts have been randomly rounded to base 3.
2. Data on all students enrolled in 2000 is from the Ministry of Education.

The following section considers the level of qualification studied for a particular subset of people with debt, namely those who completed a qualification in 1997, had a student loan debt at 31 March 1998, and were not enrolled in 1998, 1999 or 2000. This comprises some 11,800 students. The students in this group, however, may have borrowed to study a different qualification before 1997. Information on pre-1997 study is not available from the integrated student loan data.

Of this group, the most common qualifications completed were a degree (41.9 percent) or a certificate (30.1 percent). Around 10 percent were holders of a postgraduate qualification. Around 5 percent of graduates completed more than one qualification.

Figure 3.35: Student loan debt at 31 March 2001 by qualification level studied for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000

| Qualification level | 25 th percentile | Median | Mean | 75 th percentile | 95 th percentile | % of all people with debt in 2001 |
|---------------------------------------|-----------------------------|----------|----------|-----------------------------|-----------------------------|-----------------------------------|
| One certificate only | \$1,640 | \$4,850 | \$6,110 | \$8,810 | \$17,080 | 30.1% |
| One diploma only | \$3,310 | \$10,790 | \$12,470 | \$19,110 | \$33,470 | 13.5% |
| One degree only | \$1,620 | \$13,220 | \$15,770 | \$25,150 | \$42,610 | 41.9% |
| One postgraduate cert/dip only | \$0 | \$4,560 | \$10,370 | \$17,320 | \$39,650 | 3.6% |
| One masters/honours only | \$0 | \$10,540 | \$14,360 | \$24,030 | \$42,860 | 5.2% |
| Two certificates | \$400 | \$4,880 | \$5,020 | \$7,140 | \$14,620 | 1.3% |
| Two degrees | \$0 | \$8,120 | \$13,820 | \$25,120 | \$40,620 | 1.8% |
| Degree and certificate | | \$5,670 | \$9,650 | | | 0.5% |
| Degree and postgraduate qualification | | \$16,340 | \$17,190 | | | 0.5% |
| Other | \$0 | \$5,440 | \$10,960 | \$19,540 | \$38,390 | 1.6% |
| Total | \$1,400 | \$7,840 | \$11,870 | \$18,180 | \$37,770 | 100.0% |

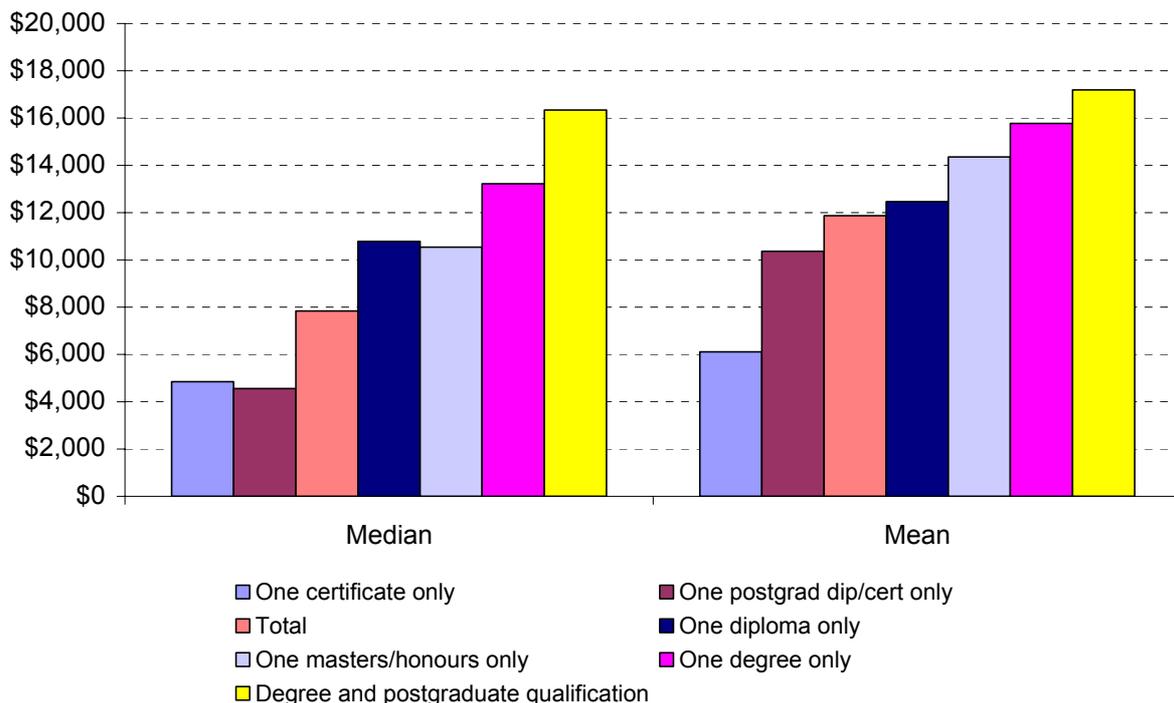
Notes

1. Cells with too few people have been excluded for confidentiality reasons.
2. Data is rounded to the nearest \$10.

Source: Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand.

Not unexpectedly, the level of student loan debt rises with the length of study and level of qualification taken. The group with the largest median debt on graduation was the group that completed a degree and a postgraduate qualification, followed by a single degree and a single honours or masters. These groups were also three of the four highest median debts three years after graduation (those who completed a single diploma ranked third).

Figure 3.36: Mean and median student loan debt at 31 March 2001 by qualification level studied for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 3.37: Median student loan debt at 31 March 1998-2001 by qualification level studied for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000

| Qualification level | 1998 | 1999 | 2000 | 2001 | % change 1998 to 2001 |
|---------------------------------------|----------|----------|----------|----------|-----------------------|
| One certificate only | \$5,530 | \$5,470 | \$5,230 | \$4,850 | -12.3% |
| One diploma only | \$12,840 | \$12,560 | \$11,930 | \$10,790 | -16.0% |
| One degree only | \$17,110 | \$16,320 | \$14,950 | \$13,220 | -22.7% |
| One postgraduate cert/dip only | \$10,320 | \$8,900 | \$6,960 | \$4,560 | -55.8% |
| One masters/honours only | \$16,890 | \$15,810 | \$13,760 | \$10,540 | -37.6% |
| Two certificates | \$5,430 | \$5,160 | \$5,070 | \$4,880 | -10.1% |
| Two degrees | \$15,300 | \$13,070 | \$11,090 | \$8,120 | -46.9% |
| Degree and certificate | \$8,740 | \$8,900 | \$6,710 | \$5,670 | -35.1% |
| Degree and postgraduate qualification | \$22,180 | \$21,390 | \$17,620 | \$16,340 | -26.3% |
| Other | \$9,530 | \$8,430 | \$7,030 | \$5,440 | -42.9% |
| Total | \$11,080 | \$10,380 | \$9,260 | \$7,840 | -29.2% |

Note: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

Three years after graduation, the groups whose median debt balance was the smallest percentage of their median graduation debt were those who completed a single postgraduate diploma or certificate (56 percent less), those who completed two degrees (47 percent), and those who completed a single masters or honours (38 percent). The percentage reduction in median debt provides an indicator of which qualifications fare better in terms of repayment. For more detailed information on repayment by qualification level see chapter 5.

Student loan debt by field of study

Students studying science, architecture, food and hospitality, and society and culture are more likely than other students to have a debt. Between 47 and 55 percent of students studying these fields in 2000 had a debt at 31 March 2001.

Students in these same fields, with the exception of food and hospitality, were also the most likely to have a student loan debt over \$20,000. Students studying health were also more likely to have a debt over \$20,000. Between 11 and 14 percent of students studying in these fields in 2000 had a debt over \$20,000 at 31 March 2001.

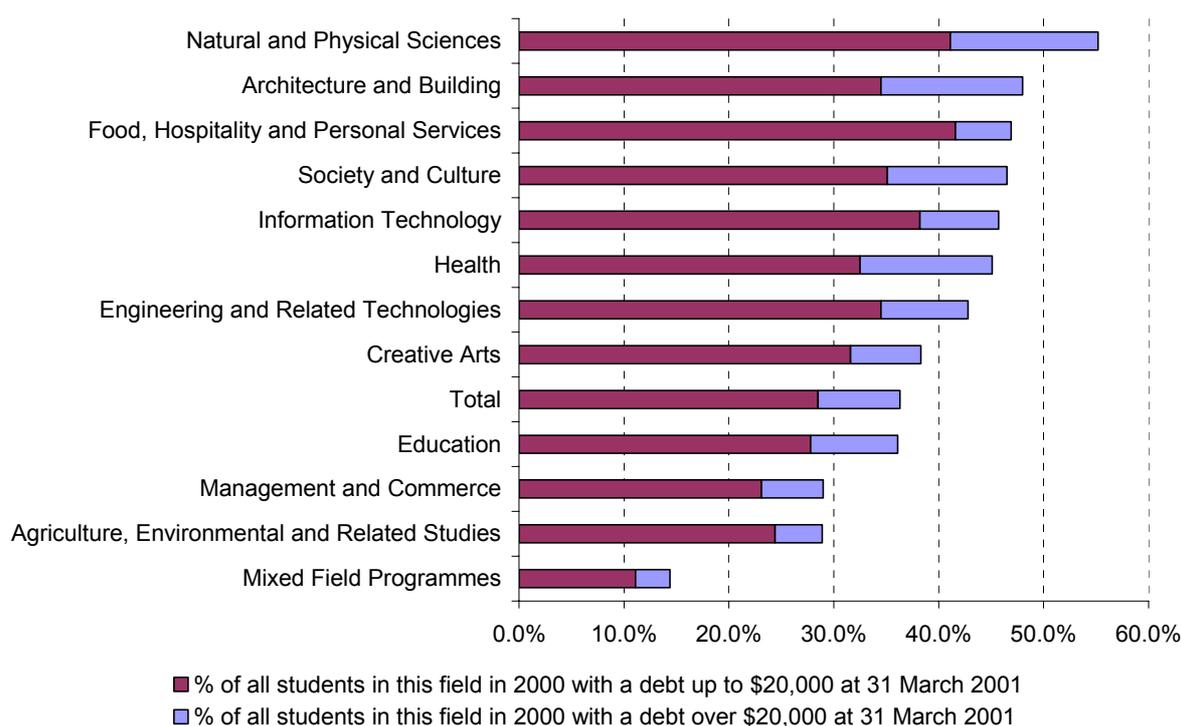
Figure 3.38: Number and percentage of students in 2000 with a student loan debt at 31 March 2001 by field of study

| Field of study | Number of first-year students in 2000 with a debt at 31 March 2001 | % of first-year students in this field in 2000 with a debt at 31 March 2001 | All students in 2000 with a debt at 31 March 2001 | % of all students in this field in 2000 with a debt at 31 March 2001 | % of all students in this field in 2000 with a debt over \$20,000 at 31 March 2001 |
|--|--|---|---|--|--|
| Mixed Field Programmes | 1,494 | 6.6% | 5,406 | 14.4% | 3.3% |
| Agriculture, Environmental and Related Studies | 879 | 26.7% | 3,084 | 28.9% | 4.5% |
| Management and Commerce | 4,479 | 30.0% | 24,075 | 29.0% | 5.9% |
| Education | 1,491 | 33.2% | 11,793 | 36.1% | 8.3% |
| Creative Arts | 3,978 | 39.5% | 13,221 | 38.3% | 6.7% |
| Engineering and Related Technologies | 1,491 | 40.0% | 6,177 | 42.8% | 8.3% |
| Health | 1,080 | 41.9% | 8,853 | 45.1% | 12.6% |
| Information Technology | 1,773 | 42.5% | 7,104 | 45.7% | 7.5% |
| Society and Culture | 6,213 | 43.2% | 31,311 | 46.5% | 11.4% |
| Food, Hospitality and Personal Services | 3,861 | 48.7% | 9,216 | 46.9% | 5.3% |
| Architecture and Building | 354 | 53.2% | 2,223 | 48.0% | 13.5% |
| Natural and Physical Sciences | 2,286 | 51.7% | 12,057 | 55.2% | 14.1% |
| Total | 27,255 | 30.8% | 124,458 | 36.3% | 7.8% |

Notes:

1. Students are counted in each field of study they were enrolled in. Consequently, the sum may not add to the total number of students.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts have been randomly rounded to base 3.
3. Data on all students enrolled in 2000 is from the Ministry of Education.

Figure 3.39: Percentage of students in 2000 with a student loan debt at 31 March 2001 by field of study



Sources: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Data on students enrolled in 2000 is from the Ministry of Education.

While one of the most likely fields to have a debt, students studying food and hospitality were one of the least likely to have a debt over \$20,000, reflecting the shorter nature of these qualifications, and hence lower total fees.

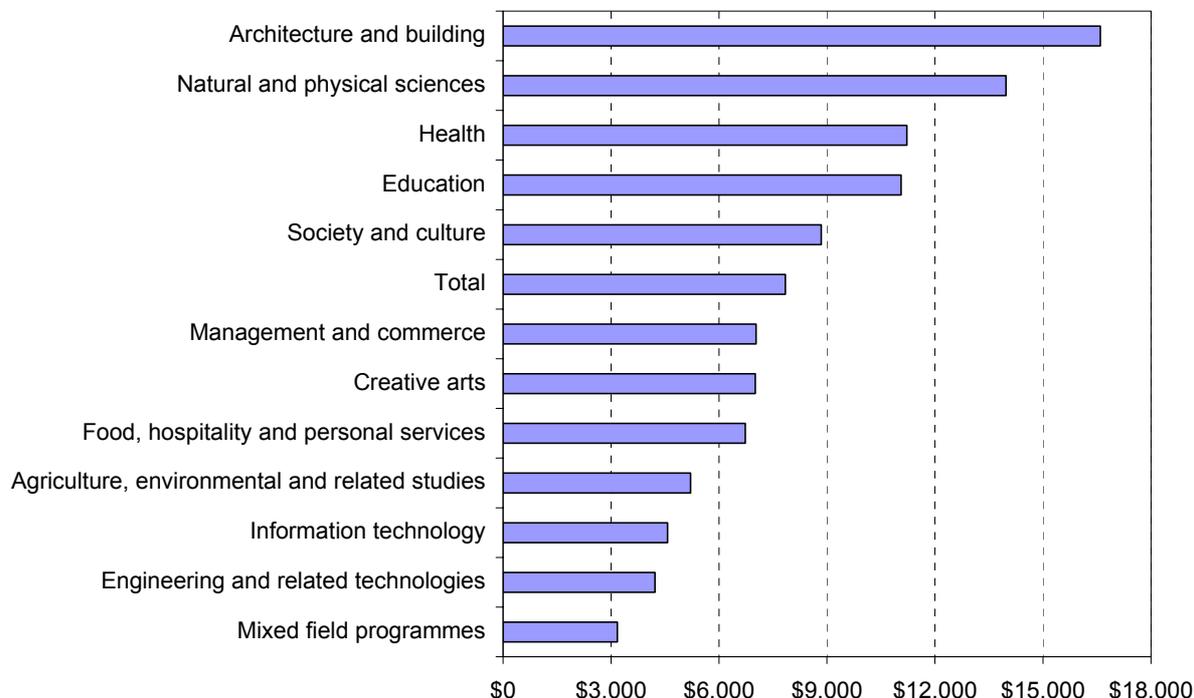
Study in mixed-field programmes, agriculture, and management and commerce had the lowest percentage of enrolled students with a debt, as well as the lowest percentage of people with a debt over \$20,000. Again, this largely reflects the shorter nature of these qualifications.

Figure 3.40: Student loan debt at 31 March 2001 by field of study for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000

| Field of study | 25 th percentile | Median | Mean | 75 th percentile | 95 th percentile | % of all people with debt in 2001 |
|--|-----------------------------|----------|----------|-----------------------------|-----------------------------|-----------------------------------|
| Natural and physical sciences | \$3,300 | \$13,970 | \$15,460 | \$24,040 | \$42,490 | 5.8% |
| Information technology | \$590 | \$4,570 | \$7,350 | \$10,190 | \$27,270 | 2.2% |
| Engineering and related technologies | \$0 | \$4,220 | \$9,850 | \$15,800 | \$37,460 | 3.6% |
| Architecture and building | \$5,700 | \$16,590 | \$18,130 | \$28,940 | \$45,160 | 1.7% |
| Agriculture, environmental and related studies | \$720 | \$5,210 | \$9,090 | \$11,450 | \$37,950 | 5.3% |
| Health | \$0 | \$11,220 | \$15,750 | \$24,230 | \$50,810 | 10.8% |
| Education | \$990 | \$11,060 | \$13,350 | \$21,090 | \$38,100 | 14.5% |
| Management and commerce | \$10 | \$7,030 | \$11,200 | \$17,920 | \$36,580 | 17.0% |
| Society and culture | \$2,140 | \$8,840 | \$12,320 | \$19,050 | \$37,160 | 18.6% |
| Creative arts | \$2,700 | \$7,010 | \$10,740 | \$15,370 | \$33,750 | 12.2% |
| Food, hospitality and personal services | \$2,780 | \$6,730 | \$7,890 | \$10,850 | \$22,370 | 7.9% |
| Mixed field programmes | \$840 | \$3,180 | \$7,220 | \$7,870 | \$30,720 | 2.8% |
| Total | \$1,400 | \$7,840 | \$11,870 | \$18,180 | \$37,770 | 100.0% |

Note: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

Figure 3.41: Median student loan debt at 31 March 2001 by field of study for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

There is a wide gap in the level of student loan debt by field of study. The median debt for architecture and building at \$16,590 was 2.1 times the overall median, and 5.2 times the median of the lowest debt group, those who completed in mixed-field programmes²³. The relative medians reflect both the specialised vocational or professional nature of some qualifications (which have higher fees), as well as the association of some fields of study with longer, higher-level qualifications. For example, over 90 percent of study in the natural and physical sciences is at degree level and above.

²³ Mixed-field programmes include a number of foundation-related programmes, including literacy and numeracy, employment-related skills training, and social and life skills-related training.

Figure 3.42: Median student loan debt at 31 March 1998-2001 by field of study for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000

| Field of study | 1998 | 1999 | 2000 | 2001 | % change 1998 to 2001 |
|---|----------|----------|----------|----------|--------------------------|
| Natural and Physical Sciences | \$17,580 | \$17,090 | \$15,910 | \$13,970 | -20.5% |
| Information Technology | \$6,390 | \$5,630 | \$5,230 | \$4,570 | -28.5% |
| Engineering and Related Technologies | \$10,980 | \$9,160 | \$6,980 | \$4,220 | -61.6% |
| Architecture and Building | \$19,380 | \$19,500 | \$18,410 | \$16,590 | -14.4% |
| Agriculture, Environmental & Related | \$6,980 | \$6,400 | \$5,630 | \$5,210 | -25.4% |
| Health | \$16,780 | \$15,130 | \$13,670 | \$11,220 | -33.1% |
| Education | \$14,710 | \$13,830 | \$12,560 | \$11,060 | -24.8% |
| Management and Commerce | \$11,320 | \$10,490 | \$8,960 | \$7,030 | -37.9% |
| Society and Culture | \$10,690 | \$10,380 | \$9,960 | \$8,840 | -17.3% |
| Creative Arts | \$8,400 | \$7,870 | \$7,270 | \$7,010 | -16.5% |
| Food, Hospitality and Personal Services | \$7,320 | \$7,310 | \$7,050 | \$6,730 | -8.1% |
| Mixed Field Programmes | \$4,000 | \$3,920 | \$3,710 | \$3,180 | -20.5% |
| Total | \$11,080 | \$10,380 | \$9,260 | \$7,840 | -29.2% |

Note: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

Over all fields of study, the median debt at 31 March 2001 was 29 percent less than the median debt three years earlier for the population being studied. The fields where the median debt in 2001 had decreased the most were engineering (38 percent), management and commerce (38 percent) and health (33 percent). Those that had decreased the least were food, hospitality and related services (8 percent), architecture (14 percent) and society and culture, and creative arts (both 17 percent).

For more detailed information on repayment by qualification and field of study see chapter 5.

Student loan debt by sub-sector

Students enrolled at a college of education for their first year of study in 2000 were the most likely to have a student loan debt, almost twice as likely as wānanga students and more than three times as likely as students at a private training establishment (PTE).

Students at universities had the highest percentage of enrolments with a debt over \$20,000, followed by those at colleges of education. Students at a university were 50 percent more likely to have debt than those at a polytechnic, and 80 percent more likely to have a debt than students enrolled with a private provider. Students at universities were over three times more likely to have debt over \$20,000 than students at polytechnics and private providers. This largely reflects the longer period of study required for university qualifications.

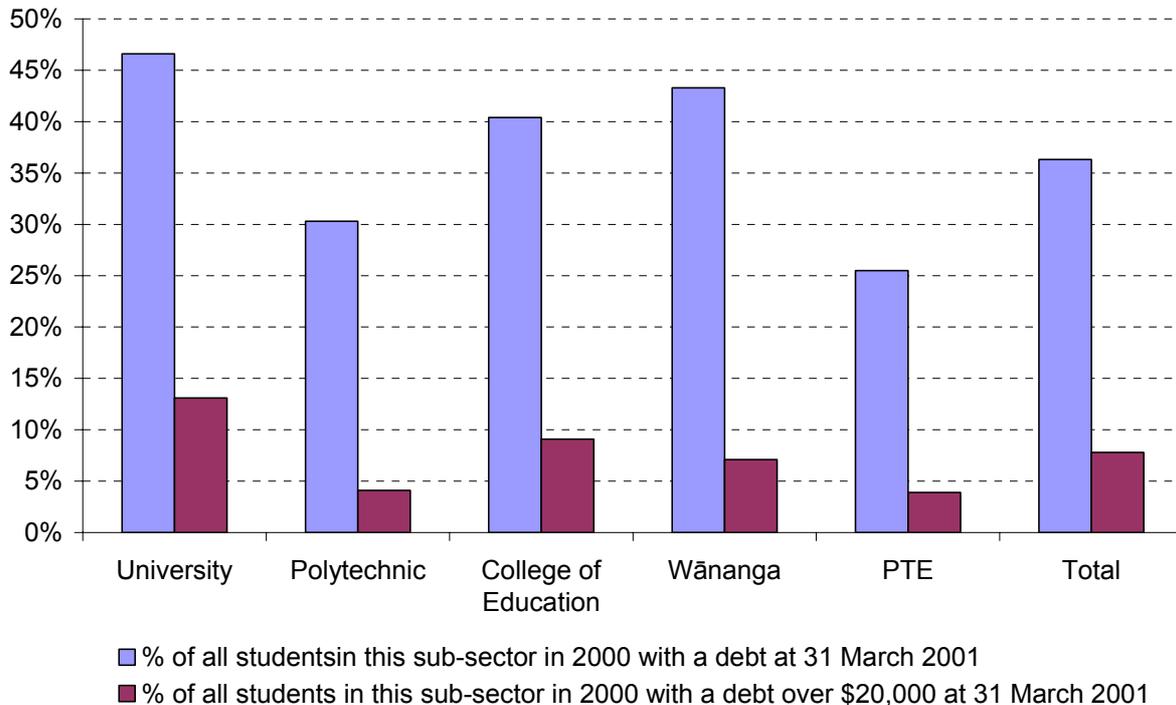
Figure 3.43: Number and percentage of students in 2000 with student loan debt at 31 March 2001 by sub-sector

| Sub-sector | Number of first-year students in 2000 with a debt at 31 March 2001 | % of first-year students in this sub-sector in 2000 with a debt at 31 March 2001 | All students in 2000 with a debt at 31 March 2001 | % of all students in this sub-sector in 2000 with a debt at 31 March 2001 | % of all students in this sub-sector in 2000 with a debt over \$20,000 at 31 March 2001 |
|-----------------------|--|--|---|---|---|
| University | 10,623 | 38.9% | 65,445 | 46.6% | 13.1% |
| Polytechnic | 10,632 | 35.2% | 39,696 | 30.3% | 4.1% |
| College of Education | 717 | 54.1% | 5,850 | 40.4% | 9.1% |
| Wānanga ²⁴ | 615 | 28.9% | 1,980 | 43.3% | 7.1% |
| PTE | 4,848 | 17.4% | 13,935 | 25.5% | 3.9% |
| Total | 27,255 | 30.8% | 124,458 | 36.3% | 7.8% |

Notes:

1. Students are counted in each sub-sector they were enrolled in. Consequently, the sum may not add to the total number of students.
2. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Counts have been randomly rounded to base 3.
3. Data on all students is from the Ministry of Education.

Figure 3.44: Enrolled students with debt as a percentage of enrolled students by sub-sector



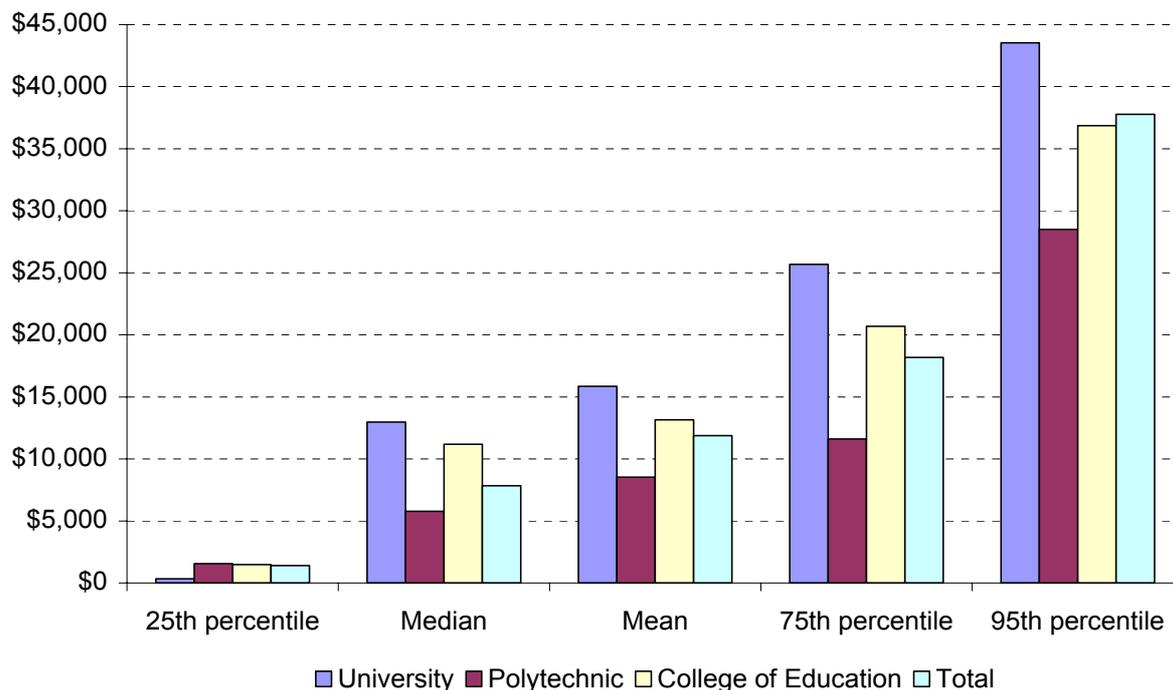
Notes:

1. Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand.
2. Data on students enrolled in 2000 is from the Ministry of Education.

The remaining comments analyse sub-sector using the previous cohort of those who completed a qualification in 1997, had a student loan debt at 31 March 1998 and were not enrolled in 1998, 1999 or 2000. Note that for this cohort, information on the PTE or private provider sub-sector is not available from the integrated student loan dataset. In addition, statistics are not presented for students in this cohort completing at wānanga because of the small size of this group in 1997.

²⁴ The major growth in student numbers at wānanga occurred after the period analysed here. Given that most wānanga courses are free to the student, it is very likely that the data represented in this report is significantly different from the situation in 2004. The data for wānanga needs to be considered with this in mind.

Figure 3.45: Selected debt statistics by sub-sector for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000



| Sub-sector | 25 th percentile | Median | Mean | 75 th percentile | 95 th percentile | % of all people with debt in 2001 |
|----------------------|-----------------------------|----------|----------|-----------------------------|-----------------------------|-----------------------------------|
| University | \$350 | \$12,970 | \$15,860 | \$25,690 | \$43,540 | 38.8% |
| Polytechnic | \$1,560 | \$5,780 | \$8,540 | \$11,610 | \$28,490 | 50.3% |
| College of Education | \$1,480 | \$11,180 | \$13,150 | \$20,690 | \$36,850 | 10.5% |
| Total | \$1,400 | \$7,840 | \$11,870 | \$18,180 | \$37,770 | 100.0% |

Note: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

The median debt for 1997 university graduates at 31 March 2001 was 26 percent lower than the median debt at 31 March 1998. This figure was 21 percent for polytechnic graduates and 24 percent for college of education graduates. The largest difference between the sub-sectors was in the 25th percentile statistic. In 2001, the 25th percentile debt balance for university graduates was 96 percent lower than in 1998, compared with 81 percent for college of education students and 63 percent for polytechnic students.

Figure 3.46: Student loan debt at 31 March 1998 to 2001 by sub-sector for those who completed a qualification in 1997, had a positive debt balance at 31 March 1998 and were not enrolled in 1998, 1999 or 2000

| Sub-sector | 1998 | 1999 | 2000 | 2001 | % change 1998 to 2001 |
|----------------------|----------|----------|----------|----------|-----------------------|
| University | \$17,500 | \$16,610 | \$15,010 | \$12,970 | -25.9% |
| Polytechnic | \$7,310 | \$6,890 | \$6,440 | \$5,780 | -20.9% |
| College of Education | \$14,690 | \$13,970 | \$12,860 | \$11,180 | -23.9% |
| Total | \$11,080 | \$10,380 | \$9,260 | \$7,840 | -29.2% |

Note: Data on people with debt is from the Integrated Dataset on Student Loan Scheme Borrowers, Statistics New Zealand. Figures may not necessarily correspond to official published sources. Data is rounded to the nearest \$10.

More information on progress to repayment can be found in chapter 5.

4 Debt and Income

Introduction

One of the primary motivations for many people choosing to take on a student loan debt is to gain tertiary qualifications and thus, to enhance their prospects of better and higher paying employment. There is a range of literature showing the financial benefits that come with higher qualifications²⁵. These studies typically look at qualifications and income, or they examine students' costs (in terms of fees and foregone earnings, for example) and make comparisons with post-study income.

This chapter examines the relationship between student loan debt at the end of study and the borrower's income several years after concluding study. It provides new information on the relationship between the level of debt students incur and their post-study income, and it explores this relationship for different demographic and study-related sub-groups. Such information is important for obtaining a fuller picture on students' expected returns on investment in tertiary education, thereby aiding student decision making. Such information also provides important new evidence for providers, student groups and government to inform both debate and policy around the Student Loan Scheme.

The study considers two cohorts of students. The first cohort consists of those who last borrowed in 1994 and were resident in New Zealand in 2000. The second cohort comprises those who last borrowed and studied in 1997, had a positive debt balance in 1997 and were resident in New Zealand in 1997 and 2000²⁶. The integrated dataset contains full linked data only for those who used the Student Loan Scheme between 1997 and 2000. There is only limited data on those who used the scheme earlier; in fact, income information on the 1994 cohort can be broken down by gender only.

The chapter is limited primarily to analysing the relationship between *earned* income and student loan debt. Earned income includes income from salary and wages, partnership income and self-employed income. This differs from *taxable* income, which includes income from sources such as interest, dividends and benefits in addition to earned income.

For most people, there is little difference between earned and taxable income. Among people with lower incomes, however, the difference between earned income and taxable income may be more significant in that a higher proportion of taxable income may derive from benefit income (which is included in taxable income but not earned income).

By removing income obtained from sources that are not directly earned through employment, the relationship between study, debt acquired because of study and subsequent income can be better reflected. By removing these additional sources of income, however, income will be under-represented in most cases. Differences between taxable and earned income between the two cohorts are discussed after figure 4.6 below.

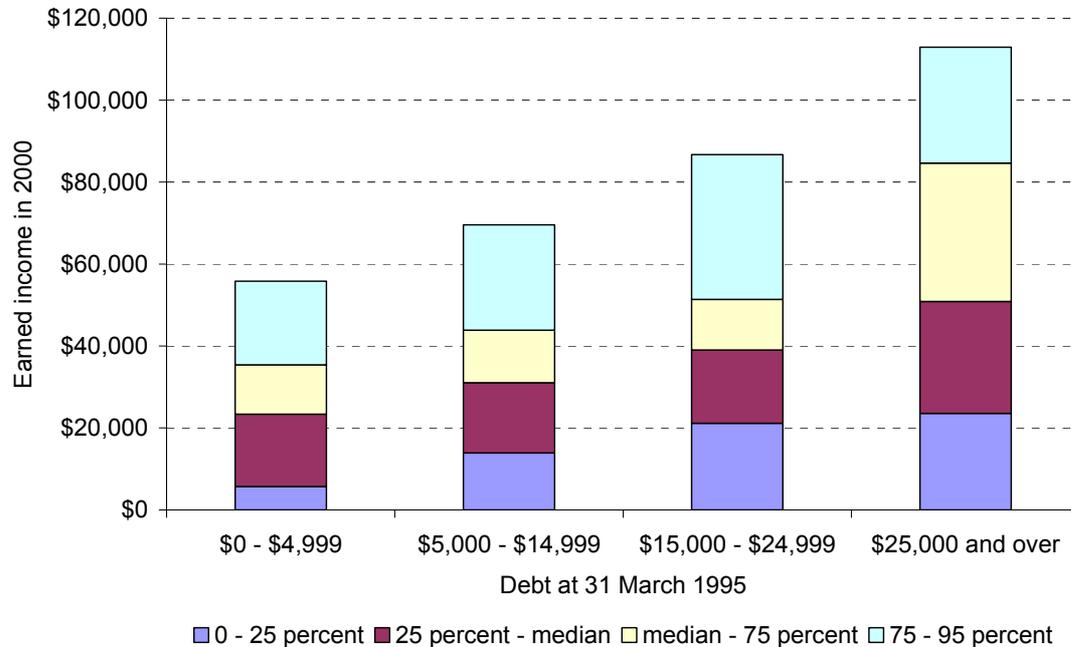
²⁵ See for example, Maani and Maloney (2004) which also includes a good summary of the literature.

²⁶ Those with a missing level of study were excluded from the 1997 cohort. Those with zero or missing taxable income have been excluded from both cohorts. Because of small differences between the definitions of the cohorts used in this chapter, the numbers of students will differ from those in other chapters.

Debt and income overall

There is a clear, positive relationship between earned income in 2000 and debt in 1994, reflecting the fact that higher debt tends to be associated with longer duration qualifications of a higher level, and these qualifications are associated with higher income (see chapter 3).

Figure 4.1: Earned income in 2000 by debt at 31 March 1995: Summary statistics for those who last borrowed in 1994



| Earned income in 2000 (6 years post-study) | Debt at 31 March 1995 | | | | |
|---|-----------------------|-----------------------|------------------------|----------------------|-------------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | 9,267 | 8,682 | 1,827 | 162 | 19,938 |
| Mean | \$23,830 | \$31,540 | \$39,140 | \$54,800 | \$28,840 |
| Median | \$23,390 | \$31,030 | \$39,030 | \$50,840 | \$28,160 |
| 25th percentile | \$5,700 | \$13,910 | \$21,150 | \$23,530 | \$9,790 |
| 75th percentile | \$35,430 | \$43,860 | \$51,380 | \$84,630 | \$41,200 |
| 95th percentile | \$55,800 | \$69,600 | \$86,710 | \$112,930 | \$66,950 |

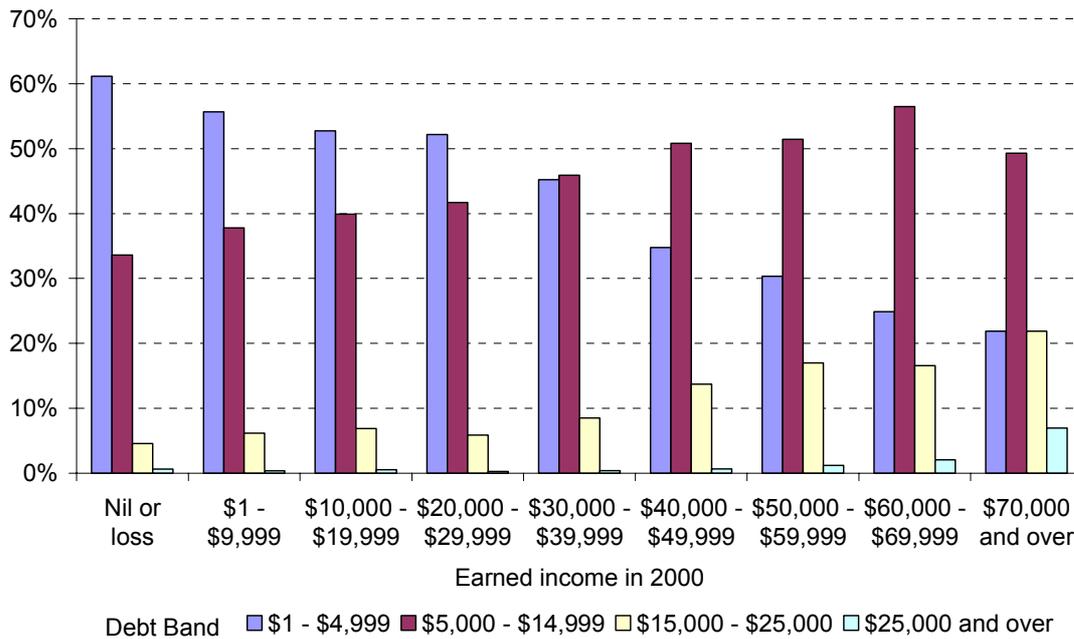
Notes:

1. The median debt is that value at which 50 percent of debtors have a debt below, and 50 percent of debtors have a debt above. The mean or average debt is the total value of student loan debt divided by the total number of people with a debt. The nth percentile is that value at which n percent of all people have a debt below and 100-n percent have a debt above.

2. Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 4.2: How income varies with debt six years after study: The proportion of students in each income band by their debt at 31 March 1995, for those last borrowing in 1994



| Earned Income in 2000 | Debt at 31 March 1995 | | | | All debt bands |
|-----------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$1 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | |
| Nil or loss | 61.1% | 33.6% | 4.6% | 0.7% | 1,830 |
| \$1 - \$9,999 | 55.7% | 37.8% | 6.2% | 0.4% | 3,207 |
| \$10,000 - \$19,999 | 52.7% | 39.9% | 6.9% | 0.5% | 2,316 |
| \$20,000 - \$29,999 | 52.2% | 41.7% | 5.9% | 0.3% | 3,381 |
| \$30,000 - \$39,999 | 45.2% | 45.9% | 8.5% | 0.4% | 3,855 |
| \$40,000 - \$49,999 | 34.8% | 50.8% | 13.7% | 0.7% | 2,667 |
| \$50,000 - \$59,999 | 30.3% | 51.5% | 17.0% | 1.2% | 1,236 |
| \$60,000 - \$69,999 | 24.9% | 56.5% | 16.6% | 2.1% | 579 |
| \$70,000 and over | 21.9% | 49.3% | 21.9% | 6.9% | 864 |
| All income bands | 46.5% | 43.5% | 9.2% | 0.8% | 100.0% |
| Number of Students | 9,267 | 8,682 | 1,827 | 162 | 19,938 |

Note: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

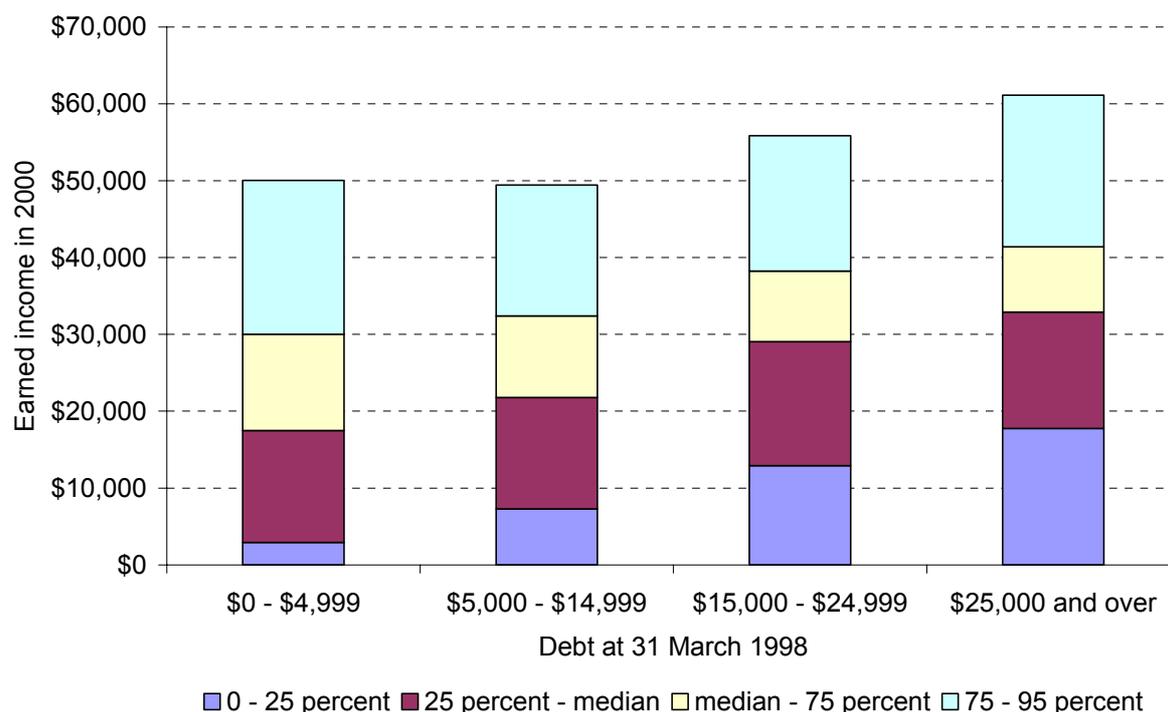
On average, earned income rises between \$7,000 and \$8,000 for every \$10,000 of extra debt. Students who left study with over \$25,000 of debt, on average, were earning more than \$10,000 (or 40 percent) more than those with debt between \$15,000 and \$24,999, and nearly \$31,000 (or 130 percent) more than those leaving with a small debt (less than \$5,000).

The median earned income in the highest debt band was 1.3 times the median income in the second highest debt band, which, in its turn, was 1.7 times the median in the lowest debt band.

This, together with the positive relationship between high debt and high-level qualifications discussed in chapter 3, provides some quantification, in terms of dollars and time since study, of the likely returns of borrowing for tertiary education.

Figure 4.3 shows the same positive relationship for the group of students who last studied and borrowed in 1997. However, this group has had up to 3 years post-study work, ie, half that of the 1994 cohort. The data shows, as might be expected, small post-study incomes in 2000 for the 1997 group.

Figure 4.3: Earned income in 2000 by debt at 31 March 1998 for those who last borrowed and studied in 1997

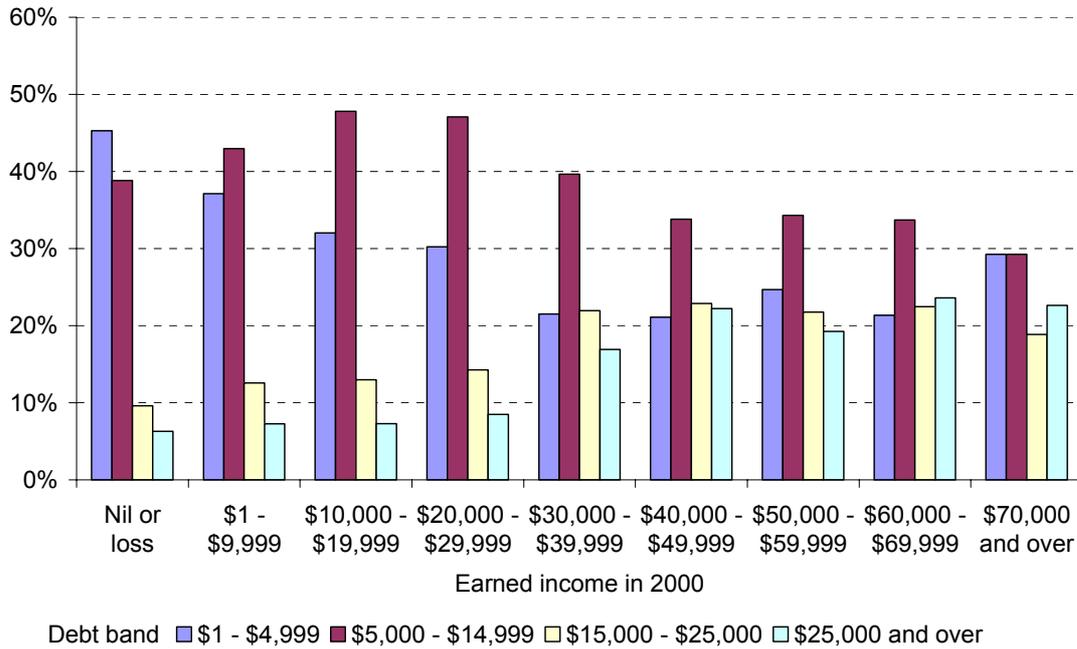


| Earned income in 2000 (3 years post-study) | Debt at 31 March 1998 | | | | |
|---|-----------------------|-----------------------|------------------------|----------------------|-------------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |
| 25th percentile | \$2,920 | \$7,290 | \$12,910 | \$17,770 | \$6,910 |
| 75th percentile | \$30,000 | \$32,400 | \$38,240 | \$41,380 | \$34,830 |
| 95th percentile | \$50,030 | \$49,440 | \$55,840 | \$61,140 | \$52,610 |

Note: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Figure 4.4: How earned income varies with debt three years after study: The proportion of students in each income band by their debt at 31 March 1998, for those who last borrowed and studied in 1997



| Earned income in 2000 | Debt at 31 March 1998 | | | | All debt bands |
|-----------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$1 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$25,000 | \$25,000 and over | |
| Nil or loss | 45.3% | 38.8% | 9.6% | 6.3% | 2,187 |
| \$1 - \$9,999 | 37.1% | 43.0% | 12.6% | 7.3% | 4,008 |
| \$10,000 - \$19,999 | 32.0% | 47.8% | 13.0% | 7.3% | 3,213 |
| \$20,000 - \$29,999 | 30.2% | 47.1% | 14.2% | 8.5% | 4,485 |
| \$30,000 - \$39,999 | 21.5% | 39.6% | 21.9% | 16.9% | 4,170 |
| \$40,000 - \$49,999 | 21.1% | 33.8% | 22.9% | 22.2% | 1,863 |
| \$50,000 - \$59,999 | 24.7% | 34.3% | 21.8% | 19.2% | 717 |
| \$60,000 - \$69,999 | 21.3% | 33.7% | 22.5% | 23.6% | 267 |
| \$70,000 and over | 29.2% | 29.2% | 18.9% | 22.6% | 318 |
| All income bands | 30.5% | 42.1% | 16.0% | 11.5% | 21,234 |
| Number of Students | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |

Notes: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

By contrast with income six years after study (figure 4.2), the relationship between debt and income three years after study is less symmetrical. People with medium levels of debt have had less time to build their incomes, hence there are relatively fewer debtors in the higher income bands.

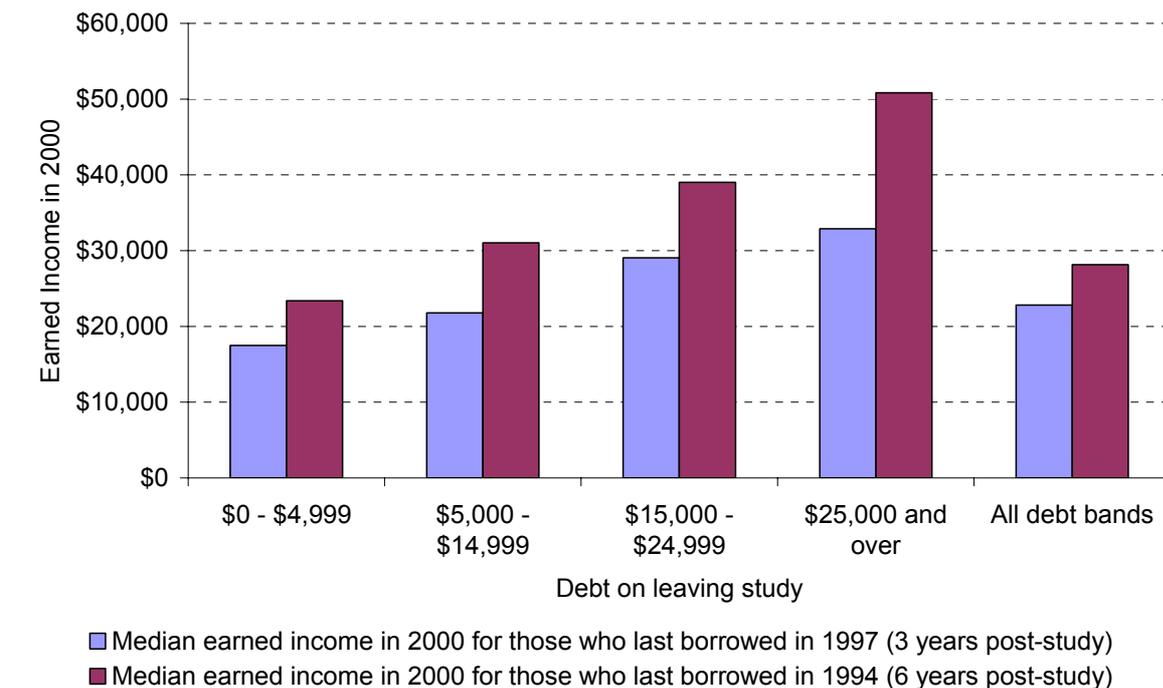
The opposite is true for those leaving with low debt (less than \$5,000). There are more people with low debt and high income (\$70,000 or more) than on middle incomes. This may reflect the significant rise in older people entering tertiary study during the 1990s. Many are combining work with study, and can command higher salaries because of their longer, previous work experience.

Analysis of the 1997 cohort by qualification level further shows that the relationship is not uniform across the level studied. The analysis finds that for those who studied at the postgraduate level and for those who were successful in completing a bachelors degree, there is no correlation between level of debt and level of income. Among those who studied lower level qualifications and those who started a bachelors degree but abandoned it without

completing, the relationship between income and debt level is especially strong. This is discussed later in this chapter.

On average, the 1994 cohort of students was earning around \$5,500 (or 25 percent) more six years after completing study, than the 1997 cohort was three years after they completed. Not only do people leaving with higher debt earn higher income, but their income grows faster than people with low or medium debt. The median income of people six years after they left in 1994 with a debt over \$25,000, was 55 percent more than that of the 1997 cohort, compared with gains of 23 percent to 42 percent for all other debt bands.

Figure 4.5: Median earned income 3 years after study and 6 years after study



| Earned income in 2000 | Debt on leaving study | | | | |
|-----------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Mean – 1994 cohort | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Mean – 1997 cohort | \$23,830 | \$31,540 | \$39,140 | \$54,800 | \$28,840 |
| Difference (\$) | \$4,440 | \$9,610 | \$11,600 | \$23,790 | \$5,750 |
| Difference (%) | 23% | 44% | 42% | 77% | 25% |
| Median – 1994 cohort | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |
| Median – 1997 cohort | \$23,390 | \$31,030 | \$39,030 | \$50,840 | \$28,160 |
| Difference (\$) | \$5,900 | \$9,240 | \$9,970 | \$17,950 | \$5,320 |
| Difference (%) | 34% | 42% | 34% | 55% | 23% |

Notes:

1. Debt on leaving study is the debt at 31 March 1995 for the 1994 cohort (those who last borrowed in 1994) and 31 March 1998 for the 1997 cohort (those who last borrowed and studied in 1997).
2. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Taxable income and earned income

As discussed earlier, this chapter is limited primarily to analysis of the relationship between *earned* income and student loan debt. Earned income includes income from salary and wages, partnership income and self-employed income. This differs from *taxable* income, which

includes income from sources such as interest, dividends and benefits in addition to earned income.

This section compares differences between taxable income and earned income for people with student loan debt 3 years after study and 6 years after study.

Figure 4.6: 2000 earned and taxable income summary statistics

| Earned income in 2000 | 1994 cohort | | | 1997 cohort | | |
|-----------------------|---------------|----------------|----------------|---------------|----------------|----------------|
| | Earned income | Taxable income | Difference (%) | Earned income | Taxable income | Difference (%) |
| Mean | \$28,840 | \$30,930 | 7% | \$23,090 | \$25,270 | 9% |
| Median | \$28,160 | \$28,720 | 2% | \$22,840 | \$23,550 | 3% |
| 25th percentile | \$9,790 | \$14,480 | 48% | \$6,910 | \$12,700 | 84% |
| 75th percentile | \$41,200 | \$41,340 | 0% | \$34,830 | \$35,000 | 0% |
| 95th percentile | \$66,950 | \$67,250 | 0% | \$52,610 | \$53,090 | 1% |

Notes:

1. Debt on leaving study is the debt at 31 March 1995 for the 1994 cohort (those who last borrowed in 1994) and 31 March 1998 for the 1997 cohort (those who last borrowed and studied in 1997).
2. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Taxable income for the lowest earning (25th percentile) group was 48 percent higher than earned income for the 1994 cohort and 84 percent higher for the 1997 cohort. This is, in large part, due to benefit income adding to the taxable income of many of those with the lowest earned incomes. By contrast, median taxable income is 2 to 3 percent higher than median earned income, and 75th and 95th percentile taxable incomes are no more than 1 percent higher than the corresponding 75th and 95th percentile earned incomes. Benefit income, one of the largest differences between earned and taxable income, does not impact greatly on those with already-high earned incomes and those on higher incomes have not acquired significant interest or dividend income only six years post-study.

By removing income obtained from sources that are not directly earned through employment, the intention is that the relationship between study, debt acquired because of study and subsequent income can be better reflected. By removing these additional sources of income, however, income will be under-represented in most cases.

As with earned income, there is a positive correlation between taxable income and finishing debt level. However, the relationship is less strong in the case of taxable income, where, largely because at lower income levels, taxable income is significantly higher than earned income.

Income by debt and gender

In general, men have higher income following completion of study than women, regardless of the level of student loan debt acquired. Figure 4.7 shows this across all measures and debt bands, with the largest disparity in the highest debt band²⁷. In this band, the median earned income for men was 1.5 times higher than for women, while the ratio was 1.4 in the lowest debt band and 1.1 in the middle two debt bands²⁸.

²⁷ The only statistic that is an exception to this rule is the 25th percentile for women where income in the highest debt band was over \$5,000 lower than in the second highest debt band.

²⁸ It also should be noted that the highest debt band contains the smallest number of borrowers.

Figure 4.7: Earned income by gender and debt at 31 March 1995 for those who last borrowed in 1994

| | Debt at 31 March 1995 | | | | |
|------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | | | | | |
| Male | 4,632 | 4,323 | 918 | 90 | 9,963 |
| Female | 4,638 | 4,359 | 909 | 72 | 9,975 |
| Total | 9,267 | 8,682 | 1,827 | 162 | 19,938 |
| Mean income in 2000 | | | | | |
| Male | \$26,430 | \$34,700 | \$42,780 | \$62,640 | \$31,850 |
| Female | \$21,230 | \$28,410 | \$35,460 | \$45,240 | \$25,840 |
| Total | \$23,830 | \$31,540 | \$39,140 | \$54,800 | \$28,840 |
| Median income in 2000 | | | | | |
| Male | \$26,230 | \$32,750 | \$40,610 | \$62,730 | \$30,190 |
| Female | \$19,160 | \$29,110 | \$36,670 | \$42,530 | \$25,600 |
| Total | \$23,390 | \$31,030 | \$39,030 | \$50,840 | \$28,160 |

Note: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Figure 4.8 shows the equivalent income for those last borrowing and studying in 1997. This group had just 3 years out of study compared with 6 years for the 1994 cohort.

Men had a higher median earned income than women in three of the four debt bands. In the \$15,000 to \$24,999 debt band, women had a higher income. In the lowest debt band, the median income for men was 36 percent higher than that of women, while the margin in the highest debt band was less than 3 percent.

In the \$15,000 to \$24,999 debt band, women's median income was 4 percent higher than that for men. This finding is consistent with the observation, noted in many other studies of the relationship between tertiary education and income, that higher level qualifications (which are associated with higher debt) tend to reduce the disparity between different groups.

Figure 4.8: Earned income summary statistics by debt band and gender for those who last borrowed and studied in 1997

| | Debt at 31 March 1998 | | | | |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | | | | | |
| Male | 3,198 | 4,446 | 1,623 | 1,209 | 10,476 |
| Female | 3,282 | 4,485 | 1,764 | 1,224 | 10,758 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| Male | \$21,130 | \$22,990 | \$28,060 | \$32,230 | \$24,280 |
| Female | \$17,690 | \$20,890 | \$27,050 | \$29,800 | \$21,940 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| Male | \$20,150 | \$22,480 | \$28,600 | \$33,450 | \$23,620 |
| Female | \$14,850 | \$21,130 | \$29,710 | \$32,590 | \$22,010 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

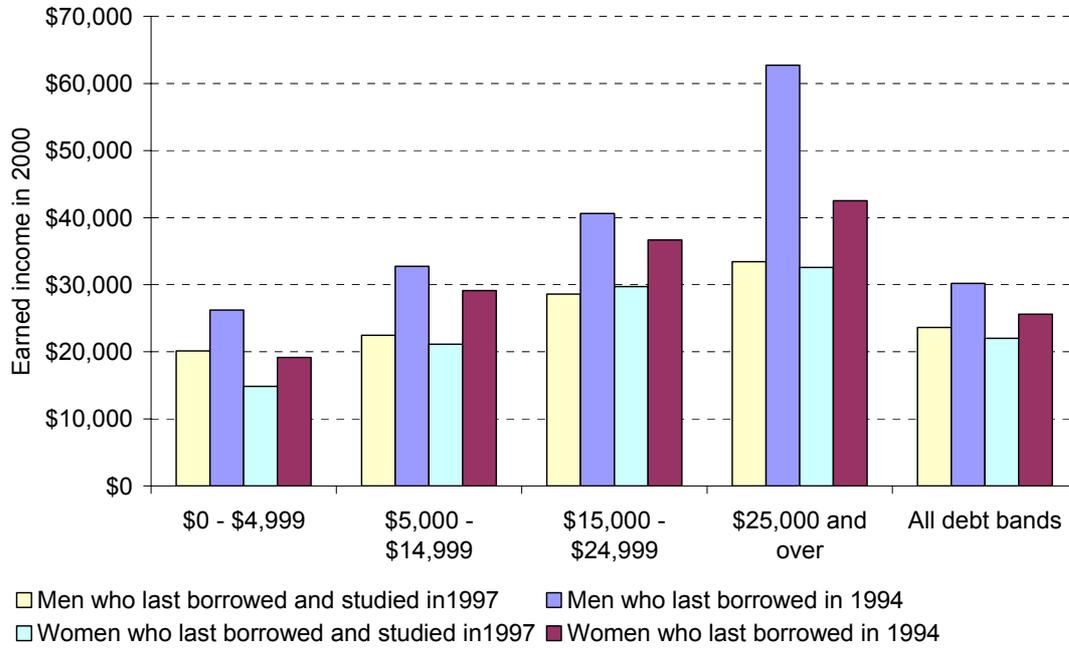
Note: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

While incomes were 10 to 50 percent higher for men than women in the 1994 cohort, the margin between men and women was less pronounced among those who last borrowed and

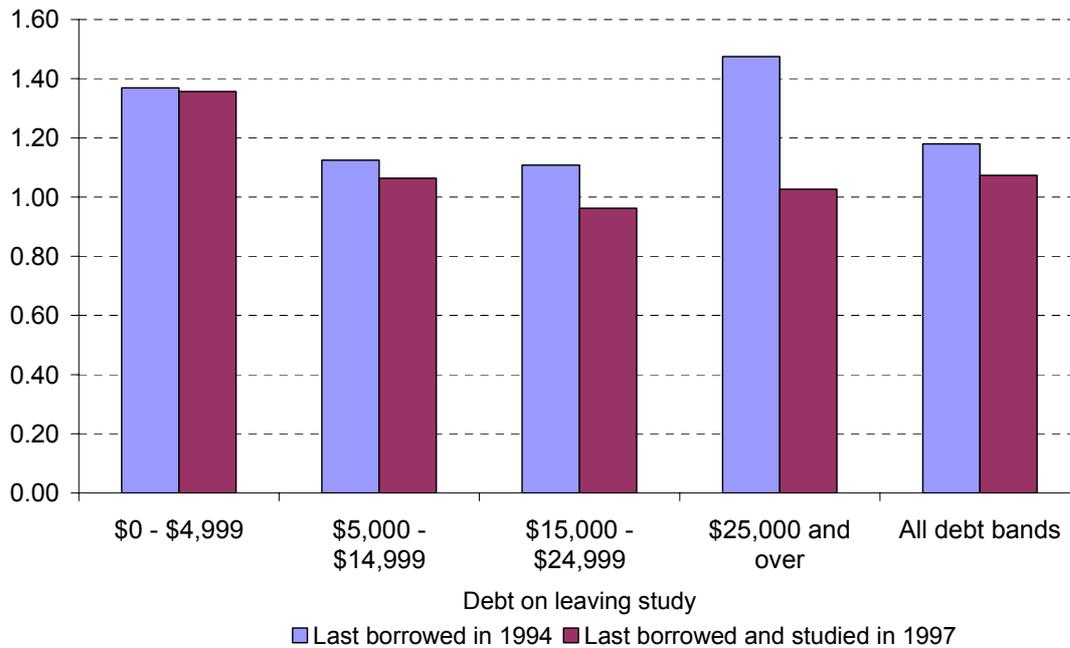
studied in 1997. This is shown in figure 4.9. As time out of study increases, the gap between male and female income tends to grow. This is most noticeable in the higher debt bands. One of the factors contributing to this may be that more of the women in the 1994 cohort are likely to have left work for child rearing than in the 1997 cohort.

Figure 4.9: Median earned income by debt band and gender: three years post-study and six years post-study



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Figure 4.10: Ratio of median male earned income in 2000 to median female earned income in 2000 for those who last borrowed in 1994, and those who last borrowed and studied in 1997



Note: Debt on leaving study is the debt at 31 March 1995 for the 1994 cohort (those who last borrowed in 1994) and 31 March 1998 for the 1997 cohort (those who last borrowed and studied in 1997).

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

When taxable income is considered, the gaps between the genders are much narrower, particularly in the lowest debt band, reflecting the fact that women are more likely to be receiving benefit income than men. The 25th percentile earned income of women is higher than that for men, implying that the advantage to women appears to be due to benefit income.

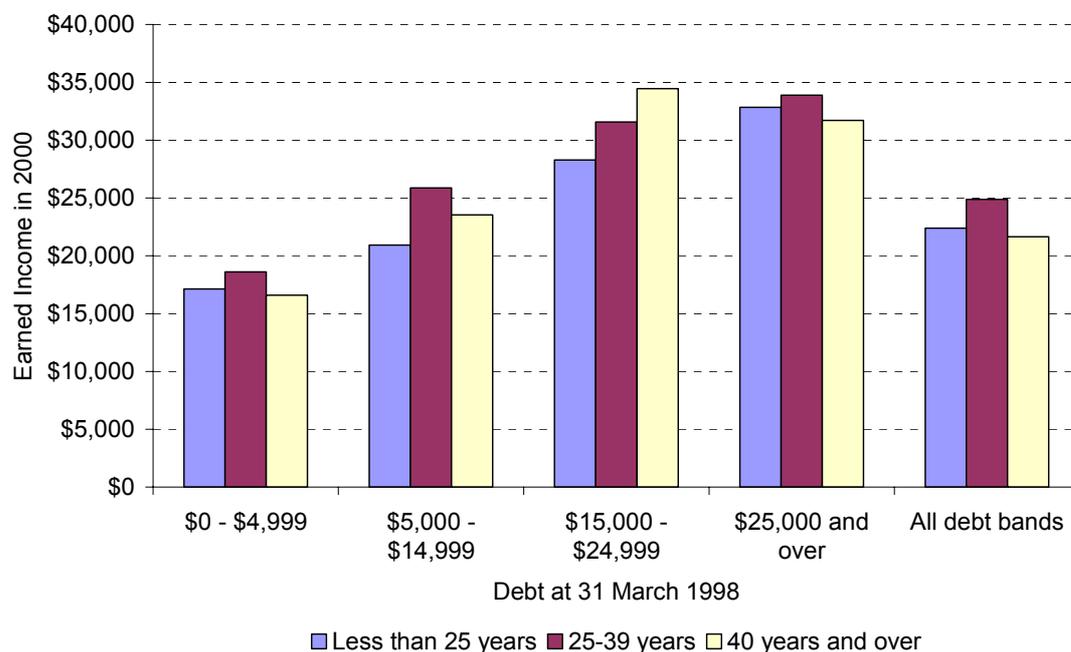
Income by debt and age

As information on age is not available from the integrated student loan dataset for the 1994 cohort, this section analyses income in 2000 by debt and age for those who last borrowed and studied in 1997.

People aged 25 to 39 had the highest mean and median earned income, with median incomes \$2,000 to \$3,000 (11 percent to 15 percent) higher than younger and older people with debt. This, perhaps, is unsurprising given that people in this age group have been in the workforce longer than younger people and have higher, full-time employment rates than both older and younger people.

Those aged less than 25 years had the lowest mean earned income of the three age groups (about 90 percent of that of the 25 to 39 age group, and 94 percent of the 40 and over age group). In terms of median income, however, those aged under 35 earn slightly more (3 percent) than those aged 40 and over. This implies that there was a small number of people in the 40 and over age group with very large incomes, thus raising the mean for this age group.

Figure 4.11: Earned income by debt at 31 March 1998 and age group for those who last borrowed and studied in 1997



| | Debt at 31 March 1998 | | | | All debt bands |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | |
| Number of students | | | | | |
| Less than 25 years | 2,991 | 5,973 | 2,340 | 1,842 | 13,146 |
| 25-39 years | 2,604 | 2,325 | 858 | 510 | 6,297 |
| 40 years and over | 885 | 636 | 186 | 84 | 1,791 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| Less than 25 years | \$17,040 | \$20,470 | \$26,880 | \$30,580 | \$22,250 |
| 25-39 years | \$21,640 | \$24,890 | \$28,630 | \$33,040 | \$24,710 |
| 40 years and over | \$20,670 | \$24,920 | \$30,730 | \$28,050 | \$23,570 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| Less than 25 years | \$17,130 | \$20,930 | \$28,290 | \$32,830 | \$22,390 |
| 25-39 years | \$18,600 | \$25,860 | \$31,560 | \$33,880 | \$24,880 |
| 40 years and over | \$16,600 | \$23,530 | \$34,440 | \$31,700 | \$21,650 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes:

1. Age is at 1 July 1997.

2. Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

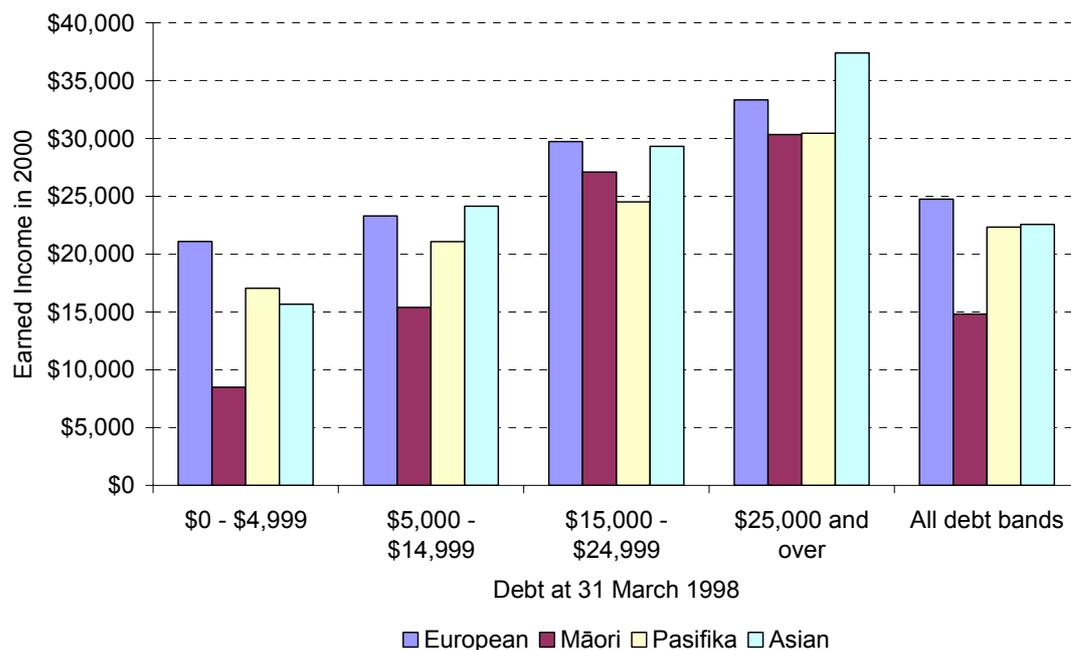
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Income by debt and ethnic group

Overall, those debtors of European ethnicity had the highest mean and median earned incomes and Māori the lowest. The mean earnings of those of European ethnicity were 1.4 times the mean earned income of Māori; for the median earned income, the ratio was 1.7. The fact that the mean income for Māori was significantly higher than the median income means that there was a substantial minority in the group with high income. By contrast, the mean earned income of Pasifika was lower than the median, implying that relatively few people in this ethnic group had very high earnings.

The pattern of distribution of earnings and the margins between the ethnic groups were different at different debt levels. Of those with higher debt levels, those of Asian ethnicity tended to have the highest mean and median earnings. For instance, in the highest debt band, the mean earned income of Asians was 1.2 that of Europeans and 1.4 that of Māori and Pasifika.

Figure 4.12: Median earned income by debt at 31 March 1998 and ethnic group for those who last borrowed and studied in 1997



| | Debt at 31 March 1998 | | | | |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | | | | | |
| European | 3,594 | 5,940 | 2,439 | 1,803 | 13,776 |
| Māori | 1,560 | 1,764 | 531 | 327 | 4,182 |
| Pasifika | 390 | 507 | 189 | 138 | 1,224 |
| Asian | 588 | 405 | 111 | 87 | 1,191 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| European | \$21,960 | \$23,320 | \$28,090 | \$31,420 | \$24,870 |
| Māori | \$13,420 | \$17,180 | \$25,280 | \$28,100 | \$17,670 |
| Pasifika | \$18,110 | \$19,840 | \$23,640 | \$27,760 | \$20,770 |
| Asian | \$20,290 | \$24,960 | \$29,750 | \$38,890 | \$24,110 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| European | \$21,100 | \$23,300 | \$29,730 | \$33,330 | \$24,750 |
| Māori | \$8,480 | \$15,390 | \$27,090 | \$30,330 | \$14,810 |
| Pasifika | \$17,050 | \$21,080 | \$24,510 | \$30,450 | \$22,340 |
| Asian | \$15,670 | \$24,140 | \$29,320 | \$37,390 | \$22,580 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Income by debt and completion status

The incomes of those who successfully complete a qualification are higher in general than those who attempt a qualification but abandon it without completing. The relationship is clearly shown in another analysis of data from the integrated dataset, as reported in the Annual Report of the Student Loan Scheme to 30 June 2004²⁹.

²⁹ Ministry of Education, Inland Revenue, Ministry of Social Development (2004) *Annual Report of the Student Loan Scheme, including the Financial Statements to 30 June 2004*. Refer to page 37.

Figures 4.13 and 4.14 explore the relationship between income and qualification completion status.³⁰ Figure 4.13 shows the mean and median earned income of students who last borrowed and studied in 1997 by debt band and completion status. Figure 4.14 shows median earned income for the same group.

Figure 4.13: Earned income statistics by debt at 31 March 1998 and completion status for those who last borrowed and studied in 1997

| | Debt at 31 March 1998 | | | | All debt bands |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | |
| Number of students | | | | | |
| Completed | 2,268 | 3,828 | 1,815 | 1,407 | 9,315 |
| Did not complete | 4,212 | 5,106 | 1,572 | 1,029 | 11,919 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| Completed | \$22,280 | \$25,090 | \$30,170 | \$32,750 | \$26,550 |
| Did not complete | \$17,830 | \$19,570 | \$24,490 | \$28,630 | \$20,390 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| Completed | \$21,410 | \$25,200 | \$32,460 | \$34,840 | \$27,130 |
| Did not complete | \$14,670 | \$18,920 | \$25,110 | \$29,430 | \$19,470 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes: Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

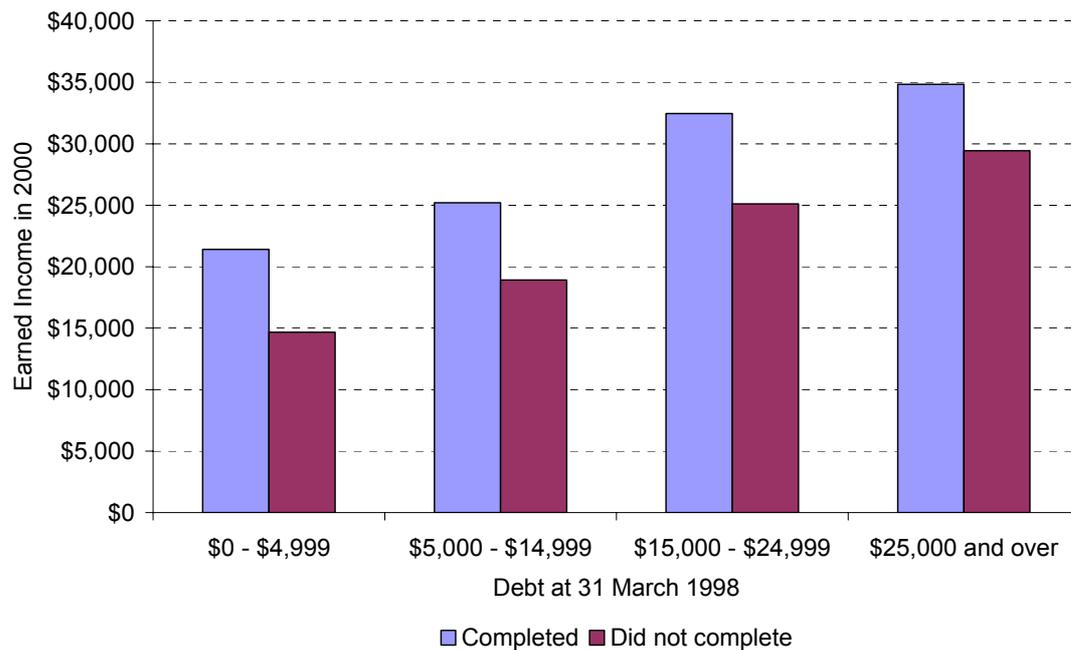
Students in higher debt bands were more likely to have completed at least one qualification in 1997. In the lowest debt band, only 35 percent of students completed at least one of the qualifications they studied, while in the highest debt band 58 percent completed.

Across all debt bands, those who completed a qualification had a higher earned income on any measure than those who did not complete a qualification. The largest difference in percentage terms was in the lowest debt band, where the median income for students who completed was 1.5 times that of those who did not complete. As the completing debt band rose, the ratio reduced; in the second and third debt bands, the ratio was 1.3 while in the highest, the median earnings of those who completed was 1.2 times (and \$5,410 higher than) the median of those who did not complete.

For both those who completed and those who did not complete, higher debt bands translated into higher incomes. Interestingly, this relationship was just as strong for those who did not complete as for those who did. For the students who did complete, the mean income of those in the highest debt band was 46 percent or \$10,470 higher than the lowest debt band, while for those who did not complete the average income in the highest debt band was 61 percent or \$10,800 higher. The median income difference between the debt bands for students who completed was \$13,430 (63 percent) and \$14,760 (101 percent) for those who did not complete.

³⁰ Completion status refers to whether the student successfully completed any of the qualifications he or she was studying towards in 1997.

Figure 4.14: Median earned income by debt at 31 March 1998 and completion status for those who last borrowed and studied in 1997



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Income by debt and qualification level

While in general, there is a strong relationship between higher debt and higher income, the relationship differs at different qualification levels. Figure 4.15 shows the mean and median earned income of students who last borrowed and studied in 1997 by debt band and highest qualification level studied. In this analysis, students are assigned to the highest level they studied in 1997 regardless of whether they completed or not. If they did not complete any qualification in 1997 they are allocated to the highest level qualification they were enrolled in.

Masters/honours students in every debt band had higher earned incomes than bachelors students in any debt band, while bachelors students in every debt band had higher earnings than certificate students in any debt band.

Figure 4.15: Earned income by debt at 31 March 1998 and highest qualification level studied for those who last borrowed and studied in 1997

| | Debt at 31 March 1998 | | | | All debt bands |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | |
| Number of students | | | | | |
| Masters/Honours | 120 | 294 | 231 | 246 | 891 |
| Bachelors | 1,368 | 2,652 | 1,797 | 1,575 | 7,392 |
| Certificate | 3,954 | 4,119 | 474 | 123 | 8,667 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| Masters/Honours | \$41,400 | \$34,370 | \$37,420 | \$34,430 | \$36,120 |
| Bachelors | \$24,580 | \$26,720 | \$28,750 | \$31,240 | \$27,780 |
| Certificate | \$15,370 | \$17,070 | \$19,690 | \$21,840 | \$16,500 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| Masters/Honours | \$38,370 | \$36,340 | \$38,870 | \$36,770 | \$37,160 |
| Bachelors | \$23,880 | \$28,260 | \$31,110 | \$33,520 | \$29,870 |
| Certificate | \$13,760 | \$17,910 | \$20,000 | \$22,820 | \$16,550 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes:

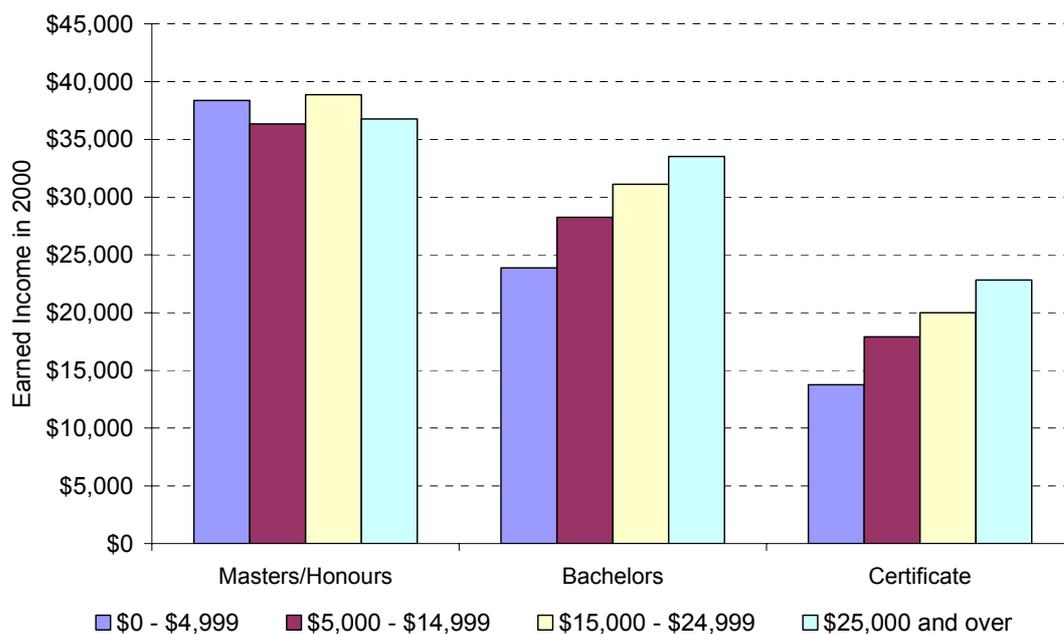
1. Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
2. 'Bachelors' also includes those advanced diplomas equivalent to bachelors level.
3. In order to simplify presentation and analysis and because these have fewer students than other categories, study at undergraduate and postgraduate diploma level has been excluded.
4. There are too few doctorate completions to provide publishable statistics.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Within the levels of study, the positive relationship between debt and income was only evident in the undergraduate qualifications, while among undergraduate students, the relationship of higher debt to higher income applies less strongly as higher levels of qualifications are reached; the relationship is strongest at the certificate level, while it is less strong (if still significant) among those who studied for bachelors degrees.

Postgraduate students in the lowest debt band had a higher mean and median income than students in the highest debt band. Some students at the postgraduate level may have earned a higher income before undertaking their postgraduate study which meant they did not need to borrow as much. Within the lowest debt band, postgraduate students had a median income three years after study that was 1.6 times the income of those studying at bachelors level and 2.8 times that of certificate students. In the highest debt band, the margins were 1.1 and 1.6, respectively.

Figure 4.16: Median earned income by debt at 31 March 1998 and highest qualification level studied, for selected levels for those who last borrowed and studied in 1997



Notes: Bachelors also includes those advanced diplomas equivalent to bachelors level.
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The higher debt/higher income relationship becomes more complex when also it is considered whether a student has successfully completed a qualification. In this analysis, students are assigned to the highest level they completed in 1997. If they did not complete any qualification in 1997 they are allocated to the highest level they studied. Figure 4.17 shows the proportions in each level and debt band that completed, while 4.18 shows the mean and median earned income in 2000 of students who last borrowed and studied in 1997 by debt band, highest level completed and completion status.³¹

Figure 4.17: Percentage of students completing by qualification level and debt at 31 March 1998 for those who last borrowed and studied in 1997

| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
|-----------------|---------------|--------------------|---------------------|-------------------|----------------|
| Masters/Honours | 40% | 49% | 52% | 45% | 47% |
| Bachelors | 32% | 48% | 58% | 64% | 51% |
| Certificate | 37% | 41% | 35% | 37% | 39% |
| Total | 35% | 43% | 54% | 58% | 44% |

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

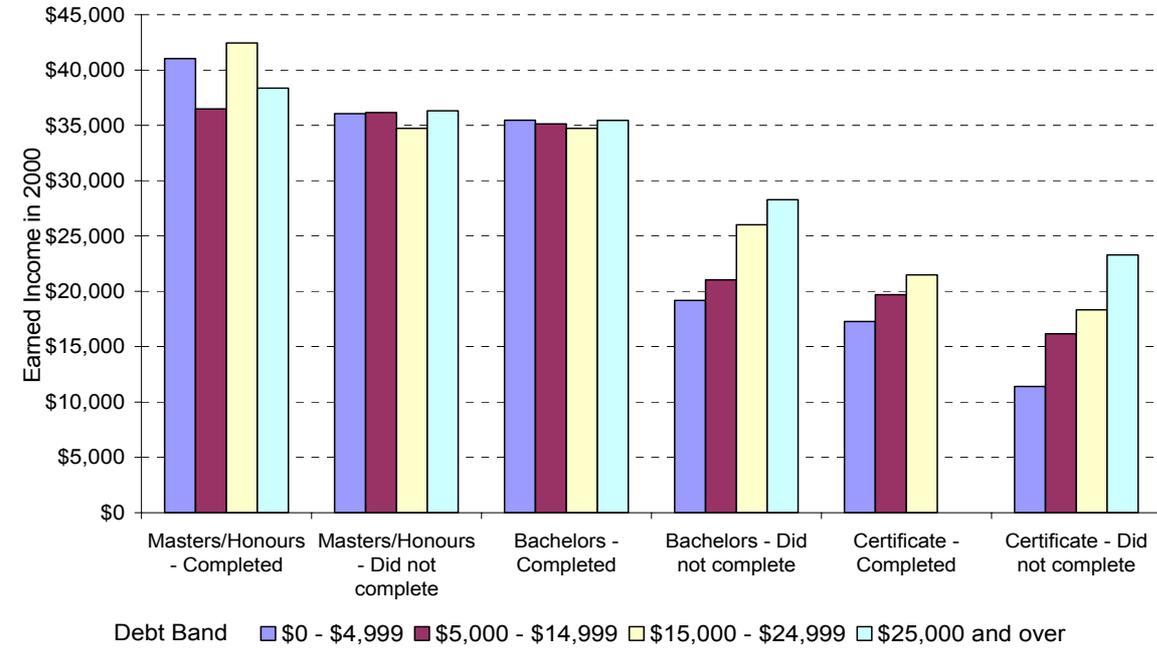
In general, the proportions completing increased with both qualification level and level of debt. The exception is at certificate level, where the proportions completing were more even across debt bands.

The fact that the high debt/high income relationship applies equally to both those students who completed and those who did not has some surprising effects. Those in the lowest debt band who completed their qualification had a lower income on average than those with high

³¹ Students are allocated to the highest level they completed in 1997. If they did not complete any qualifications they are allocated to the 'did not complete' category of the highest level they studied in 1997. Students in the 'did not complete' category of the postgraduate levels would have completed their undergraduate study some time in the past, but are still recorded as 'did not complete' because they did not complete any qualification in 1997.

debt bands who did not complete their studies. Figure 4.18 shows that bachelors students who did not complete their qualification had a higher income in 1997 than certificate students who did complete.

Figure 4.18: Median earned income by debt at 31 March 1998, highest qualification level and completion status for those who last borrowed and studied in 1997



| | Debt at 31 March 1998 | | | | |
|------------------------|-----------------------|--------------------|---------------------|-------------------|-----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Masters/Honours | | | | | |
| Completed | \$41,020 | \$36,490 | \$42,440 | \$38,360 | \$39,090 |
| Not complete | \$36,050 | \$36,150 | \$34,730 | \$36,310 | \$36,060 |
| Total | \$38,370 | \$36,340 | \$38,870 | \$36,770 | \$37,160 |
| Bachelors | | | | | |
| Completed | \$35,460 | \$35,130 | \$34,720 | \$35,440 | \$35,140 |
| Not complete | \$19,180 | \$21,040 | \$26,020 | \$28,280 | \$23,200 |
| Total | \$23,880 | \$28,260 | \$31,110 | \$33,520 | \$29,870 |
| Certificate | | | | | |
| Completed | \$17,280 | \$19,700 | \$21,490 | | \$19,070 |
| Not complete | \$11,410 | \$16,170 | \$18,330 | \$23,290 | \$14,410 |
| Total | \$13,760 | \$17,910 | \$20,000 | \$22,820 | \$16,550 |
| All levels | | | | | |
| Completed | \$21,410 | \$25,200 | \$32,460 | \$34,840 | \$27,130 |
| Not complete | \$14,670 | \$18,920 | \$25,110 | \$29,430 | \$19,470 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes:

1. Any cell with fewer than 100 persons has been excluded. Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
2. 'Bachelors' also includes those advanced diplomas equivalent to bachelors level.
3. In order to simplify presentation and analysis and because these have fewer students than other categories, study at undergraduate and postgraduate diploma level have been excluded.
4. There are too few doctorate completions to provide meaningful statistics.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Those who completed an honours or masters degree had the highest median incomes. Unsurprisingly, students who completed a bachelors degree had about the same income as those who did not complete an honours or masters degree. Students who did not complete a

bachelors degree had a lower income than those who did, but had a higher income than certificate students who did complete their course. Certificate students who completed their qualification had a higher income than those who did not.

Within all debt bands and qualification levels, those who completed their qualification had a higher median income than those who did not complete, with the exception of the highest debt band of postgraduate certificate/diploma students. These students would have completed undergraduate study previously or have a number of years' work experience in a relevant field. Some would have been studying part-time, while in employment. In these cases, their earnings would reflect both their current and past work experience, and their previous qualification, as well as their postgraduate study.

The largest difference between median incomes for those who completed and those who did not was at the bachelors level. The margins were highest in the lower debt bands. Students in the lowest debt band who completed a bachelors degree earned 85 percent more than their counterparts who did not complete their qualification. In the highest debt band, the margin was 25 percent. This pattern reflects the fact that the high debt/high income relationship did not apply among those who successfully completed at that level; there was relatively little difference between debt bands in median earned income of those who were successful in finishing a bachelors degree. By contrast, among those who abandoned without completing, the variation by debt band was very significant.

Students in the lowest debt band who completed a certificate had a median income 51 percent higher than those who did not complete. This fell to 17 percent in the second highest debt band³². There was a positive relationship between debt and income for both those who completed and those who did not complete at this level. Students who did not complete their certificate in the highest debt band earned more than twice as much as those who did not complete in the lowest debt band. Students who successfully completed their certificate in the second highest debt band earned 24 percent more than those in the lowest debt band.

There was no relationship between debt and median income for honours/masters students, whether they completed their qualification or not. For honours/masters students in the lowest debt band, students who completed had a median income 14 percent higher than those who did not complete. In the highest debt band the margin was only 6 percent, and 1 percent in the second lowest debt band.

Unsurprisingly, the median earned income of masters/honours students who abandoned without completing was very similar to that of those who successfully completed a bachelors degree.

³² At the certificate level too few people completed a certificate and had a debt in the highest debt band to produce statistics.

Income by debt and sub-sector

Figure 4.19 shows the mean and median earned income of students who last borrowed and studied in 1997 by debt band and sub-sector³³. Median incomes were highest in all debt bands for college of education students, reflecting the relatively high starting salaries of teachers. University students also had relatively high incomes. This is explained by the predominance of higher level qualifications at universities and colleges of education compared with polytechnics.

Figure 4.19: Earned income summary statistics by debt at 31 March 1998 and sub-sector for those who last borrowed and studied in 1997

| | Debt at 31 March 1998 | | | | |
|-------------------------------------|-----------------------|--------------------|---------------------|-------------------|----------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Number of students | | | | | |
| University | 1,305 | 2,406 | 1,662 | 1,587 | 6,957 |
| Polytechnic | 4,827 | 5,934 | 1,341 | 633 | 12,735 |
| College of Education | 252 | 489 | 366 | 210 | 1,317 |
| Total | 6,480 | 8,931 | 3,387 | 2,436 | 21,234 |
| Mean earned income in 2000 | | | | | |
| University | \$27,320 | \$28,310 | \$30,080 | \$32,930 | \$29,600 |
| Polytechnic | \$17,130 | \$19,210 | \$24,470 | \$26,150 | \$19,320 |
| College of Education | \$25,590 | \$26,080 | \$27,830 | \$31,700 | \$27,360 |
| Total | \$19,390 | \$21,930 | \$27,540 | \$31,010 | \$23,090 |
| Median earned income in 2000 | | | | | |
| University | \$25,260 | \$29,090 | \$31,510 | \$34,480 | \$30,650 |
| Polytechnic | \$15,710 | \$19,680 | \$25,190 | \$28,150 | \$19,470 |
| College of Education | \$29,860 | \$29,990 | \$32,280 | \$35,380 | \$31,730 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes:

1. Counts data has been randomly rounded to base 3. Data has been rounded to the nearest \$10.
2. Information is not available on PTE students for this cohort.
3. There are too few students from this cohort at wānanga to provide publishable statistics.

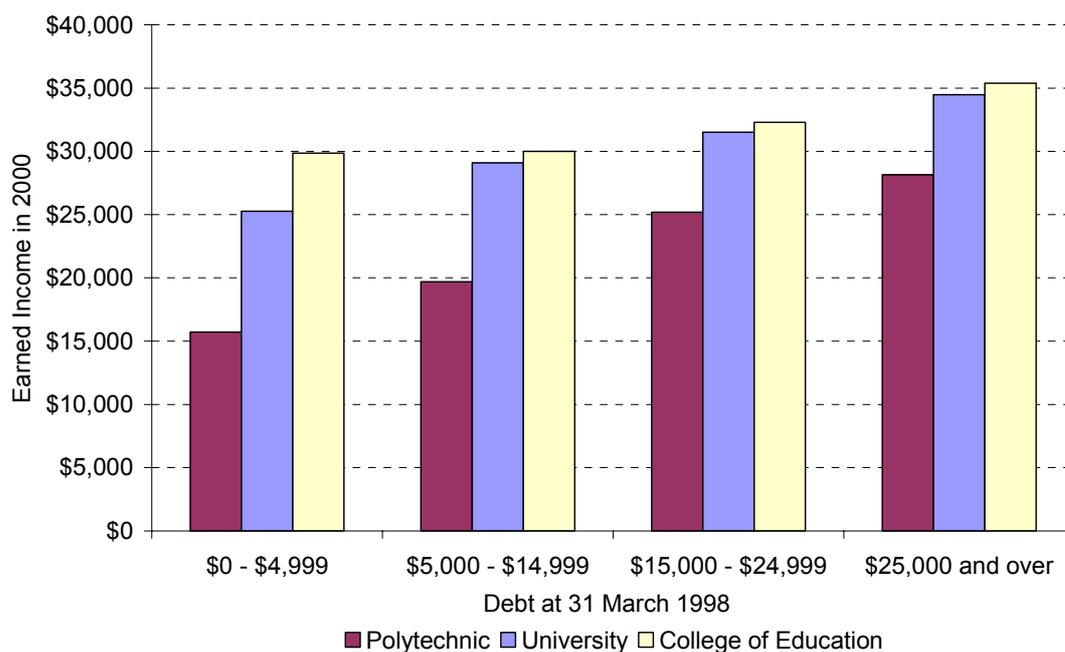
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

While median incomes were highest for college of education students, the highest mean earned income was found among those who attended a university; this difference applied in every debt band. While teachers have relatively high starting salaries, they face a comparatively uniform salary scale. Therefore, the probability of earning a very high income three years after completing study is lower for a college of education graduate than for a university graduate.

For all sub-sectors, mean and median incomes increased with the debt band. This was particularly noticeable for polytechnic students, where the median income was almost 80 percent higher for those in the highest debt band than for those in the lowest debt band, reflecting the diversity of qualification levels in that sub-sector. This contrasts with a difference in median income of 37 percent across the debt bands for university students and 18 percent for college of education students.

³³ Students are allocated to the sub-sector associated with the highest level of study they completed in 1997. Students who did not complete any qualification in 1997, are allocated to the sub-sector associated with the highest level of study they attempted. There were too few students from this cohort studying at wānanga to produce publishable statistics. In addition, information is not available on PTE students for this cohort.

Figure 4.20: Median earned income by debt at 31 March 1998 and sub-sector for those who last borrowed and studied in 1997



Notes:

1. Information is not available on PTE students for this cohort.
2. There are too few students from this cohort at wānanga to provide publishable statistics.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Income by debt and field of study

Figures 4.21 and 4.22 show the median earned income of students who last borrowed and studied in 1997 by debt band and field of study³⁴. The fields of study with the highest overall median income were health, engineering and education. The lowest median incomes were in mixed-field programmes and food, hospitality and personal services.

³⁴ Students are allocated to the field of study associated with the highest level of study they completed in 1997. Students who did not complete any qualification in 1997 are allocated to the field of study associated with the highest level qualification they were enrolled in.

Figure 4.21: Median earned income in 2000 by debt at 31 March 1998 and field of study for those who last borrowed and studied in 1997

| | Debt at 31 March 1998 | | | | |
|--|-----------------------|-----------------------|------------------------|----------------------|-------------------|
| | \$0 - \$4,999 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over | All debt bands |
| Natural and Physical Sciences | \$22,370 | \$25,860 | \$28,910 | \$31,180 | \$26,900 |
| Information Technology | \$17,250 | \$24,630 | \$33,740 | | \$23,540 |
| Engineering and Related Technologies | \$30,240 | \$31,110 | \$35,240 | \$37,600 | \$32,470 |
| Architecture and Building | \$21,150 | \$27,060 | \$28,780 | \$30,740 | \$27,690 |
| Agric, Environmental & Related Studies | \$15,850 | \$19,070 | \$27,750 | \$32,400 | \$19,230 |
| Health | \$27,010 | \$30,620 | \$35,600 | \$38,320 | \$33,430 |
| Education | \$29,410 | \$30,260 | \$32,880 | \$35,300 | \$32,120 |
| Management and Commerce | \$21,000 | \$24,490 | \$30,810 | \$35,200 | \$25,220 |
| Society and Culture | \$12,950 | \$18,990 | \$26,340 | \$30,670 | \$20,290 |
| Creative Arts | \$17,950 | \$19,230 | \$20,720 | \$23,280 | \$19,140 |
| Food, Hospitality and Personal Services | \$14,640 | \$17,120 | \$20,580 | \$24,510 | \$16,780 |
| Mixed Field Programmes | \$6,270 | \$14,310 | \$31,530 | \$32,460 | \$11,300 |
| Total | \$17,490 | \$21,790 | \$29,060 | \$32,890 | \$22,840 |

Notes:

1. Data has been rounded to the nearest \$10.
2. There were too few people studying information technology in the highest debt band to produce publishable statistics.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

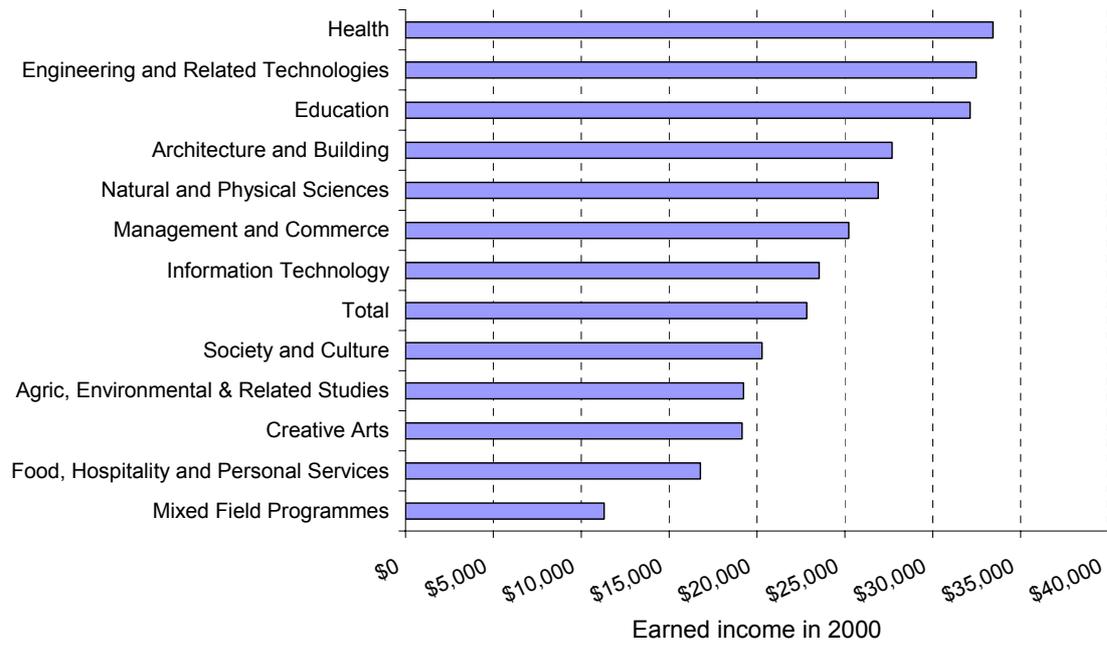
In all fields of study the positive relationship between higher mean and median income and higher debt was observed. The largest differences between the median incomes of the highest and lowest debt bands were in mixed-field programmes (a factor of 5), society and culture (2.4 times), agriculture, environmental and related studies (2 times), and information technology (2 times).

The smallest differences were in education (20 percent), engineering (24 percent) and creative arts (30 percent).

In the lowest two debt bands, the fields with the highest mean and median incomes were engineering and related technologies, health and education. In the lowest three debt bands, the fields with the lowest mean income were mixed-field programmes, food, hospitality and personal services, agriculture, environmental and related studies and creative arts.

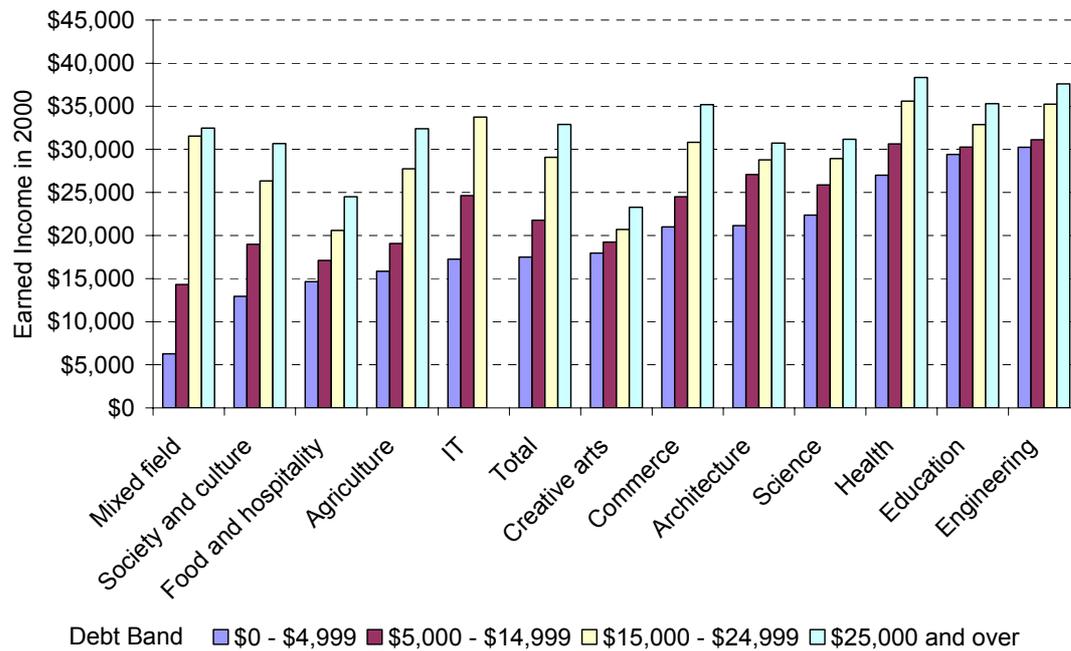
In the highest debt band, the fields with the lowest mean income were creative arts, food, hospitality and personal services, society and culture, and natural and physical sciences. In the highest debt band, the fields with the highest mean and median incomes were engineering and related technologies, management and commerce, and agriculture, environmental and related studies.

Figure 4.22: Median earned income by field of study for those who last borrowed and studied in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 4.23: Median earned income by debt band and field of study for those who last borrowed and studied in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

5 Debt and Repayment

Introduction

Many concerns have been raised over the impacts of having to repay student loan debt. These concerns include claims that the presence of student loan debt: reduces people's ability to save for retirement and causes people to delay marriage and family formation. Some argue that people with a student loan debt are less likely to obtain finance to buy a house or for other purposes. Others have argued that the student loan scheme and subsequent repayment obligations discriminate certain groups of society who earn lower incomes. In particular, Māori and women are said to be unfairly disadvantaged because of this. One of the most frequently voiced concerns is that students with a student loan debt are more likely to go overseas enticed either by high incomes overseas as a means of meeting their repayment obligations, or as a way to avoid or defer repayment³⁵.

Estimates of loan repayment times have often been used to illustrate the impact of debt on individuals and society. The average repayment period has fallen to 9.3 years from 9.6 years last year and 10.3 years at 30 June 2002. Overall repayment time is currently estimated to be 7.2 years for males, and 10.8 years for females³⁶. However, much of the debate around the impacts of debt repayment has been conducted in a relative absence of suitable research. As mentioned earlier, one of the government's responses to this was to fund the development of the integrated student loan dataset. In this chapter, the integrated student loan dataset is used to analyse student loan repayment by a number of demographic and study-related characteristics.

As in the previous chapter, this study considers two cohorts of students. The first cohort consists of those who last borrowed in 1994 and were resident in New Zealand in 2000³⁷. The second cohort consists of those who last borrowed and studied in 1997, had a positive debt at March 1998 and were resident in New Zealand in 1997 and 2000³⁸. The integrated dataset contains full linked data only for those who used the Student Loan Scheme between 1997 and 2000; there is only limited data on those who used the scheme earlier. In fact, repayment information on the 1994 cohort can be broken down by gender only.

Because the integrated dataset is current to 2000 only, it will not reflect the situation for overall debt and subsequent progress to repayment following the policy changes that were

³⁵ See *Inquiry into student fees, loans, allowances and the overall resourcing of tertiary education*, Report of the Education and Science Committee, October 2001, eg pages 9-10. The one rigorous statistical study of these factors is Scobie G M and J K Gibson (2002) *Individual net worth in New Zealand: A preliminary analysis based on a new survey*. Paper presented to the conference of the NZ Society of Actuaries, Rotorua, 2002. <http://www.actuaries.org.nz/events/Conference%202002.htm>. Scobie and Gibson, analysing the data from the Household Savings Survey found no evidence that the presence of student loan debt was associated with delays in the age of mothers who gave birth for the first time. They did find a small but statistically significant effect on the presence of a mortgage and also the size of mortgages.

³⁶ Ministry of Education, Inland Revenue, Ministry of Social Development (2004), *Annual Report Student Loan Scheme Incorporating the Financial Statements to 30 June 2004*, page 18.

³⁷ Some of those who last borrowed in 1994 may have studied subsequently without using the Student Loan Scheme. Loan balances at 31 March 1995 for the 1994 cohort have been estimated by adding the annual amounts borrowed, the annual interest transferred amounts from 1992 to 1994 and an estimate of interest compounded by IRD in that time. Zero repayments were assumed in the absence of income and repayment information. This will overestimate at least some peoples' debt in 1994, resulting in a higher estimated percentage debt repaid than the true value. The true value of the medians (and other statistics) may be lower than presented.

³⁸ Those with a missing level of study were excluded from the 1997 cohort. Those with zero or missing taxable income have been excluded from both cohorts. Because of small differences between the definitions of the cohorts used in this chapter, the numbers of students will differ from those in other chapters

introduced in 2000³⁹. These acted to reduce the finishing debt that a student acquired. It might be expected, therefore, that progress to repayment for students studying from 2000 onwards will be faster than that presented in this chapter⁴⁰.

Debt and repayment overall

Figure 5.1 looks at the percentage of debt repaid by 31 March 2001. The 1994 borrowers had six years of making repayments, while the 1997 borrowers had three years. By 2001, almost 50 percent of those who last borrowed and studied in 1997 had not reduced their debt. However, almost half of those who last borrowed in 1994 had repaid at least three quarters of their debt.

In Figure 5.1, those in the 'zero or less' column had a debt at March 2001 that was at least as large as, if not larger than, it was when they finished borrowing (ie they have made no progress towards reducing their debt). Students in the '100%' column had completely repaid their debt by March 2001 and those in between were making progress towards repaying their debt.

The proportion of the 1994 borrowers who had fully repaid their debt by March 2001 was more than twice that of the 1997 borrowers (39 percent compared with 18 percent), indicating an accelerating repayment rate as borrowers' careers advanced. The distributions are both bimodal. For both cohorts a large proportion has either repaid all of their debt or has made no progress (69 percent of 1994 borrowers and 66 percent of 1997 borrowers).

A significant proportion of both cohorts had made no progress in repaying their debt (49 percent of 1997 borrowers and 29 percent of 1994 borrowers). It is possible that some students will legitimately have a negative debt repaid. This would occur for those borrowers who have not made any repayments on their debt, with a consequence that the interest will have increased their debt. The debt of those who have met all of their repayment obligations cannot, however, rise in real terms, as only the CPI component of the interest is charged if a borrower's income is low.

While almost half of those who last borrowed and studied in 1997 had not reduced their debt by March 2001, half of those who last borrowed in 1994 had repaid at least three quarters of their debt by March 2001 (ie after six years). This tends to corroborate June 2004 Ministry estimates of the average repayment time of 9.3 years, compared with 9.6 years a year earlier and 10.3 years in June 2002. Most borrowers repay in about eight years.

The analysis in this report is concerned with nominal balances only, and hence overstates the real value of debt. Reference should be made to the Student Loan Scheme Annual Report 2004, pages 32 to 34, for information on interest write-offs. Borrowers who do not pay their annual repayment on time incur penalties which could also increase their level of debt.

³⁹ These included full interest write-off for while studying for full-time full-year students and some part-time student son low incomes, as well as partial interest write-offs and interest reduction for other part-time students. The interest rate was frozen at 7 percent for the 2000/01 income year. See Student loan Scheme Annual Report 2001, for more details.

⁴⁰ Updates to the integrated student loan dataset for students enrolled in the 2001 and 2002 academic year will be made by the end of 2004. It is planned to update the dataset annually thereafter.

Figure 5.1: Percentage of debt repaid by 2001 for those who last borrowed in 1994 and those who last borrowed and studied in 1997

| | Percent repaid by March 2001 | | | | | | All students |
|-----------------------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Last borrowed in 1994 | 29% | 9% | 7% | 5% | 10% | 39% | 26,589 |
| Last borrowed and studied in 1997 | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995 and 31 March 1998.

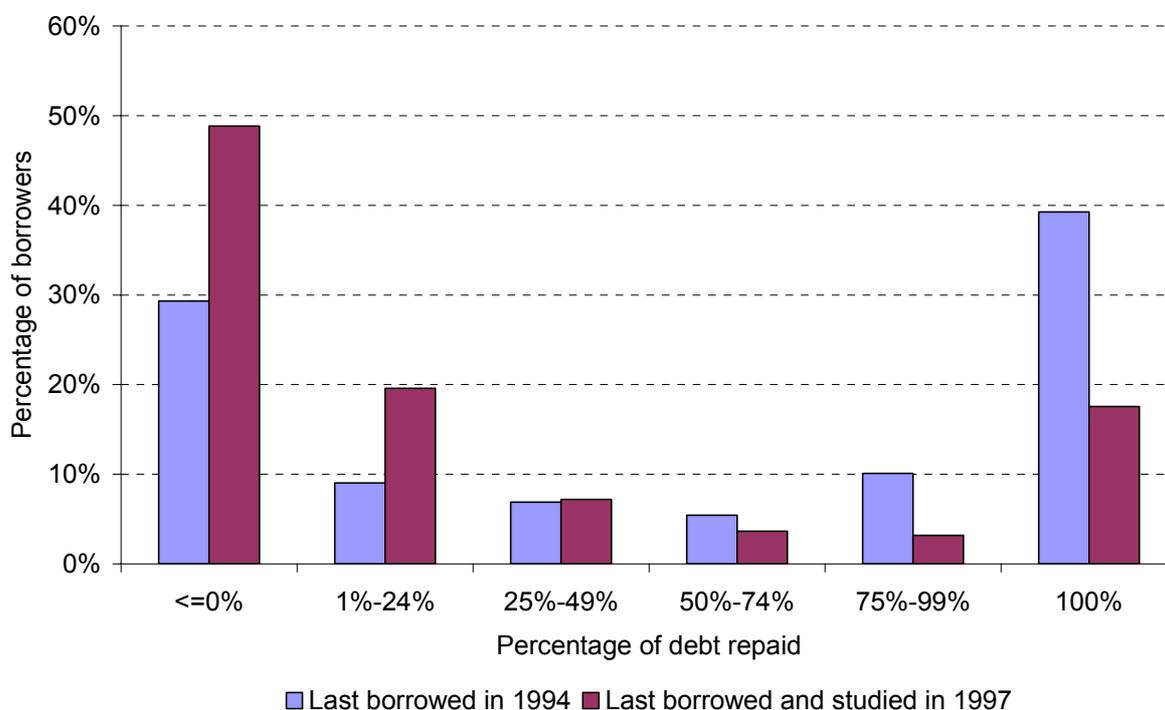
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.2 shows the different repayment profiles of the two cohorts. Much higher proportions of the 1997 borrowers have made no progress or have repaid less than a quarter of their debt than the 1994 borrowers (68 percent as opposed to 38 percent), while much higher proportions of the 1994 borrowers have repaid at least three quarters of their debt (49 percent as opposed to 21 percent).

The bimodal distributions in each cohort result in U-shaped graphs. For the 1994 borrowers the right side of the U is higher than the left, while the reverse is true for the 1997 borrowers. As time passes, the percentage of debt repaid increases for most borrowers, and they move through the curve from nothing repaid towards full repayment.

Figure 5.2: Percentage of debt repaid by 2001 for those who last borrowed in 1994 and those who last borrowed and studied in 1997



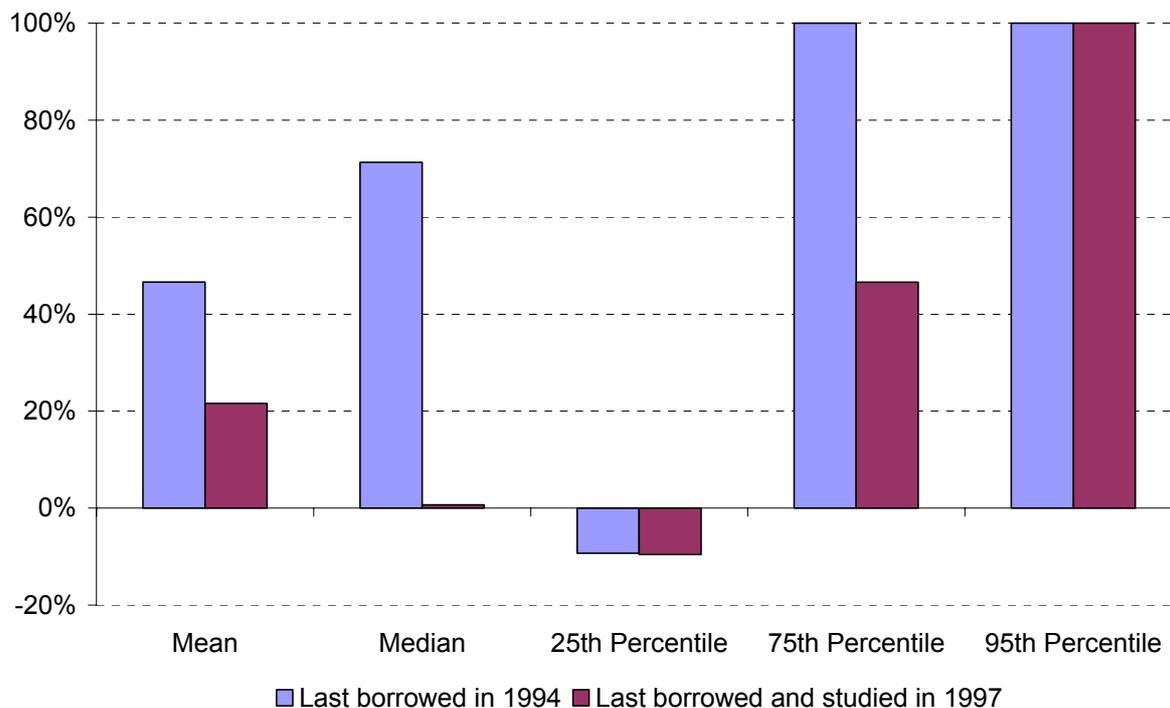
Note: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995 and 31 March 1998.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.3 shows statistics relating to the percentage of debt repaid by 2001 for those who last borrowed in 1994 and those who last borrowed in 1997. Reflecting the U-shape of both cohorts shown in figure 5.2, the 25th and 95th percentiles are almost identical. More than a quarter of students in both cohorts had made no progress towards repayment of their debt

(25th percentile was less than zero in each case)⁴¹. The largest differences are in the median and 75th percentile. More than a quarter of the 1994 cohort have completely repaid their debt (75th percentile is 100 percent), but three quarters of the 1997 cohort have repaid less than half of their debt. Half of the 1994 cohort has repaid more than 70 percent of their debt, and half of the 1997 cohort has repaid less than 1 percent of their debt. The means are much closer together than the medians.

Figure 5.3: Percentage of debt repaid by 2001 statistics for those who last borrowed in 1994 and those who last borrowed and studied in 1997



Note: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995 and March 1998.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by level of debt

Figures 5.4 and 5.5 show the progress made by students who last borrowed in 1994 towards repaying their debt by March 2001 by their level of debt in 1994.

The graphs for all debt bands are U-shaped as discussed above. Unsurprisingly, the cohort with the best repayment record by 2001 is the group that had the lowest debt in 1994 (below \$5,000). Almost half of that group had completely repaid their debt by 2001 and 57 percent had repaid at least three quarters of their debt. The group with the second lowest debt in 1994 (between \$5,000 and \$14,999) had the second fastest repayment record. 36 percent of that group had completely repaid their debt by 2001 and about half (47 percent) had repaid at least three quarters of their debt.

The group with the highest leaving debt was not the slowest to repay, probably due to earning higher incomes. The cohort repaying most slowly comprised those with a debt between \$15,000 and \$25,000. Only 21 percent of that group had repaid all of their debt by 2001, and 29 percent had repaid at least three quarters of their debt. These percentages are much lower than for the other three groups.

⁴¹ A percentage repaid of less than zero means that the loan balance has increased. This can happen when accrued interest or penalties exceeds repayments.

Very similar percentages of people in each debt band have made no progress repaying their student loan debt.

Almost 80 percent of the group with the lowest debt in 1994 had repaid ‘all or nothing’ of their debt by 2001. Only 53 percent of the group with a debt between \$15,000 and \$25,000 had repaid all or nothing of their loan, which means that almost half of these students are still “in progress” with their repayment.

Figure 5.4: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by debt in 1994

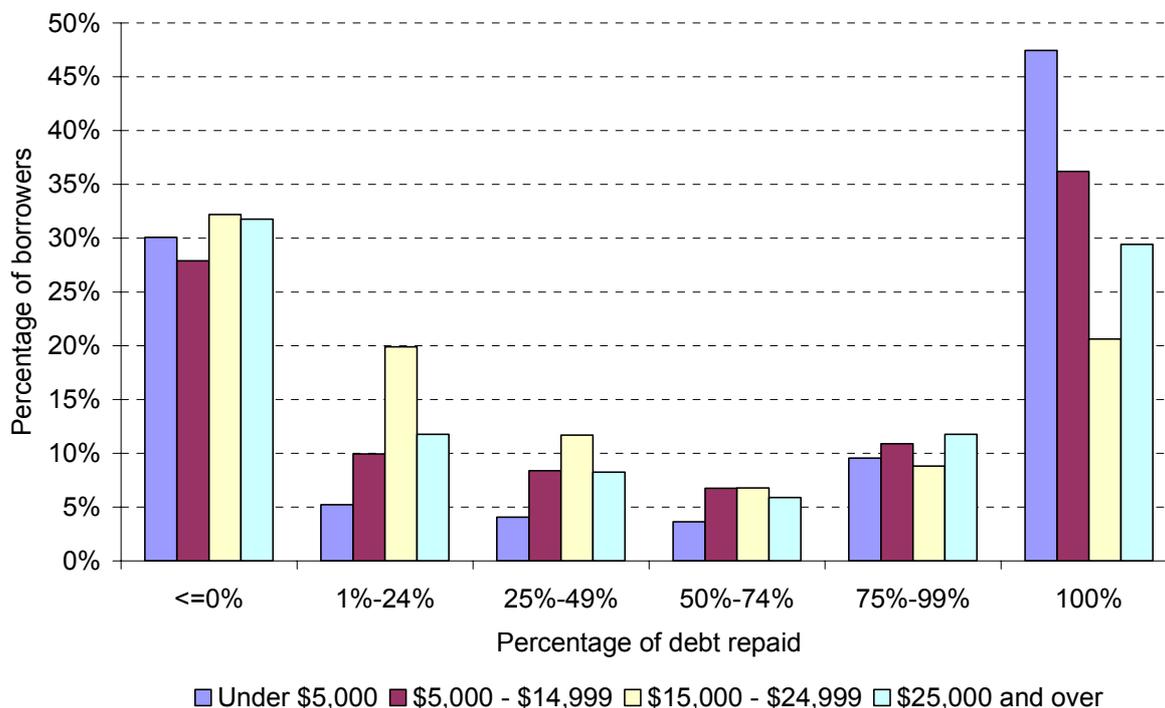
| Debt at March 1995 | Percent repaid by March 2001 | | | | | | All students |
|---------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | 30% | 5% | 4% | 4% | 10% | 47% | 11,397 |
| \$5,000 - \$14,999 | 28% | 10% | 8% | 7% | 11% | 36% | 12,015 |
| \$15,000 - \$24,999 | 32% | 20% | 12% | 7% | 9% | 21% | 2,925 |
| \$25,000 and over | 32% | 12% | 8% | 6% | 12% | 29% | 255 |
| All students | 29% | 9% | 7% | 5% | 10% | 39% | 26,589 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.5: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by debt in 1994



Note: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995 and 31 March 1998.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.6 shows statistics relating to the percentage of debt repaid by 2001 for those who last borrowed in 1994 by debt band. The 25th, 75th and 95th percentiles are all very close for each of the debt bands. The largest difference is in the medians. The median for the lowest debt

band is very close to 100 percent, compared with 60 percent for the second debt band, 40 percent for the highest debt band and 20 percent for the second highest debt band.

Figure 5.6: Percentage of debt repaid by 2001 statistics for those who last borrowed in 1994 by debt in 1994

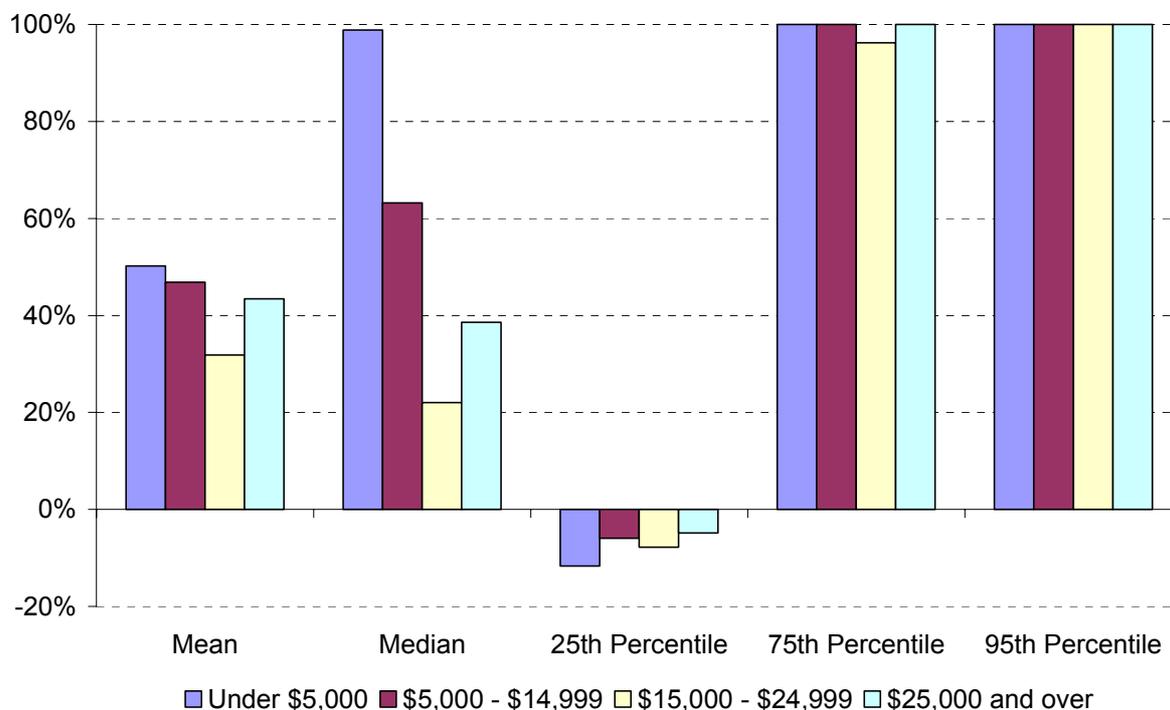


Figure 5.7: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by debt band

| Debt at March 1995 | | Percent repaid by | | | |
|--------------------------------|----------------------|-------------------|-------|-------|-------|
| | | 1998 | 1999 | 2000 | 2001 |
| Under \$5,000 (11,397) | Mean | 33.2% | 40.6% | 46.3% | 50.2% |
| | Median | 17.5% | 46.4% | 87.0% | 98.9% |
| | Percent fully repaid | 24% | 35% | 43% | 47% |
| \$5,000 - \$14,999 (12,015) | Mean | 23.0% | 32.2% | 40.1% | 46.8% |
| | Median | 9.2% | 21.7% | 39.1% | 63.2% |
| | Percent fully repaid | 12% | 21% | 29% | 36% |
| \$15,000 - \$24,999 (2,925) | Mean | 9.0% | 16.2% | 24.1% | 31.8% |
| | Median | -0.8% | 3.7% | 11.2% | 22.0% |
| | Percent fully repaid | 5% | 10% | 15% | 21% |
| \$25,000 and over (255) | Mean | 19.5% | 27.6% | 36.0% | 43.4% |
| | Median | 8.1% | 13.4% | 24.9% | 38.6% |
| | Percent fully repaid | 8% | 15% | 24% | 29% |
| All students (26,589) | Mean | 25.8% | 34.0% | 41.0% | 46.6% |
| | Median | 8.6% | 22.5% | 43.7% | 71.3% |
| | Percent fully repaid | 16% | 26% | 34% | 39% |

Notes:

1. Percentage of debt repaid is based on the loan balance for the years 31 March 1998-2001 in relation to the loan balances at 31 March 1995.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.7 shows the mean and median percentage debt repaid by students in the different debt bands for each year between 1998 and 2001, as well as the percentage of people within each debt band who had fully repaid their debt (graphed in figure 5.8). The percentage of borrowers fully repaying their debt increased steadily each year, reaching 39 percent by 2001. By 2001, the average borrower had repaid 47 percent of their debt.

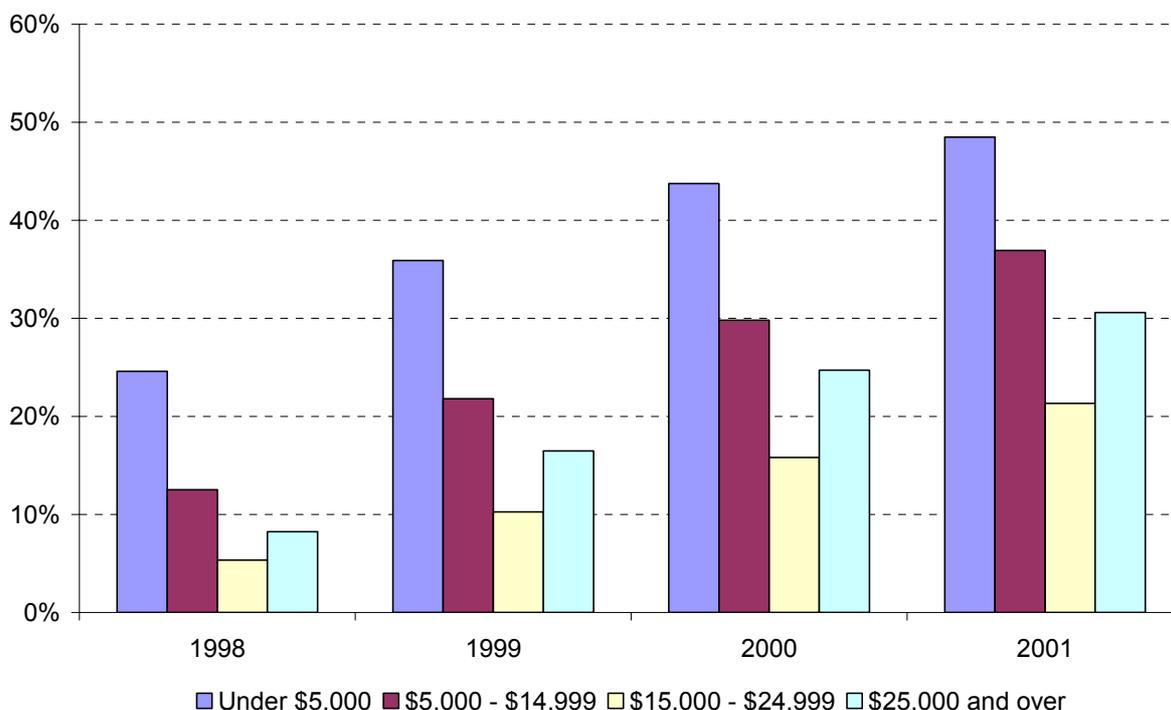
Means, medians and the percentage of people who have fully repaid their debt increased in all years for all debt bands. In some cases the increase from 1998 to 2001 was very dramatic, illustrating accelerating repayment rates as borrowers build careers and move to higher salaries. For instance, in the lowest debt band, the median increased from 18 to 99 percent.

By 2001, the median percentage debt repaid for the under \$5,000 group was 99 percent, but the mean was 50 percent, while the 25th percentile was negative. This pattern reflects the bimodal nature of the distribution, and in particular the reducing but still relatively large tail in the cohort. That group comprised nearly half (47 percent) who had completely repaid and more than a quarter who had not made any progress, so at least three quarters were in the ‘all or nothing’ category. The 25th percentile was negative across all groups and all years.

There was no change in rankings over the four years for any of the statistics in figure 5.7 – the lowest debt band had the highest mean, median and percentage to have fully repaid in every year, the second lowest debt band was second, the highest debt band third and the second highest debt band fourth.

Figure 5.8 shows the proportions in each debt band who had completely repaid in each year. In each debt band, the numbers to have fully repaid increase in each year, although the rate of increase slows over time as the proportion repaid rises.

Figure 5.8: Percentage of people who last borrowed in 1994 who had fully repaid their debt by debt band, 1998-2001



Note: Percentage of debt repaid is based on the loan balance for the years 31 March 1998-2001 in relation to the loan balances at 31 March 1995.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figures 5.9 and 5.10 show the progress made by students who last borrowed and studied in 1997 towards repaying their debt by 2001 by their debt in 1998. Again, the higher two debt bands contain fewer students than the lower two, but the difference in the proportion of borrowers in each debt band is less extreme than that for the 1994 borrowers because of higher fees between 1995 and 1997.

Figure 5.9: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by debt at March 1998

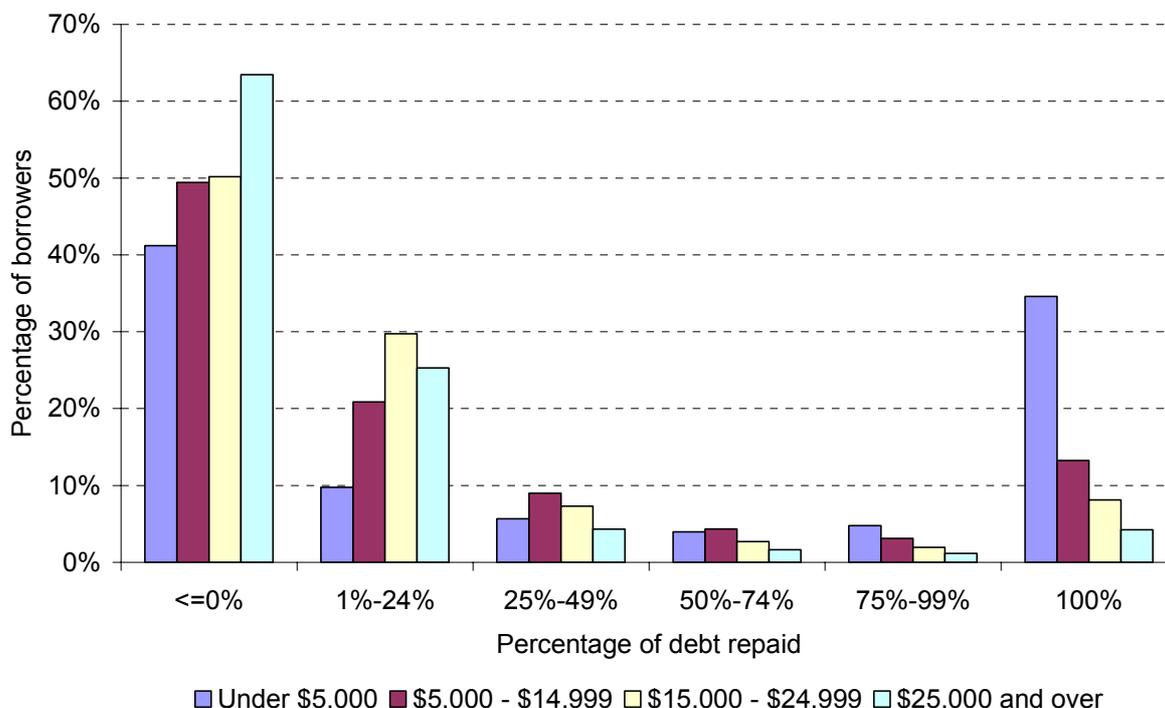


Figure 5.10: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by debt at March 1998

| Debt at March 1998 | Percent repaid by March 2001 | | | | | | All students |
|---------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | 41% | 10% | 6% | 4% | 5% | 35% | 9,465 |
| \$5,000 - \$14,999 | 49% | 21% | 9% | 4% | 3% | 13% | 13,965 |
| \$15,000 - \$24,999 | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 |
| \$25,000 and over | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.

2. Counts data has been randomly rounded to base 3.

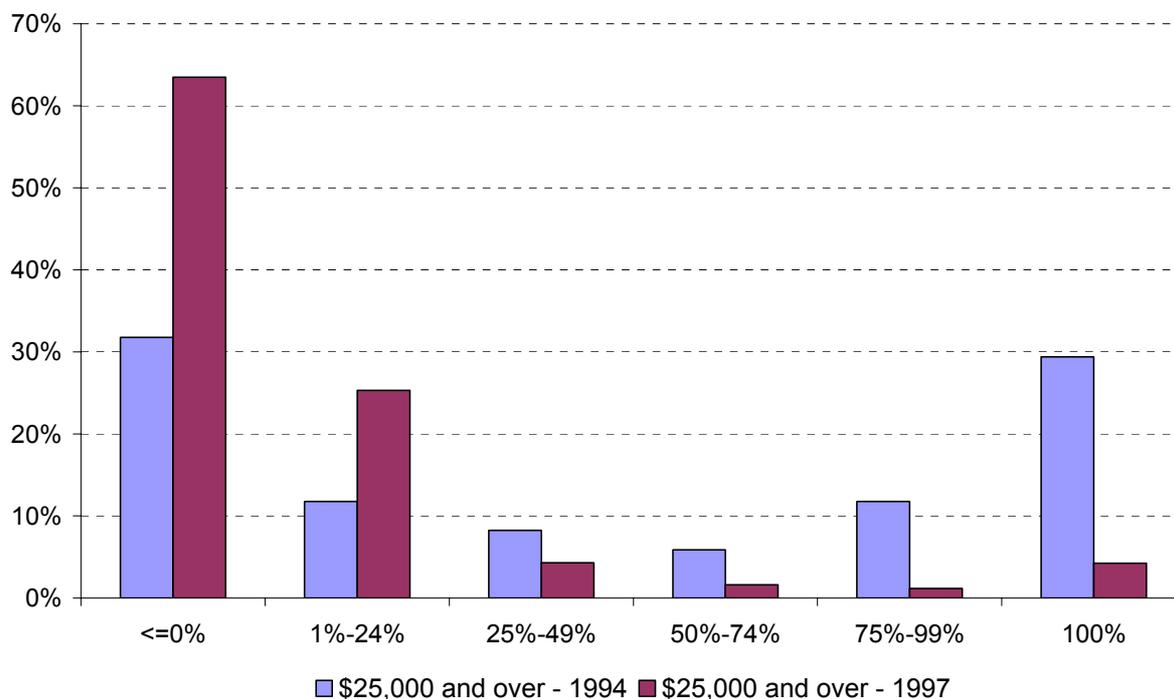
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

For the 1997 borrowers, there is a clear inverse relationship between initial debt and progress towards repayment by 2001. The curve for all debt bands is U-shaped, but the right hand side – showing the percentage who had completely repaid – was relatively low for the highest debt band in particular.

The biggest difference between the 1994 and the 1997 borrowers was for those who had a debt over \$25,000. Figure 5.11 shows these two groups on the same graph. Only 4 percent of the 1997 group had fully repaid their debt by 2001, compared with 29 percent of the 1994 group. Over 60 percent of the 1997 group had made no progress repaying their debt and almost 90 percent of that group still owed at least three quarters of their starting debt by 2001.

For the 1994 group, 32 percent had made no progress and 44 percent owed at least three quarters of their starting balance.

Figure 5.11: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt over \$25,000 and those who last borrowed in 1994 with a debt over \$25,000



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

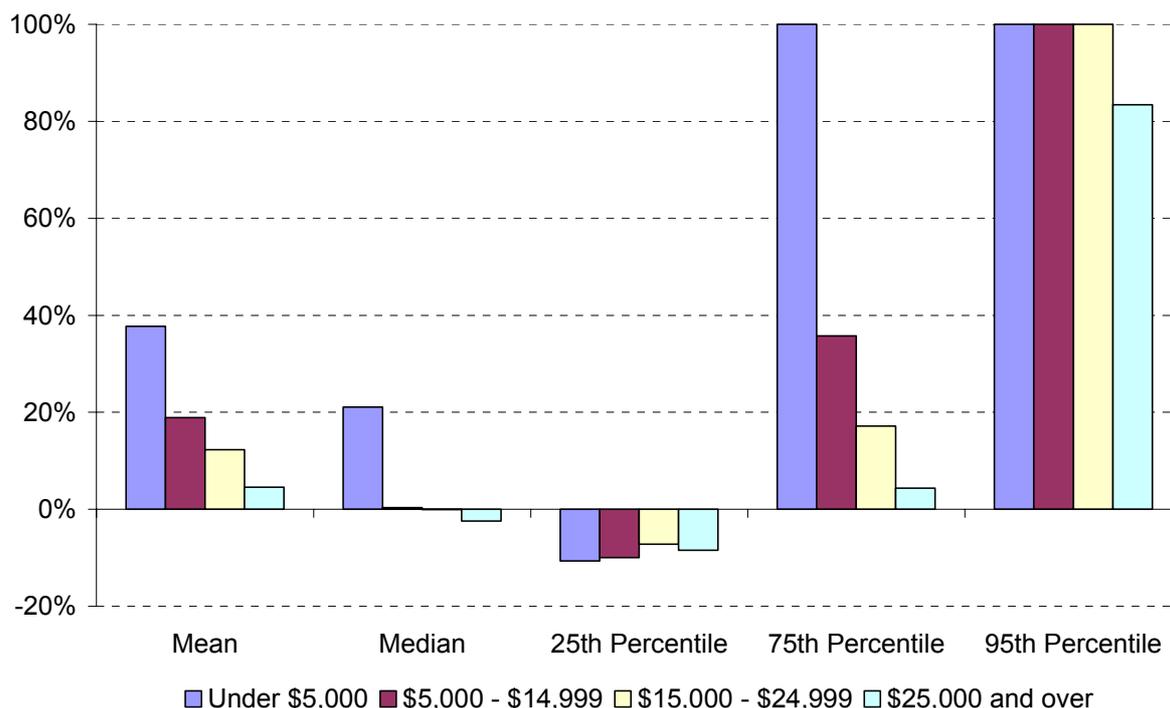
Figure 5.11, like figure 5.2 illustrates the acceleration in progress to repayment in the fourth, fifth and six years following completion of study as people build their careers and hence their earning power.

There was considerably less difference between the 1994 and 1997 borrowers with a debt under \$5,000. Just under half (47 percent) of the 1994 group had fully repaid their loan by 2001, compared with just over a third of the 1997 group. Thirty percent of the 1994 group had made no progress, compared with 41 percent of the 1997 group.

In the second lowest debt band, there was a more substantial difference between the 1994 and 1997 borrowers. Over a third of the 1994 group had completely repaid their debt by 2001, compared with 13 percent of the 1997 group. Less than 30 percent of the 1994 group had made no progress, compared with about half of the 1997 group.

Figure 5.12 shows statistics relating to the percentage of debt repaid by the 1997 borrowers by debt band. For the mean, median and 75th percentile, there is a clear inverse relationship between initial debt and progress towards repayment, with the 75th percentile showing the largest variation (100 percent for the lowest debt band, 4 percent for the highest debt band). The range of the means was from 38 percent to 5 percent, while the medians ranged from 21 percent to -2 percent. In the highest debt band, more than half of borrowers had a higher debt by 2001 than they did in 1997. There was very little difference in the 25th percentiles by debt band. These ranged from -7 percent to -11 percent.

Figure 5.12: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by debt band



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by gender

An analysis of the progress to repayment of men and women shows that there is little difference between the repayment rates of men and women over the six years between 1994 and 2000. It might have been expected that women would have slower repayment rates due to earning lower incomes or taking time out of the workforce to start a family, but that was not evident either in this cohort or in that of 1997. Figures 5.13 and 5.14 show the percentage debt repaid by 2001 for those who last borrowed in 1994 by gender.

Figure 5.13: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by gender

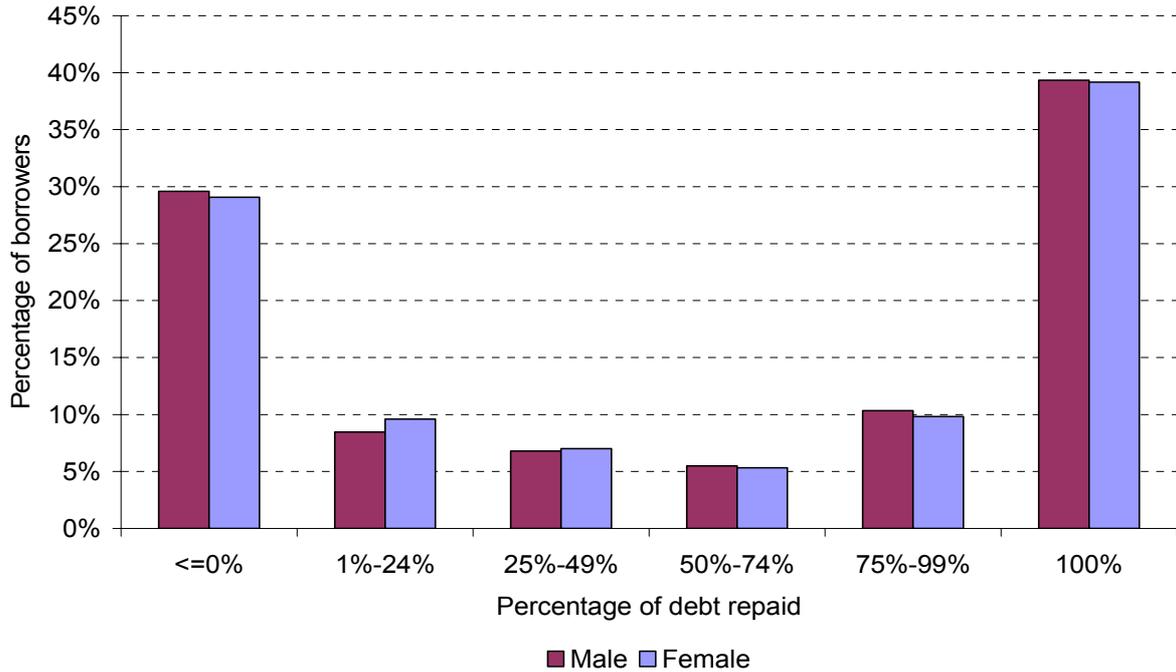
| | Percent repaid by March 2001 | | | | | | All students |
|--------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Males | 30% | 8% | 7% | 5% | 10% | 39% | 13,431 |
| Females | 29% | 10% | 7% | 5% | 10% | 39% | 13,158 |
| All students | 29% | 9% | 7% | 5% | 10% | 39% | 26,589 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

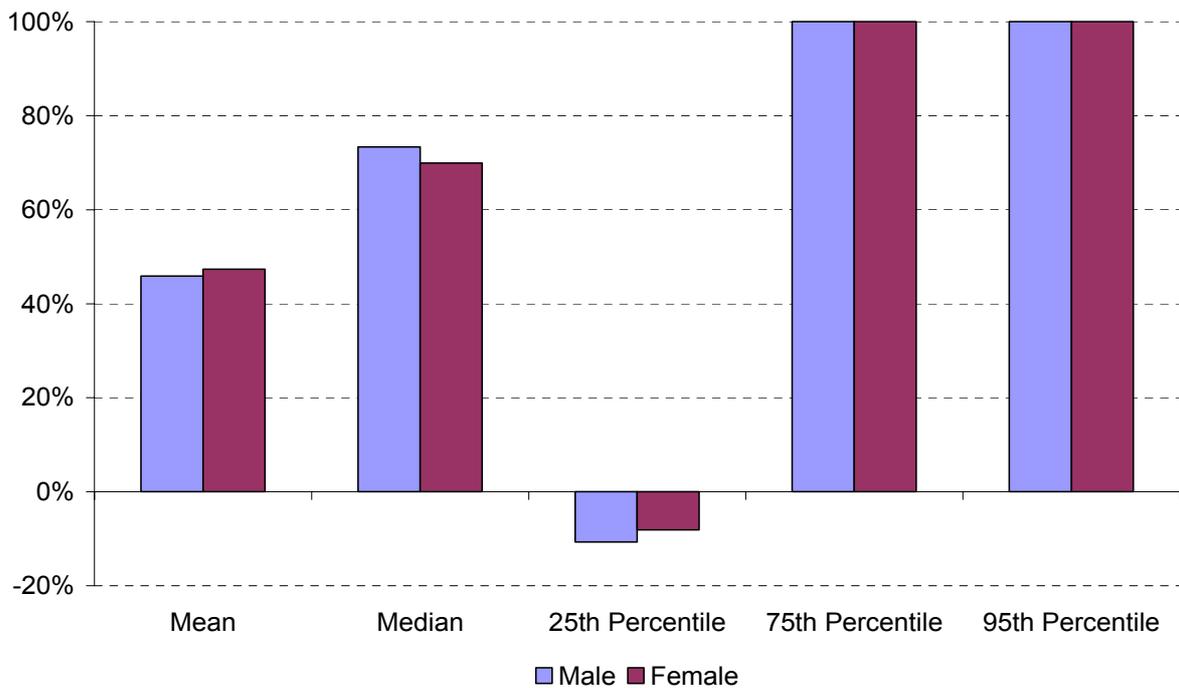
Figure 5.14: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.15 shows again very little difference between men and women. The male median percentage debt repaid is slightly higher than the female (73 percent compared with 70 percent), and the female mean percentage debt repaid is slightly higher than that for men. Over a quarter of those in the study owed more in nominal terms by 2001 than in 1994. This applied to both men and women.

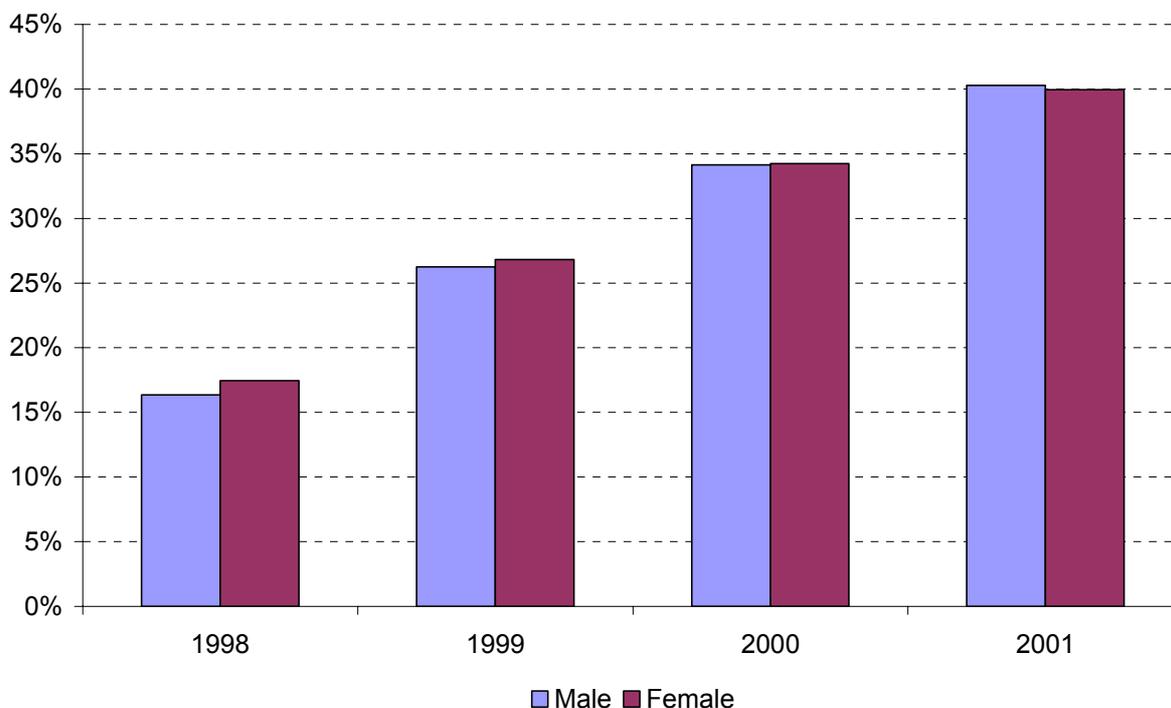
Figure 5.15: Percentage of debt repaid by 2001 statistics for those who last borrowed in 1994 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.16 shows the percentage of men and women who last borrowed in 1994 who have fully repaid their debt by 1998 to 2001. Women had a slightly higher percentage in 1998, but this situation was eroded in 1999 and 2000 until men had a slightly higher percentage in 2001. However, the differences are very slight, with the proportions rising each year and the rate of increase slowing over time.

Figure 5.16: Percentage of people who last borrowed in 1994 who had fully repaid their debt by 1998, 1999, 2000 and 2001



Note: Percentage of debt repaid is based on the loan balance for the years 31 March 1998-2001 in relation to the loan balances at 31 March 1995.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.17: Debt in 1994 and 2000 for those who last borrowed in 1994 by gender

| | Average debt | | | Median debt | | |
|--------------|--------------|---------|----------|-------------|---------|----------|
| | 1994 | 2000 | % change | 1994 | 2000 | % change |
| Male | \$7,580 | \$4,330 | 43% | \$6,000 | \$1,180 | 80% |
| Female | \$7,370 | \$4,270 | 42% | \$5,980 | \$1,160 | 81% |
| All students | \$7,480 | \$4,300 | 43% | \$5,990 | \$1,170 | 80% |

Notes:

1. Debt in 1994 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.17 shows the average and median debt in 1998 (after leaving study) and in 2001 for men and women who last borrowed in 1994. Men borrowed slightly more than women, and had a slightly higher debt six years later. There was very little difference in percentage change terms.

Figures 5.18 and 5.19 show the percentage debt repaid by 2001 for those who last borrowed and studied in 1997 by gender. As with the 1994 cohort, there is not a large difference between men and women. Slightly more men than women have made no progress repaying their loan (51 percent compared with 47 percent), and slightly more women than men have repaid either all of their loan or between 0 and 25 percent of their loan.

Figure 5.18: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by gender

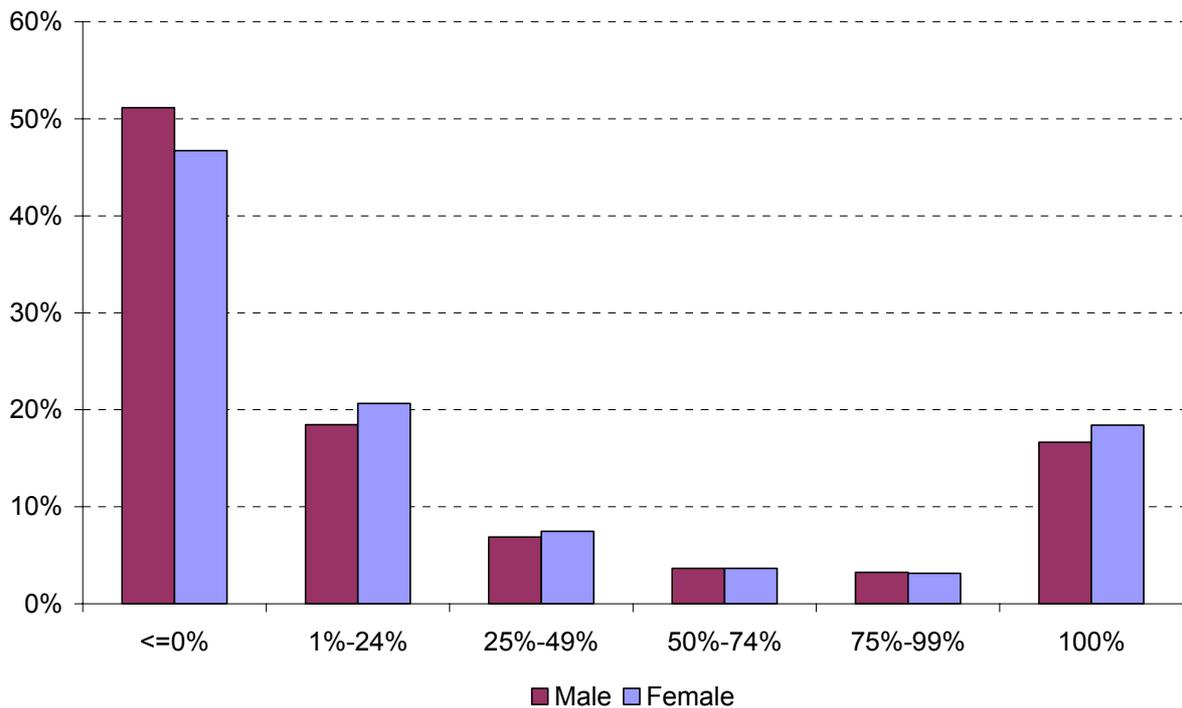
| | Percent repaid by March 2001 | | | | | | All students |
|--------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Males | 51% | 18% | 7% | 4% | 3% | 17% | 15,690 |
| Females | 47% | 21% | 7% | 4% | 3% | 18% | 16,887 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

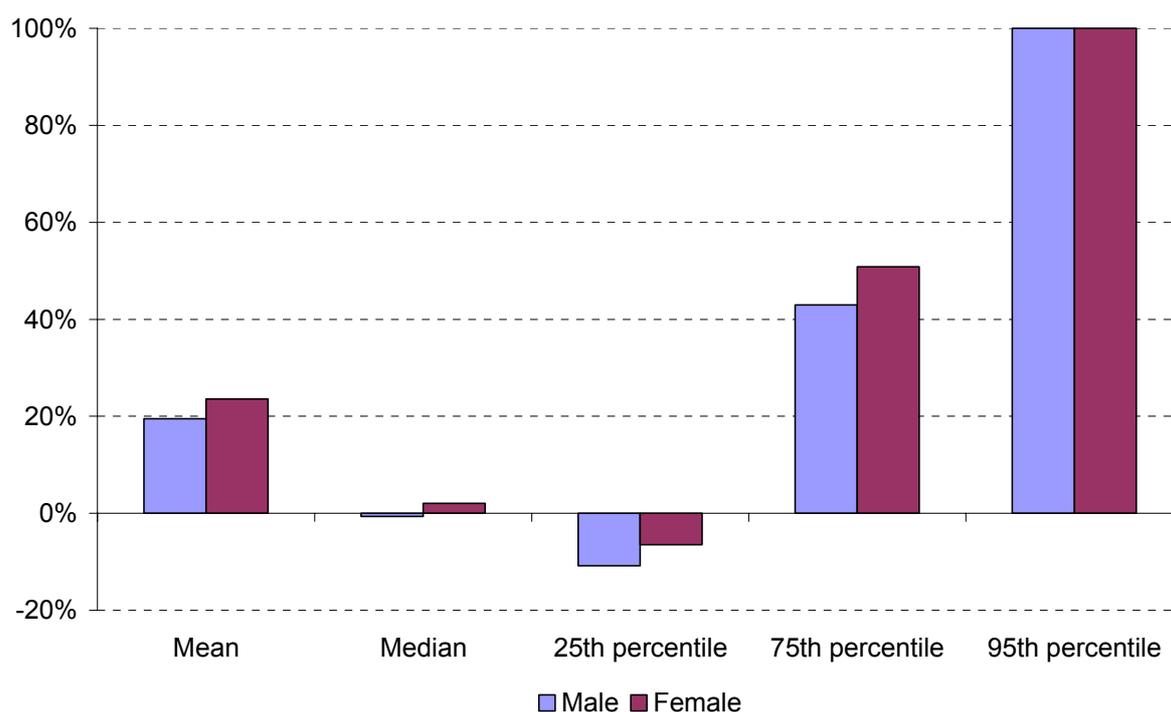
Figure 5.19: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.20 shows some statistics relating to the percentage of debt repaid by 2001 by gender of the 1997 borrowers. On all statistics except the 95th percentile (which is 100 percent for both), women repaid a higher percentage of their debt than men. Only for the 75th percentile does the margin exceed 5 percentage points.

Figure 5.20: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.21: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by gender

| | Average debt | | | Median debt | | |
|--------------|--------------|----------|----------|-------------|---------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Males | \$12,060 | \$10,690 | 11% | \$8,600 | \$6,770 | 21% |
| Females | \$11,800 | \$10,170 | 14% | \$8,890 | \$6,920 | 22% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.21 shows leaving debt and debt three years later for those students who last borrowed and studied in 1997 by gender. Men had a higher average debt and a lower median debt both on completion and three years later. In 1997, the male average debt was \$260 higher than the average female debt, and the difference was \$520 by 2001, as the average debt for women fell by slightly more than the male average debt.

Although there was no significant difference in the analysis by gender alone, there was more of a difference when analysing by gender and debt band. In particular, in the highest debt band⁴², men appeared to repay their loan debt more quickly than women. Differences between men and women were less in every other debt band. Figure 5.22 shows the percentage of debt repaid by 2001 for those who last borrowed in 1994 by gender and debt band in 1994.

⁴² The highest debt band contains less than 10 percent of the students who last borrowed in 1994.

Figure 5.22: Percentage of debt repaid by 2001 for those who last borrowed in 1994 by gender and debt band

| Debt at March 1995 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|--------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Male | 30% | 5% | 4% | 4% | 10% | 47% | 5,721 |
| | Female | 30% | 5% | 4% | 3% | 9% | 48% | 5,676 |
| | Total | 30% | 5% | 4% | 4% | 10% | 47% | 11,397 |
| \$5,000 to \$14,999 | Male | 28% | 9% | 8% | 7% | 11% | 36% | 6,048 |
| | Female | 27% | 11% | 9% | 7% | 11% | 36% | 5,964 |
| | Total | 28% | 10% | 8% | 7% | 11% | 36% | 12,015 |
| \$15,000 to \$24,999 | Male | 32% | 18% | 10% | 7% | 9% | 24% | 1,518 |
| | Female | 33% | 22% | 13% | 6% | 8% | 17% | 1,407 |
| | Total | 32% | 20% | 12% | 7% | 9% | 21% | 2,925 |
| \$25,000 and over | Male | 26% | 11% | 9% | 6% | 13% | 34% | 141 |
| | Female | 38% | 14% | 8% | 5% | 8% | 24% | 111 |
| | Total | 32% | 12% | 8% | 6% | 12% | 29% | 255 |
| Total | Male | 30% | 8% | 7% | 5% | 10% | 39% | 13,431 |
| | Female | 29% | 10% | 7% | 5% | 10% | 39% | 13,158 |
| | Total | 29% | 9% | 7% | 5% | 10% | 39% | 26,589 |

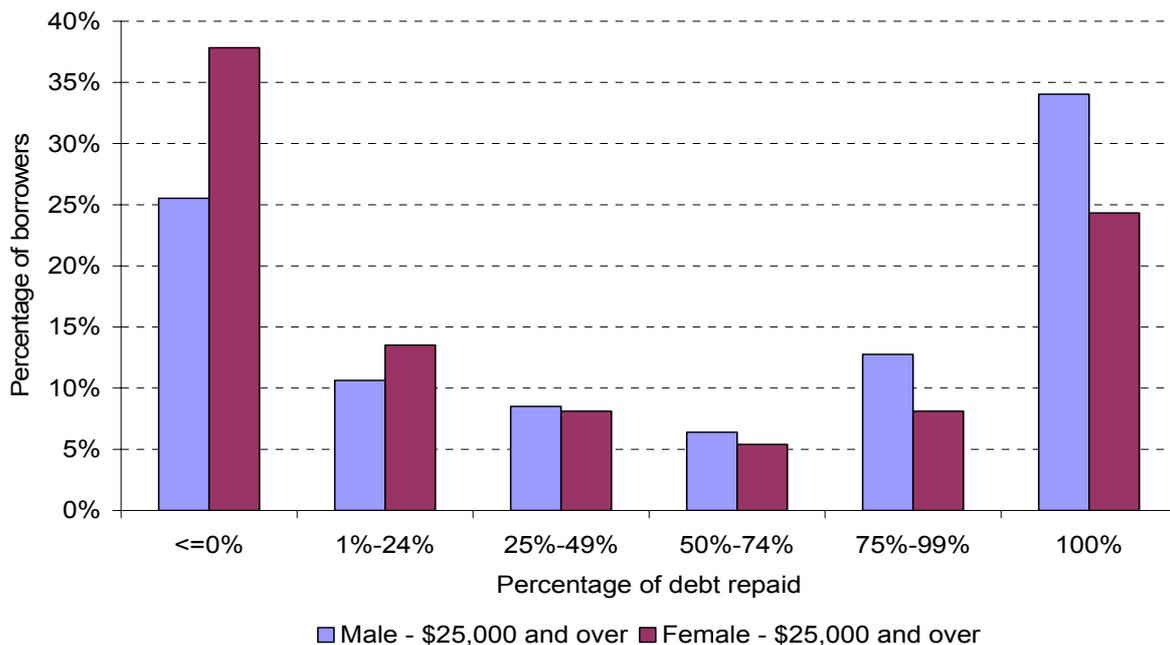
Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In the highest debt band, 34 percent of men fully repaid their debt compared with 24 percent of women. Almost half of the men repaid at least three quarters of their debt (47 percent), compared with 32 percent of women. More than half of the female debtors repaid less than a quarter of their debt (51 percent), compared with 36 percent of the men. Almost 40 percent of women made no progress (38 percent), compared with about a quarter of men (26 percent). Figure 5.23 illustrates the differences in repayment record between men and women who last borrowed in 1994 with a debt over \$25,000.

Figure 5.23: Percentage of debt repaid by 2001 for those who last borrowed in 1994 with a debt greater than \$25,000 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.24: Percentage of debt repaid by 2001 statistics for those who last borrowed in 1994 by gender and debt band

| | Percent repaid by March 2001 | | | |
|-----------------------------|------------------------------|--------------------|---------------------|-------------------|
| | Under \$5,000 | \$5,000 - \$14,999 | \$15,000 - \$24,999 | \$25,000 and over |
| Mean | | | | |
| Male | 48.3% | 46.4% | 34.5% | 50.0% |
| Female | 52.1% | 47.3% | 29.0% | 35.1% |
| Median | | | | |
| Male | 97.9% | 65.7% | 26.7% | 66.7% |
| Female | 99.4% | 60.6% | 17.5% | 16.2% |
| Percent fully repaid | | | | |
| Male | 47% | 36% | 24% | 34% |
| Female | 48% | 36% | 17% | 24% |

Notes: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1995.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

As noted above, the differences between men and women are not significant except in the higher debt bands. In the highest debt band men repaid a significantly higher proportion of their debt than women in terms of mean and median percent repaid and the percentage who had fully repaid. The average percentage of debt repaid for men was almost 15 percentage points higher than for women, and the difference between the medians was even greater (over 50 percentage points). These gaps increased substantially between 1998 and 2001. In 1998, the difference between the percentage debt repaid by men and women was around 7 percent (mean and median). The percentage of men who had completely repaid their debt by 2001 was also higher than for women (34 percent compared with 24 percent), whereas in the same group there had been just one percentage point difference in the percentage who had repaid completely by 1998.

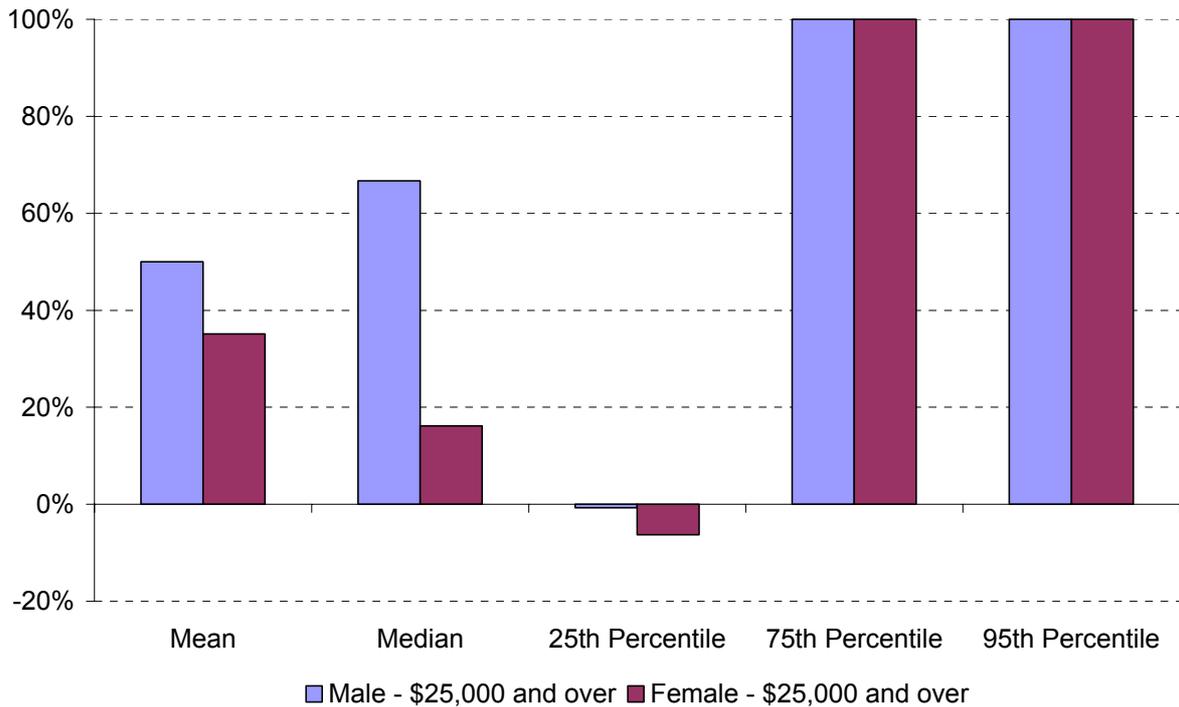
Men in the second highest debt band also had a higher mean and median percentage of debt repaid, as well as a higher percentage who had completely repaid their debt, with the gaps increasing between 1998 and 2001. The means and medians were much closer together than in the highest debt band.

In the second lowest debt band, women had a higher mean percentage of debt repaid by 2001. In 1998 and 1999, they also had a higher median percentage debt repaid until the male median passed the female median by 2001. There was very little difference between the percentages to have completely repaid their debt in any year.

In the lowest debt band, women had a higher mean and median percentage debt repaid, as well as a higher proportion who had completely repaid their debt in every year from 1998 to 2001.

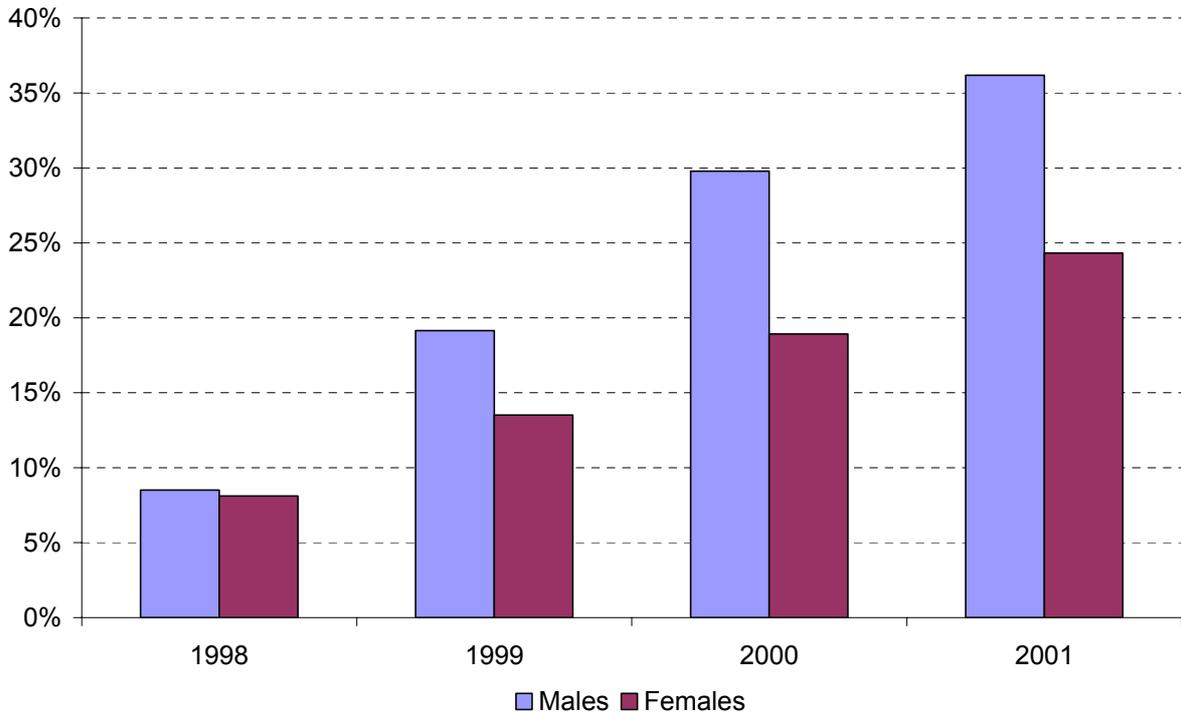
Figures 5.25 and 5.26 show statistics relating to the difference in percentage debt repaid for men and women with a debt over \$25,000. Figure 5.26 shows clearly the divergence between 1998, when there was very little difference between the genders, and 2001.

Figure 5.25 Percentage of debt repaid by 2001 statistics for those who last borrowed in 1994 with a debt greater than \$25,000 by gender



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.26: Percentage of people who last borrowed in 1994 with a debt over \$25,000 who had fully repaid their debt by 1998, 1999, 2000 and 2001



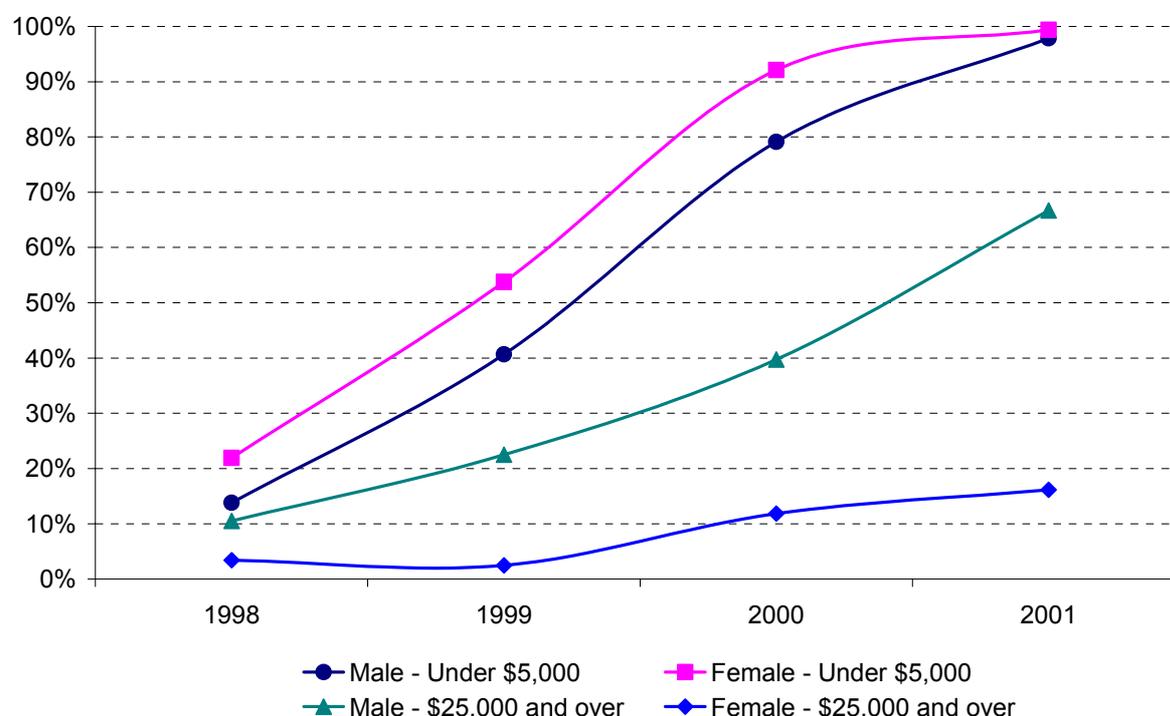
Notes: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balances at 31 March 1998 to 31 March 2001.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

By contrast, in the lowest debt band, the median percentage of debt repaid by men and women converged over time. Figure 5.27 shows the median percentage of debt repaid for the highest debt band and the lowest debt band by gender between 1998 and 2001. The male group with a

debt over \$25,000 was much closer in pattern to the two lowest debt band groupings than to the female group with a debt over \$25,000, which showed much slower progress than the other three.

Figure 5.27: Median percentage of debt repaid by 2001 for those who last borrowed in 1994



Note: Percentage of debt repaid is based on the loan balance for the years 31 March 1998-2001 in relation to the loan balances at 31 March 1995.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.28: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by gender and debt band

| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|--------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Male | 44% | 10% | 6% | 4% | 5% | 32% | 4,611 |
| | Female | 39% | 10% | 6% | 4% | 5% | 37% | 4,851 |
| | Total | 41% | 10% | 6% | 4% | 5% | 35% | 9,462 |
| \$5,000 to \$14,999 | Male | 51% | 20% | 9% | 4% | 3% | 13% | 6,618 |
| | Female | 48% | 22% | 9% | 4% | 3% | 14% | 7,344 |
| | Total | 49% | 21% | 9% | 4% | 3% | 13% | 13,962 |
| \$15,000 to \$24,999 | Male | 53% | 27% | 7% | 3% | 2% | 8% | 2,520 |
| | Female | 47% | 33% | 7% | 3% | 2% | 8% | 2,733 |
| | Total | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 |
| \$25,000 and over | Male | 65% | 24% | 4% | 1% | 1% | 4% | 1,938 |
| | Female | 62% | 26% | 5% | 2% | 1% | 4% | 1,962 |
| | Total | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 |
| Total | Male | 51% | 18% | 7% | 4% | 3% | 17% | 15,690 |
| | Female | 47% | 21% | 7% | 4% | 3% | 18% | 16,887 |
| | Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.

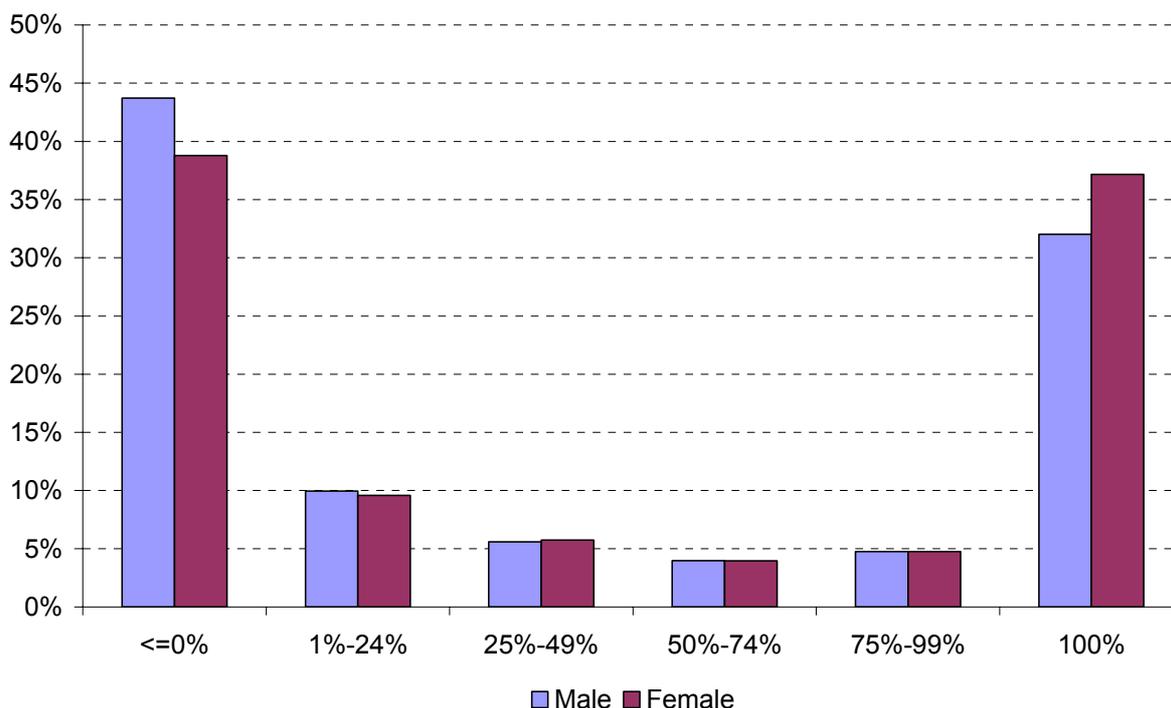
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.28 shows the percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by gender and debt band. More men than women made no progress repaying their debt in all debt bands. More women than men repaid all of their debt in the lowest two debt bands. There were also more women than men in the 1-24 percent repaid for the three highest debt bands.

The largest difference between the genders was in the lowest debt band, where women clearly made more progress than men. In this respect the 1994 cohort and the 1997 cohort have some differences. Figure 5.29 shows the percentage of debt repaid by those with an initial debt under \$5,000.

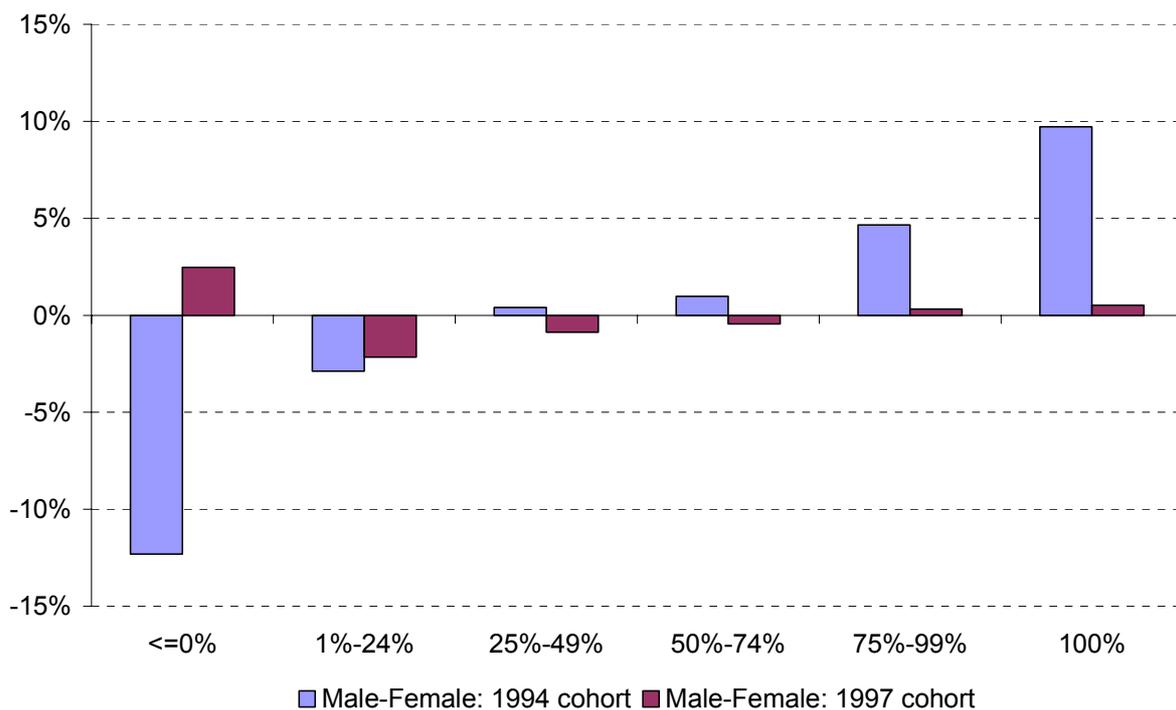
Figure 5.29: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by gender with a debt under \$5,000



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The largest difference with the 1994 borrowers is in the highest debt band. For the 1997 borrowers in the highest debt band, slightly more men had made no progress and slightly more women had repaid 1-24 percent of their debt, while there was little difference in the other categories. For the 1994 borrowers, significantly more women had made no progress and significantly more men had completely repaid their debt. Figure 5.30 shows the male-female differentials for 1994 and 1997 borrowers.

Figure 5.30: Male-female differences in percentage debt repaid for those who last borrowed in 1994 and who last borrowed and studied in 1997 with a debt over \$25,000



Note: Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balances at 31 March 1995 and 31 March 1998 respectively. The figures above are the percent repaid for males minus the percent repaid for females.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by ethnic group

Figures 5.31 and 5.32 show the percentage debt repaid by 2001 for those who last borrowed and studied in 1997 by ethnic group.

Figure 5.31: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by ethnic group

| | Percent repaid by March 2001 | | | | | | All students |
|--------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| European | 41% | 23% | 8% | 4% | 4% | 20% | 17,964 |
| Māori | 63% | 17% | 5% | 3% | 2% | 10% | 4,959 |
| Pasifika | 65% | 18% | 5% | 2% | 2% | 8% | 1,506 |
| Asian | 47% | 11% | 6% | 3% | 4% | 29% | 2,040 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Ethnic group is based on the single prioritised method of reporting.
3. People with 'unknown' ethnic group are not shown separately but are included in the totals.
4. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Māori and Pasifika students made significantly less progress to repayment than all students. Asian students made significantly more progress to repayment than all students. European students made more progress to repayment than all students.

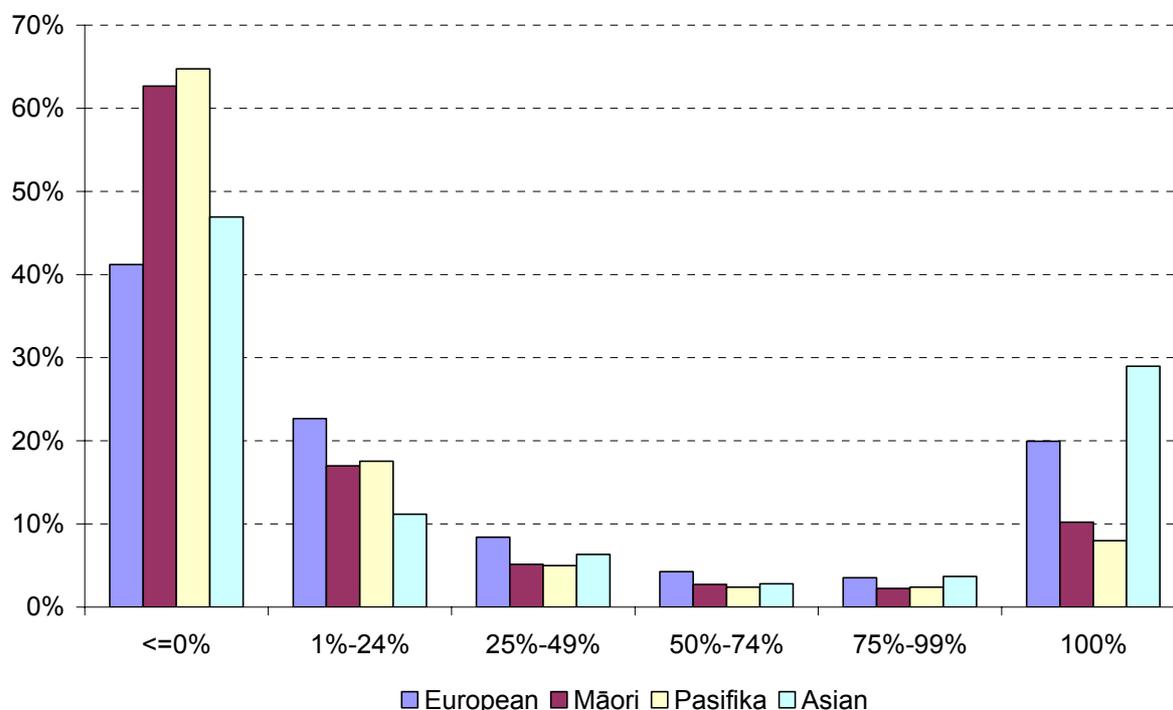
Pasifika students had the highest percentage that had made no progress (65 percent), the highest percentage that had repaid less than a quarter of their debt (82 percent), and the lowest percentage that had fully repaid their debt (8 percent).

European students had the lowest percentage (of the four major groups) that had made no progress repaying their debt (41 percent), the second lowest percentage that had repaid less than a quarter of their debt (64 percent), and the second highest percentage that had fully repaid their debt (20 percent).

Asian students had the second lowest percentage that had made no progress in repaying their debt (47 percent), the lowest percentage that had repaid less than a quarter of their debt (58 percent), the highest percentage that had fully repaid their debt (29 percent) and the highest percentage that had repaid at least 75 percent of their debt (33 percent).

Sixty-one percent of European students, 73 percent of both Māori and Pasifika students and 76 percent of Asian students had repaid all or nothing of their debt by 2001.

Figure 5.32: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by ethnic group



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.33 shows statistics relating to the progress towards repayment by ethnic group for those who last borrowed and studied in 1997. Asian students had the highest mean and 75th percentile repaid, while European students had the highest median and 25th percentile. The largest difference is in the 75th percentile, which is 100 percent for Asian students, 65 percent for European, 13 percent for Māori and 10 percent for Pasifika. The same ranking applies for the means, but the range is much smaller (32 percent for Asian students to 7 percent for Pasifika students).

More than half of Māori and Pasifika students had a higher debt by 2001 than in 1998. The medians range from 6 percent for European students to -5 percent for Pasifika students.

There is very little difference between the statistics for Māori and Pasifika students. Māori students have a slightly higher mean, median and 75th percentile.

Figure 5.33: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by ethnic group

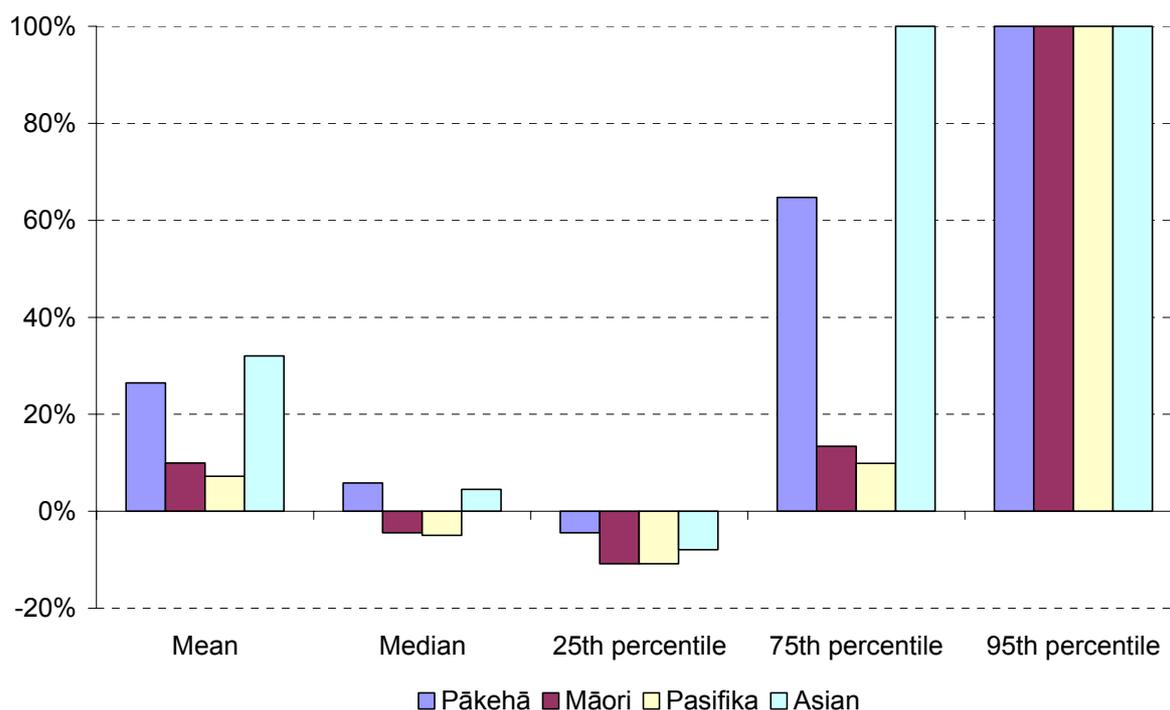


Figure 5.34: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by ethnic group

| | Average debt | | | Median debt | | |
|--------------|--------------|----------|----------|-------------|---------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| European | \$13,500 | \$11,380 | 16% | \$10,190 | \$7,500 | 26% |
| Māori | \$10,220 | \$9,850 | 4% | \$6,980 | \$6,470 | 7% |
| Pasifika | \$11,470 | \$11,440 | 0% | \$7,870 | \$7,390 | 6% |
| Asian | \$9,200 | \$7,320 | 20% | \$5,620 | \$3,650 | 35% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.34 shows debt on leaving study and debt three years later for those who last borrowed and studied in 1997 by ethnic group. European students had the highest leaving debt, followed by Pasifika, Māori and Asian students. Three years after study, Asian students had the largest reduction in average and median debt in percentage terms, while European students had the largest reduction in nominal terms. Asian students had the lowest average and median debt by 2001, followed by Māori students.

Figure 5.35 shows the percentage debt repaid by ethnic group and debt band for those who last borrowed and studied in 1997.

Figure 5.35: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by ethnic group and debt band

| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|----------|------------------------------|--------|---------|---------|---------|--------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | European | 29% | 11% | 7% | 5% | 6% | 42% | 4,461 |
| | Māori | 61% | 10% | 4% | 3% | 3% | 20% | 1,794 |
| | Pasifika | 54% | 11% | 5% | 3% | 5% | 21% | 468 |
| | Asian | 41% | 7% | 5% | 2% | 4% | 42% | 912 |
| | Total | 41% | 10% | 6% | 4% | 5% | 35% | 9,462 |
| \$5,000 to \$14,999 | European | 40% | 24% | 11% | 5% | 4% | 17% | 7,362 |
| | Māori | 63% | 19% | 7% | 3% | 2% | 6% | 2,067 |
| | Pasifika | 67% | 20% | 7% | 3% | 1% | 2% | 615 |
| | Asian | 47% | 13% | 8% | 4% | 5% | 23% | 750 |
| Total | 49% | 21% | 9% | 4% | 3% | 13% | 13,962 | |
| \$15,000 to \$24,999 | European | 44% | 33% | 8% | 3% | 2% | 10% | 3,366 |
| | Māori | 59% | 27% | 5% | 3% | 1% | 4% | 672 |
| | Pasifika | 66% | 24% | 5% | 1% | 1% | 1% | 249 |
| | Asian | 59% | 23% | 7% | 1% | 1% | 8% | 213 |
| Total | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 | |
| \$25,000 and over | European | 60% | 27% | 5% | 2% | 1% | 4% | 2,775 |
| | Māori | 74% | 22% | 2% | 1% | 1% | 1% | 426 |
| | Pasifika | 80% | 17% | 0% | 0% | 0% | 2% | 177 |
| | Asian | 60% | 15% | 7% | 4% | 2% | 13% | 165 |
| Total | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 | |
| Total | European | 41% | 23% | 8% | 4% | 4% | 20% | 17,964 |
| | Māori | 63% | 17% | 5% | 3% | 2% | 10% | 4,959 |
| | Pasifika | 65% | 18% | 5% | 2% | 2% | 8% | 1,506 |
| | Asian | 47% | 11% | 6% | 3% | 4% | 29% | 2,040 |
| | Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

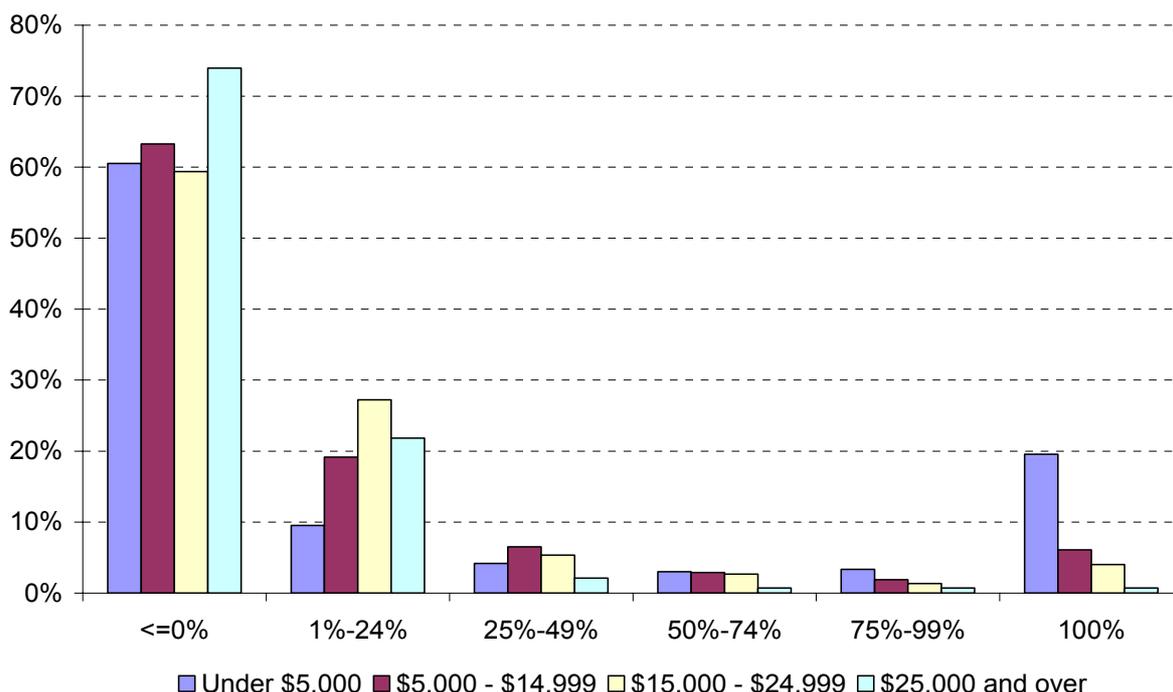
1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Ethnic group is based on the single prioritised method of reporting.
3. People with 'unknown' ethnic group are not shown separately but are included in the totals.
4. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figures 5.36 and 5.37 show some variations from the standard pattern of repayment by debt band.

Figure 5.36 shows the percentage debt repaid by Māori students by debt band. For Māori students there is little variation, for the first three debt bands, in the proportion who had made no progress. For all students, in the lowest debt band a much smaller percentage of students had made no progress repaying their debt than the other debt bands.

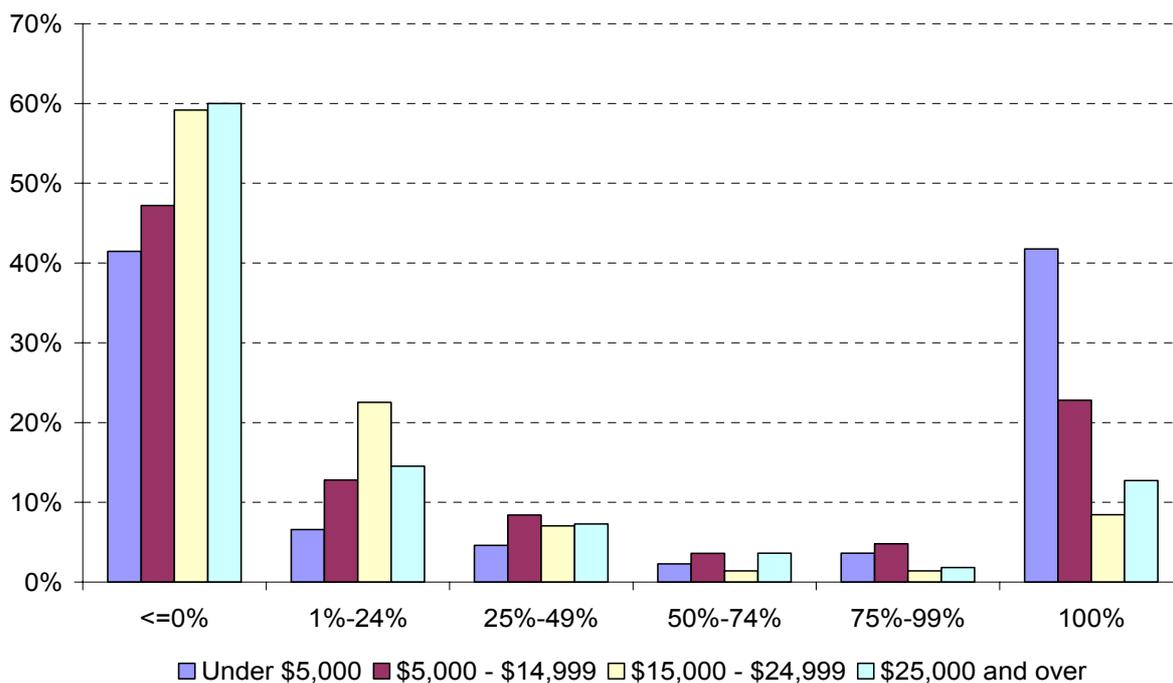
Figure 5.36: Percentage of debt repaid by 2001 for Māori students who last borrowed and studied in 1997 by debt band



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.37 shows the percentage debt repaid by Asian students by debt band. For Asian students in the third and fourth debt bands, the proportion to have made no progress was almost 15 percentage points higher than the second debt band. For all students, the third debt band has a similar proportion to have made no progress as the second band, about 15 percentage points lower than the highest debt band.

Figure 5.37: Percentage of debt repaid by 2001 for Asian students who last borrowed and studied in 1997 by debt band



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by age

Figures 5.38 and 5.39 show the percentage debt repaid by 2001 for those who last borrowed and studied in 1997 by the age they were in 1997.

Figure 5.38: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by age in 1997

| | Percent repaid by March 2001 | | | | | | All students |
|--------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Less than 25 | 52% | 22% | 7% | 3% | 2% | 13% | 20,088 |
| 25-39 | 44% | 16% | 8% | 4% | 4% | 24% | 9,825 |
| 40 and over | 45% | 13% | 7% | 4% | 5% | 27% | 2,658 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.

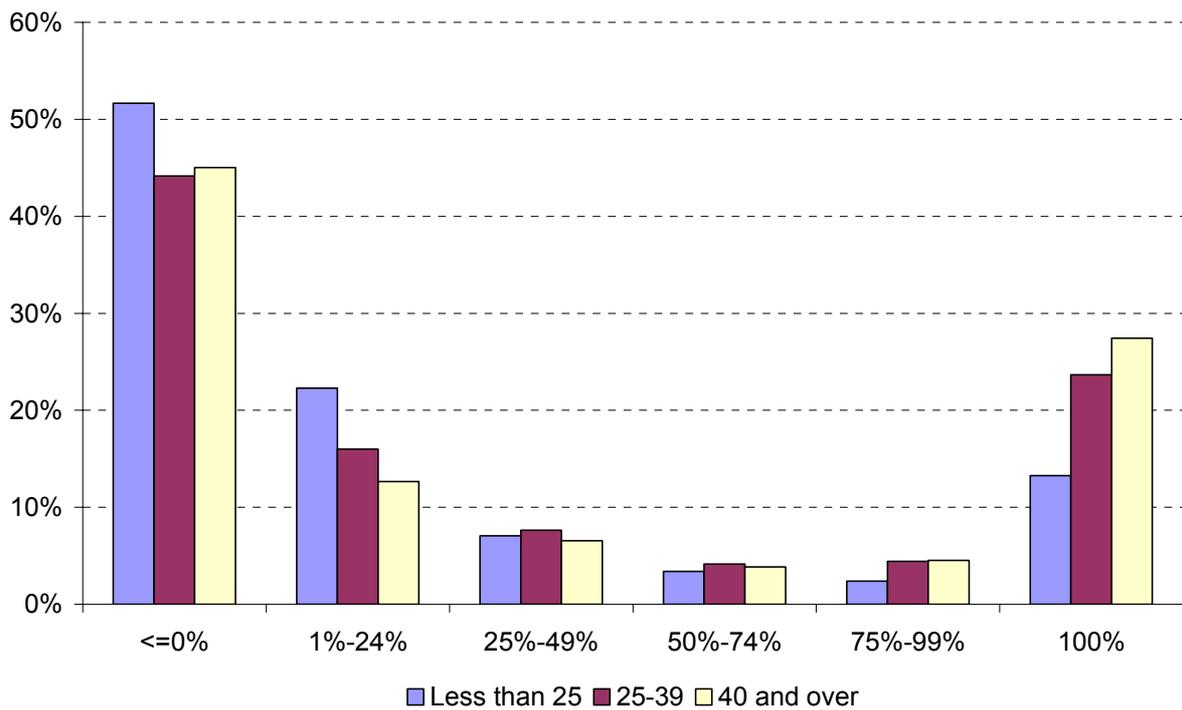
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Older age groups repaid their debt faster than younger age groups and this relationship also held when 5 year bands for age were used. Census data shows that age is associated with higher income with many older people have substantial work experience, which increases their earning power and therefore progress to repayment. While the majority of people with debt in the 40 plus age group are in their 40s or 50s, the probability of not being in the labour force increases as people age, and hence ability to repay reduces. This is shown in figure 5.42, where the mean percent of debt repaid is higher in the 40 to 49 age groups and lower for older age groups.

The group aged over 40 had the highest proportion of people who had repaid their debt by 2001 (27 percent), the highest proportion of people who had repaid at least three quarters of their debt (32 percent), and the second lowest proportion who had made no progress repaying their debt (45 percent). Older students borrow less than younger students, and this links to the lowest two debt band groups (refer Figure 5.21), which also had the best record on repayment. This age group had the highest ‘all or nothing’ percentage (72 percent).

The youngest age group (under 25) had the lowest proportion to have fully repaid their debt (13 percent), the highest proportion to have repaid less than a quarter of their debt (74 percent) and the highest proportion to have made no progress (52 percent).

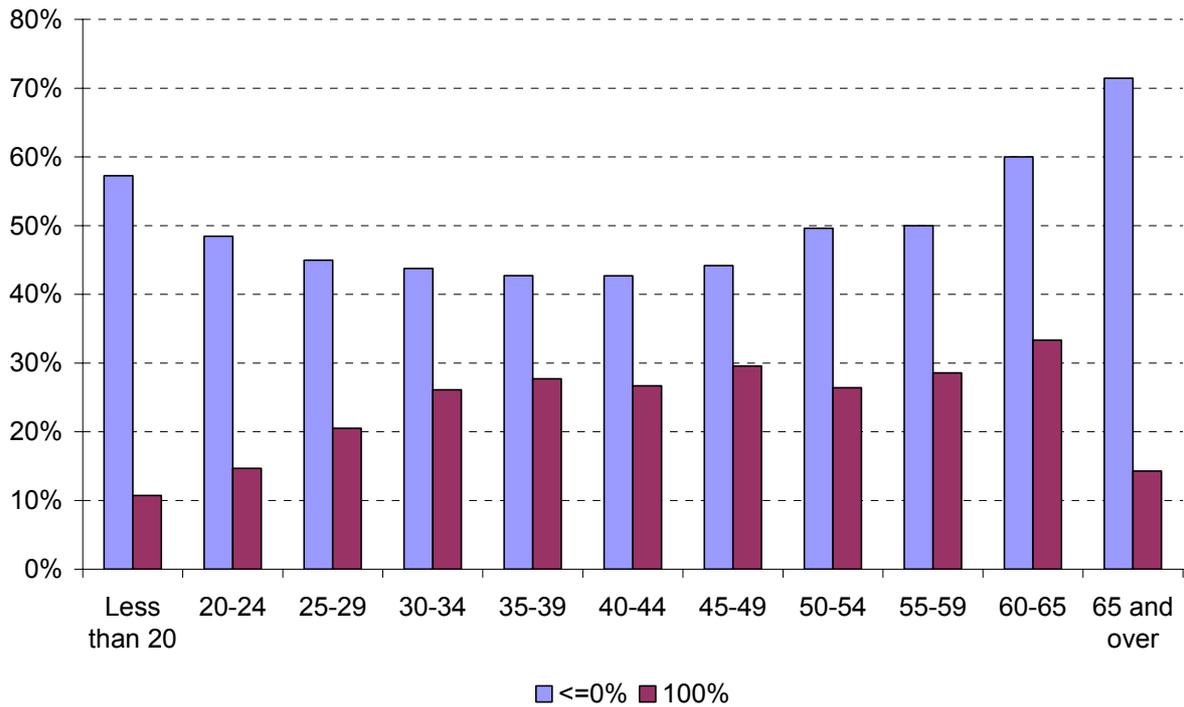
Figure 5.39: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by age



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.40 gives a breakdown of the data in figure 5.39 in narrower (5 year) age bands. There are very few people aged over 60. The superior repayment record of the over 40s age group evident in figure 5.39 results from the rapid progress in repayment of the 40 to 44 and the 45-49 aged bands (which contained nearly 80 percent of the over 40s). The 40 to 44 year olds are at the peak of their earning power. There is a trend to slower repayment within the over 40 age group as this group ages. The over 65 year olds are probably retired and, therefore, less likely to repay.

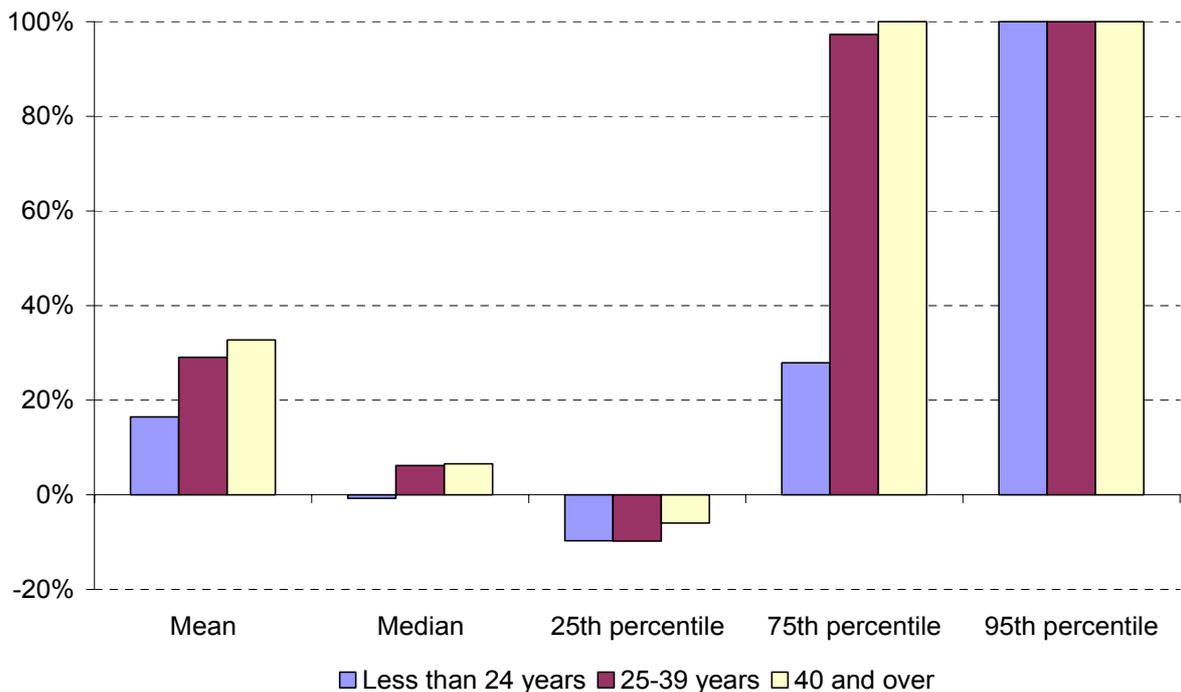
Figure 5.40: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by age



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.41 shows statistics relating to the progress towards repayment by age for those who last borrowed and studied in 1997. The oldest age group had the highest percentage debt repaid as measured by all statistics except the 95th percentile (where all age groups had completely repaid). The youngest age group had the lowest mean, median and 75th percentile.

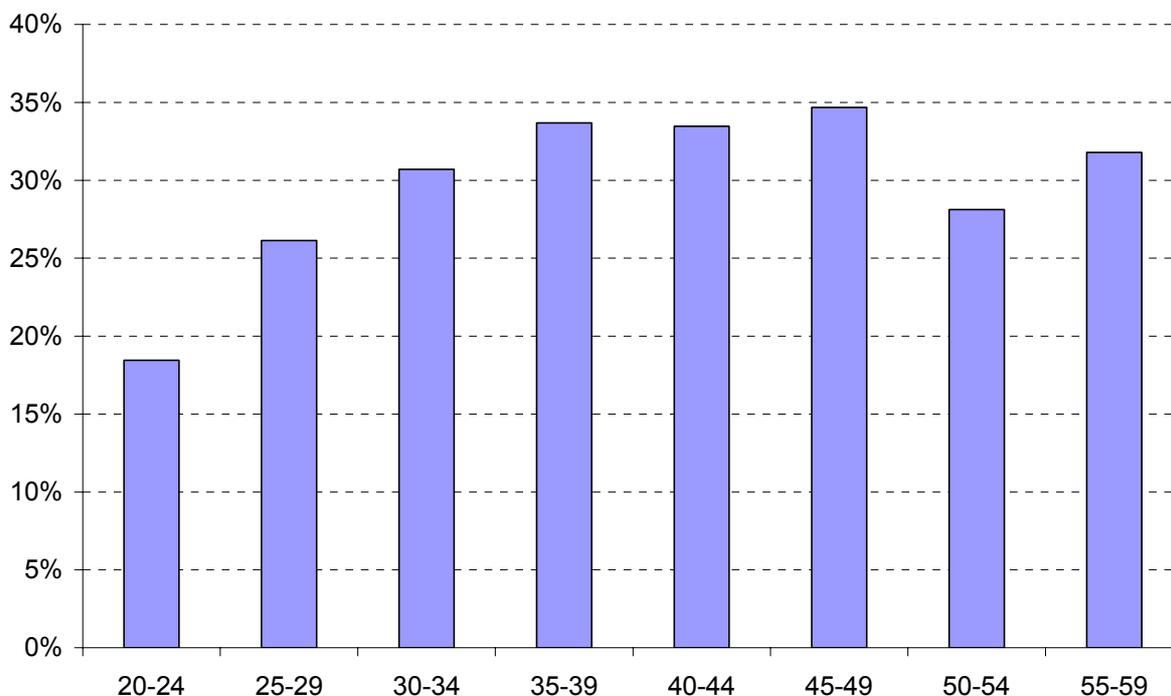
Figure 5.41: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by age



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.42 shows the average percentage of debt repaid by 2001 by five-year age groups⁴³. The mean increased from the youngest age group (20 to 24 years of age) through to the 35 to 39 year old age group, before levelling off. The age group with the highest mean proportion of debt repaid was the 45 to 49 year old group.

Figure 5.42: Mean percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by age



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.43: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by age

| | Average debt | | | Median debt | | |
|--------------|--------------|----------|----------|-------------|---------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Less than 25 | \$13,520 | \$12,070 | 11% | \$10,110 | \$8,640 | 15% |
| 25-39 | \$9,800 | \$8,210 | 16% | \$6,540 | \$4,680 | 28% |
| 40 and over | \$7,680 | \$6,140 | 20% | \$5,190 | \$3,420 | 34% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.43 shows the mean and median debt on leaving study and three years later for those who last borrowed and studied in 1997. Younger age groups had higher leaving debts, and higher debts three years later. The over 40 age group achieved the largest reduction in mean and median debt within three years in percentage terms, while the 25 to 39 year age group achieved the largest reduction in nominal terms.

⁴³ There were too few people in older age groups to produce publishable means.

Figure 5.44: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by age

| | Average debt | | | Median debt | | |
|--------------|--------------|----------|----------|-------------|----------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Less than 20 | \$7,400 | \$6,900 | 7% | \$6,450 | \$6,090 | 6% |
| 20-24 | \$17,010 | \$15,020 | 12% | \$14,620 | \$11,940 | 18% |
| 25-29 | \$11,800 | \$10,090 | 14% | \$8,420 | \$5,960 | 29% |
| 30-34 | \$8,060 | \$6,580 | 18% | \$5,710 | \$3,920 | 31% |
| 35-39 | \$7,550 | \$6,090 | 19% | \$4,990 | \$3,460 | 31% |
| 40-44 | \$7,580 | \$5,940 | 22% | \$5,330 | \$3,440 | 35% |
| 45-49 | \$7,790 | \$6,240 | 20% | \$4,960 | \$3,280 | 34% |
| 50-54 | \$7,710 | \$6,440 | 16% | \$5,270 | \$3,400 | 35% |
| 55-59 | \$7,620 | \$5,930 | 22% | \$4,860 | \$3,440 | 29% |
| 60 and over | \$8,180 | \$7,440 | 9% | \$5,460 | \$4,120 | 25% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.44 shows the mean and median debt by 5 year age bands. The age groups with the highest leaving debts are the 20 to 24 and 25 to 29 age groups. There is much less variation between the leaving debts of age groups. The group aged between 40 and 44 years had achieved the largest percentage reduction in average and median debt by 2001, while the 20 to 24 and 25 to 29 age groups had achieved the largest nominal reduction. The lowest reductions were in the youngest and oldest age groups.

Figure 5.45: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by age in 1997 and debt band

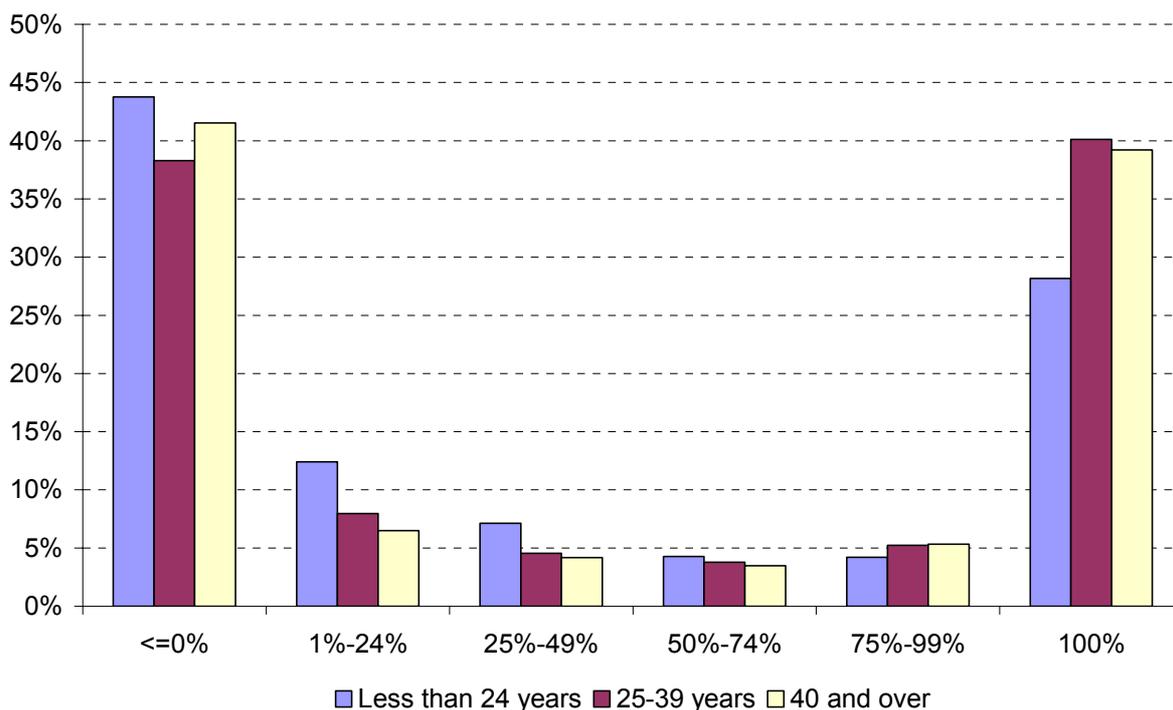
| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|--------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Less than 25 | 44% | 12% | 7% | 4% | 4% | 28% | 4,209 |
| | 25-39 years | 38% | 8% | 5% | 4% | 5% | 40% | 3,957 |
| | 40 and over | 42% | 6% | 4% | 3% | 5% | 39% | 1,293 |
| | Total | 41% | 10% | 6% | 4% | 5% | 35% | 9,462 |
| \$5,000 to \$14,999 | Less than 25 | 52% | 23% | 8% | 4% | 2% | 11% | 9,186 |
| | 25-39 years | 45% | 17% | 11% | 6% | 5% | 16% | 3,792 |
| | 40 and over | 47% | 16% | 10% | 5% | 4% | 19% | 987 |
| | Total | 49% | 21% | 9% | 4% | 3% | 13% | 13,962 |
| \$15,000 to \$24,999 | Less than 25 | 51% | 30% | 7% | 3% | 2% | 8% | 3,687 |
| | 25-39 years | 48% | 31% | 9% | 3% | 2% | 7% | 1,287 |
| | 40 and over | 48% | 27% | 8% | 3% | 3% | 11% | 276 |
| | Total | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 |
| \$25,000 and over | Less than 25 | 64% | 25% | 4% | 2% | 1% | 4% | 3,009 |
| | 25-39 years | 63% | 26% | 4% | 1% | 1% | 4% | 789 |
| | 40 and over | 62% | 26% | 6% | 3% | 3% | 6% | 102 |
| | Total | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 |
| Total | Less than 25 | 52% | 22% | 7% | 3% | 2% | 13% | 20,088 |
| | 25-39 years | 44% | 16% | 8% | 4% | 4% | 24% | 9,825 |
| | 40 and over | 45% | 13% | 7% | 4% | 5% | 27% | 2,658 |
| | Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

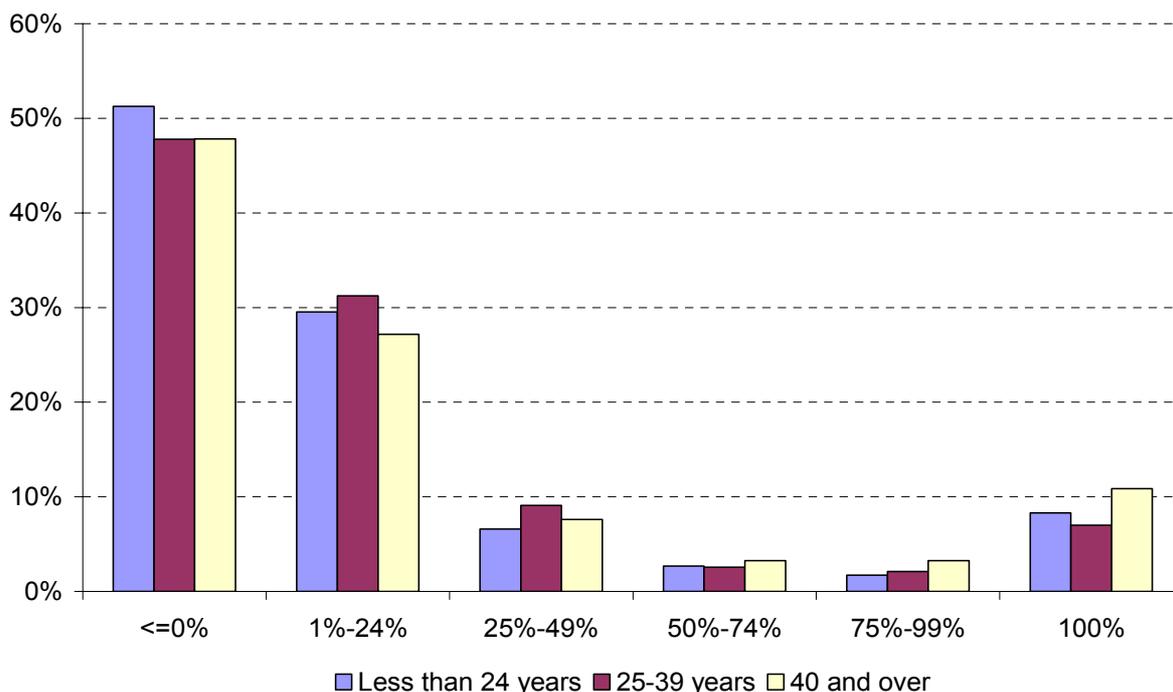
Figure 5.46: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt under \$5,000 by age in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.47 shows the age repayment profile for the third debt band, with debt between \$15,000 and \$24,999. In this group of borrowers, the 25 to 39 year olds have the highest percentage in the 1 percent to 24 percent repaid and the lowest percentage in the 100 percent repaid categories.

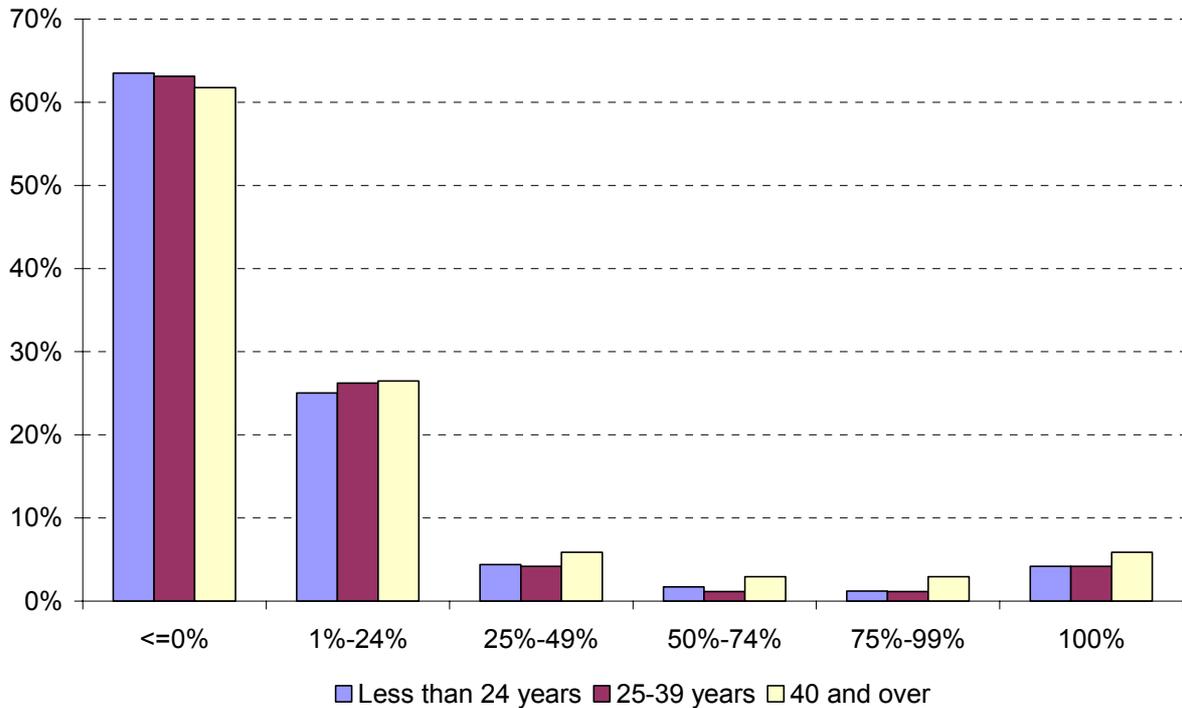
Figure 5.47: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt between \$15,000 and \$24,999 by age in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.48 shows the age repayment profile for those with a debt over \$25,000. In this debt band, there is much less variation between the age groups. The increased earning power of the older age group has not given them any great advantage in repaying their debt in the first three years after study. This may relate to those people (particularly women) wishing to re-enter the labour force, or to change careers, and thereby undertaking new tertiary study, with particular qualification and career objectives.

Figure 5.48: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt over \$25,000 by age in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by qualification level and completion status

Figures 5.49 and 5.50 show the percentage of debt repaid by completion status. A higher proportion of those who completed their study had completely repaid their debt than those who did not complete their course, while a smaller percentage of those who completed their course had made no progress compared with those who did not complete. This is not unexpected, as those who complete their qualifications tend to earn higher incomes than those who do not complete (particularly for undergraduate qualifications), which should translate into faster repayment.

Figure 5.49: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by completion status

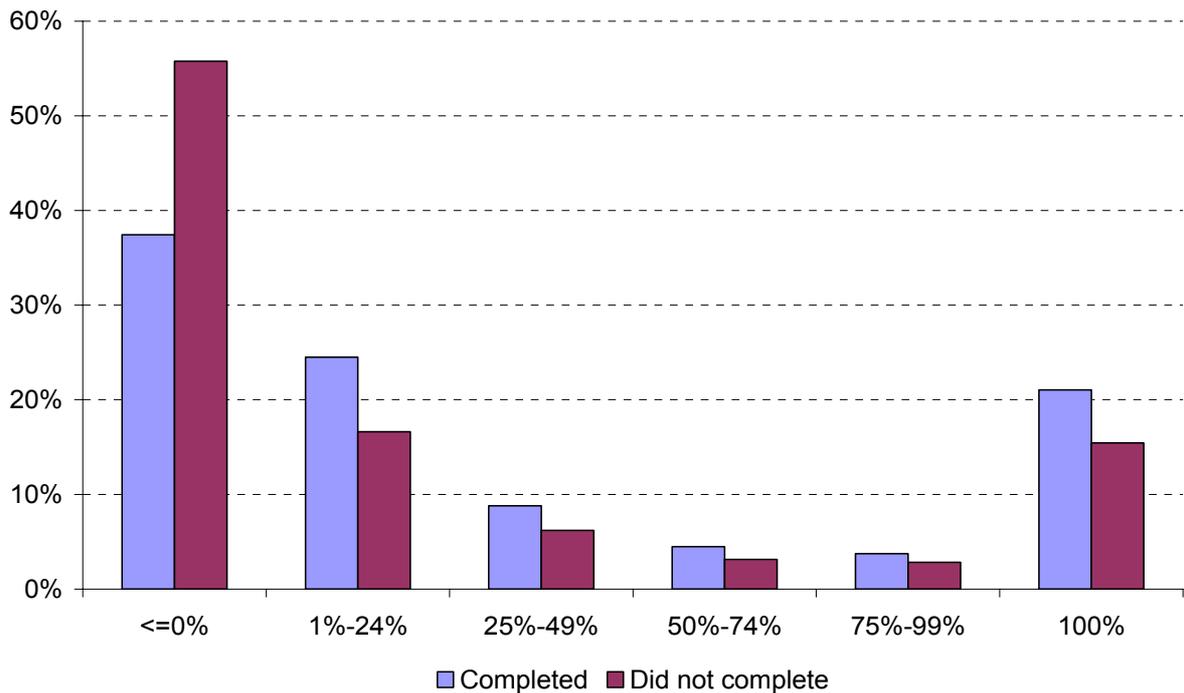
| | Percent repaid by March 2001 | | | | | | All students |
|------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Completed | 37% | 24% | 9% | 4% | 4% | 21% | 12,282 |
| Did not complete | 56% | 17% | 6% | 3% | 3% | 15% | 20,295 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

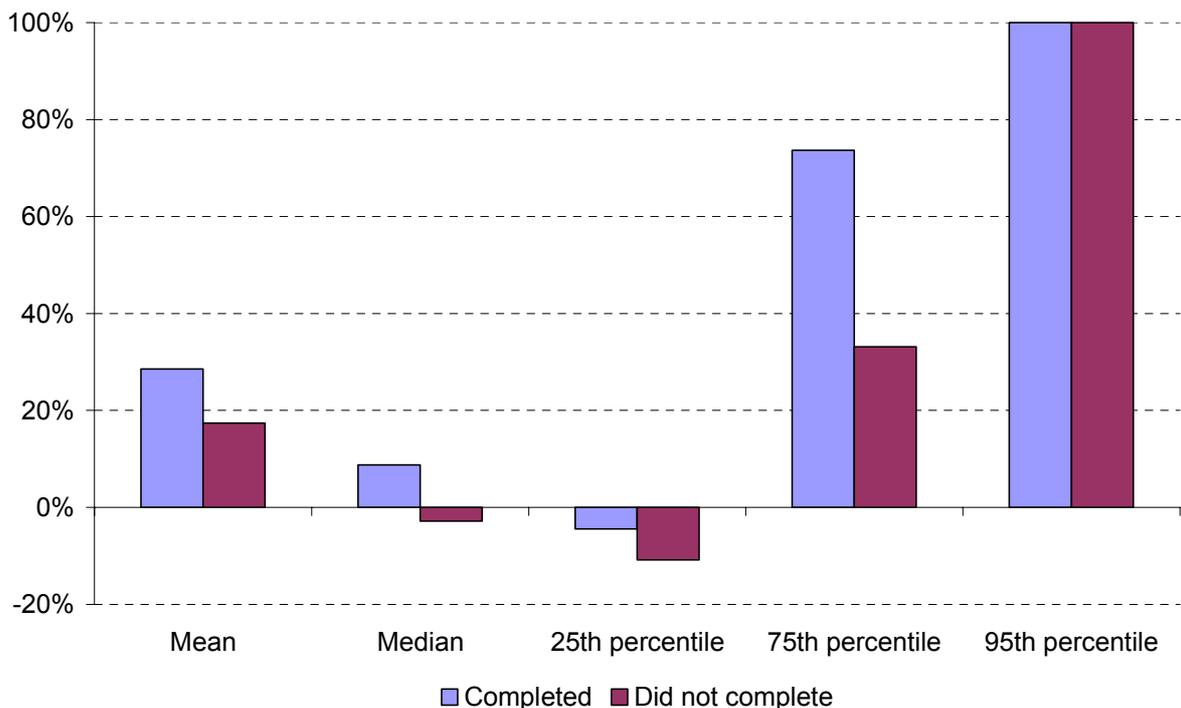
Figure 5.50: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by completion status



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.51 shows statistics relating to the progress towards repayment by completion status for those who last borrowed and studied in 1997. Those who had completed their qualification had the highest percentage debt repaid as measured by all statistics except the 95th percentile (where both groups had completely repaid).

Figure 5.51: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by completion status



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.52: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by completion status

| Completion status | Average debt | | | Median debt | | |
|-------------------|--------------|----------|----------|-------------|---------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Completed | \$14,340 | \$11,760 | 18% | \$10,880 | \$7,670 | 30% |
| Did not complete | \$10,460 | \$9,610 | 8% | \$7,640 | \$6,500 | 15% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.52 shows the average and median leaving debt, and debt three years later for those who last borrowed and studied in 1997. Students who completed their qualification had a higher debt in both 1997 and 2000, but had reduced their average and median debt more over the three years than those who did not complete.

Figure 5.53: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by completion status and debt band

| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Completed | 29% | 10% | 6% | 5% | 6% | 44% | 2,844 |
| | Did not complete | 46% | 10% | 6% | 4% | 4% | 31% | 6,618 |
| \$5,000 to \$14,999 | Completed | 34% | 24% | 12% | 6% | 4% | 20% | 4,821 |
| | Did not complete | 58% | 19% | 7% | 4% | 2% | 10% | 9,141 |
| \$15,000 to \$24,999 | Completed | 37% | 38% | 9% | 3% | 3% | 11% | 2,487 |
| | Did not complete | 62% | 23% | 6% | 2% | 1% | 6% | 2,763 |
| \$25,000 and over | Completed | 57% | 29% | 5% | 2% | 1% | 5% | 2,130 |
| | Did not complete | 71% | 21% | 3% | 1% | 1% | 4% | 1,770 |
| Total | Completed | 37% | 24% | 9% | 4% | 4% | 21% | 12,282 |
| | Did not complete | 56% | 17% | 6% | 3% | 3% | 15% | 20,295 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In all debt bands those who completed their study were more likely to have completely repaid their debt and less likely to have repaid none of their debt compared with those who did not complete their qualification.

Figures 5.54, 5.55 and 5.56 show the repayment profiles of those who last borrowed and studied in 1997 by qualification level⁴⁴.

⁴⁴ For level, sub-sector and field of study, these relate to the highest level a student completed in 1997. If no qualification was completed in 1997, these relate to the highest level a student attempted in 1997. There are very small numbers of doctorate students.

Figure 5.54: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by qualification level studied in 1997

| | Percent repaid by March 2001 | | | | | | All students |
|----------------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Masters/Honours | 35% | 22% | 9% | 4% | 5% | 24% | 1,440 |
| Post-Grad. Cert/Dip | 31% | 20% | 9% | 5% | 5% | 30% | 1,083 |
| Bachelors/Advanced Diploma | 42% | 22% | 8% | 4% | 3% | 20% | 10,509 |
| Diploma | 46% | 22% | 7% | 4% | 3% | 18% | 4,536 |
| Certificate | 56% | 17% | 6% | 3% | 3% | 15% | 10,122 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage of debt repaid is based on the loan balance at 31 March 2001 in relation to the loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.
3. Doctorates are excluded because of the small numbers in this category for this cohort.
4. The 'Total' row includes all qualification levels.

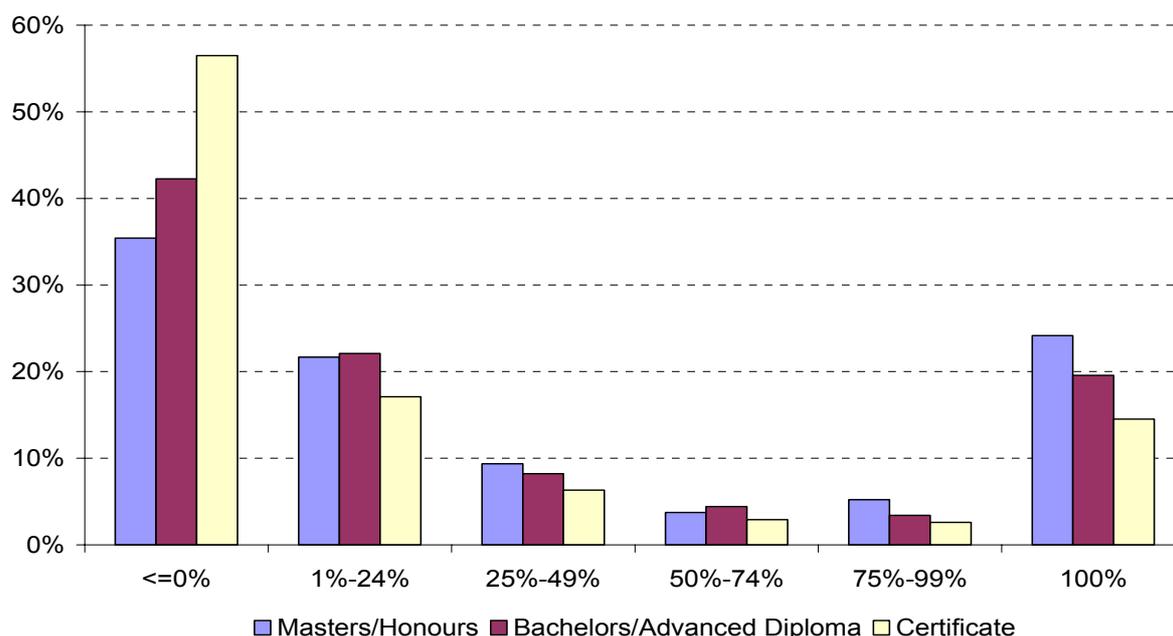
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The students who repaid the most of their debt within three years studied at the postgraduate certificate/diploma and masters/honours levels. Students who repaid least of their debt had studied at certificate and diploma levels.

Students with the lowest percentage of those who had made no progress repaying their loan (32 percent) had studied at the postgraduate certificate/diploma levels and this group also had the highest percentage to have fully repaid their loan (30 percent). Postgraduate qualifications are shorter qualifications (meaning that students are likely to borrow less), often studied part-time (also implying lower levels of borrowing) and are taken by people who often have post-study experience in the workforce (and hence, higher earning power). All of these factors result in a greater ability to repay student loan debt.

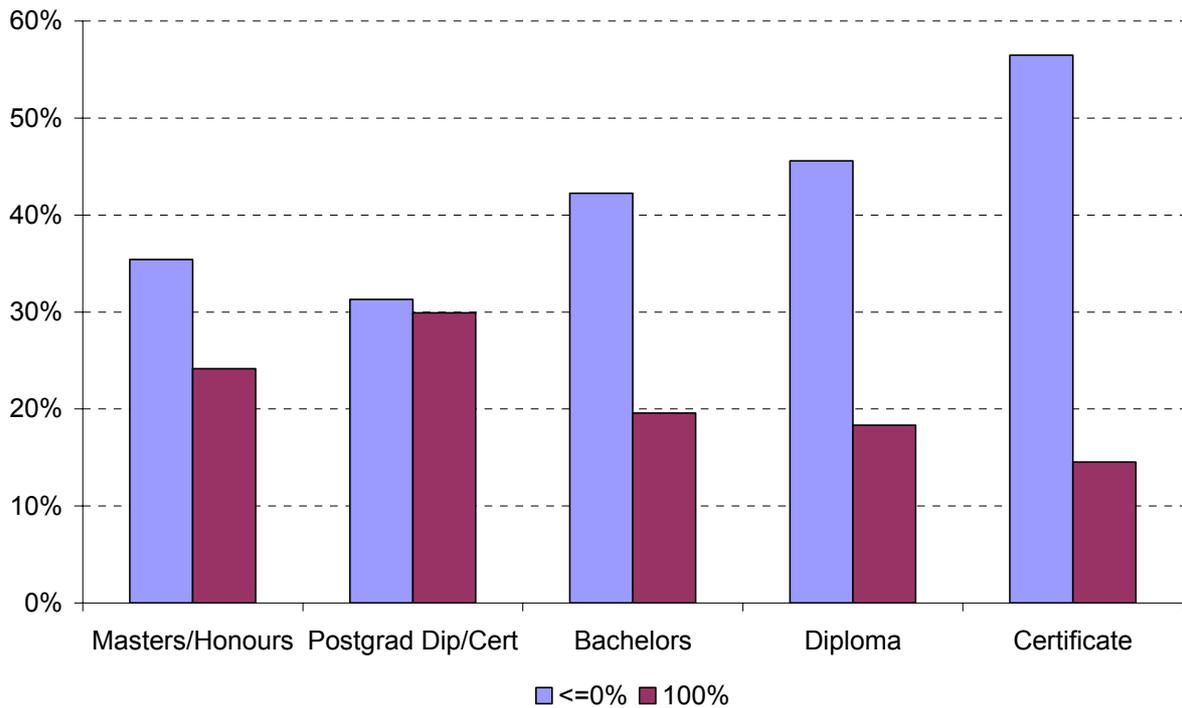
Certificate students had the highest percentage to have made no progress repaying their loan (57 percent), the highest percentage to have repaid less than 25 percent of their loan (74 percent) and the lowest percentage to have fully repaid their loan (14 percent).

Figure 5.55: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by qualification level studied in 1997 – selected levels



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

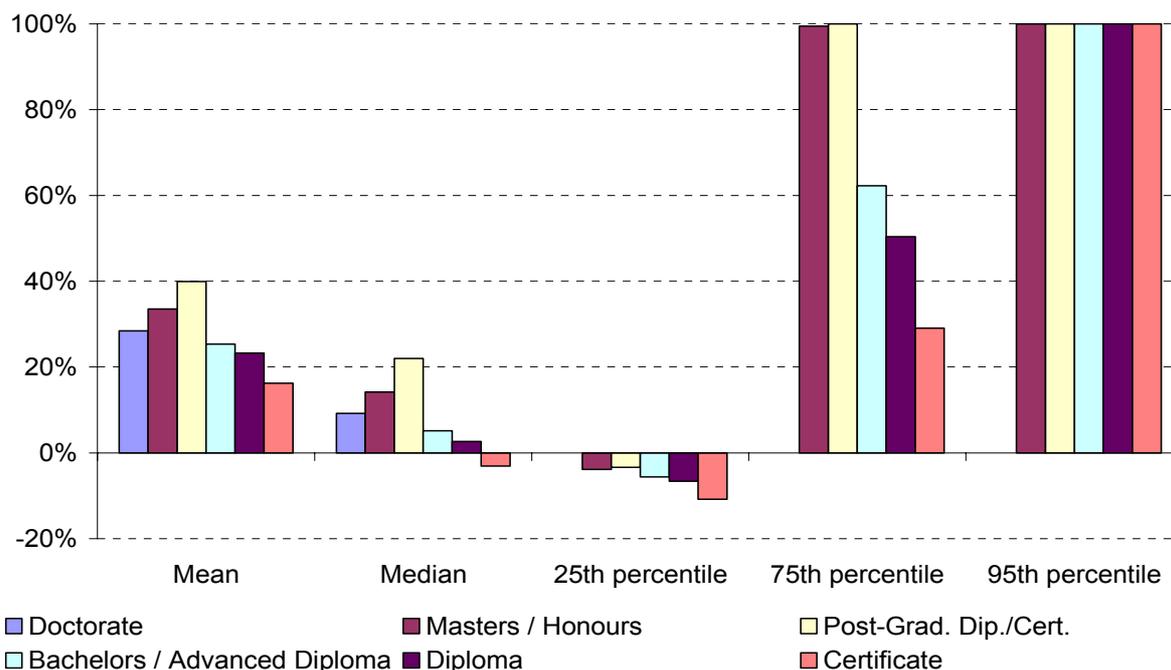
Figure 5.56: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by qualification level studied in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.57 shows statistics relating to the percentage of debt repaid by qualification level. Postgraduate diplomas and certificates had the highest means and medians, followed by masters and honours. More than half of the certificate students owed more by 2001 than they did in 1997. The 25th percentile of each qualification level was negative, meaning that more than a quarter of borrowers at all qualification levels had made no progress.

Figure 5.57: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by qualification level studied in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.58: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by level

| | Average debt | | | Median debt | | |
|----------------------------|--------------|----------|----------|-------------|----------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Doctorate | \$19,410 | \$16,520 | 15% | \$13,320 | \$10,730 | 19% |
| Masters/Honours | \$18,670 | \$15,200 | 19% | \$16,710 | \$11,490 | 31% |
| Post-Grad. Cert/Dip | \$15,870 | \$12,640 | 20% | \$12,540 | \$6,670 | 47% |
| Bachelors/Advanced Diploma | \$16,580 | \$14,200 | 14% | \$14,110 | \$10,840 | 23% |
| Diploma | \$12,050 | \$10,690 | 11% | \$9,960 | \$8,120 | 18% |
| Certificate | \$6,720 | \$6,200 | 8% | \$5,330 | \$4,900 | 8% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Doctorate and masters/honours students had the highest average leaving debt, followed by bachelors students. Masters/honours students had the highest median leaving debt, followed by bachelors students and doctorate students. Certificate students had the lowest leaving debt, followed by diploma students. Postgraduate certificate/diploma students and masters/honours students had the largest difference between 1997 and 2000 debt, while certificate students had the smallest difference.

For all debt bands, certificates had the highest proportion to have made no progress ranging from 49 percent in the lowest debt band to 85 percent in the highest debt band (which had 159 students). Certificate students also had the lowest proportion to have completely repaid their debt in all debt bands.

Figure 5.59: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by qualification level studied in 1997 and debt band – selected levels

| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|----------------------|-------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | <=0 | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Masters/honours | 14% | 6% | 3% | 3% | 8% | 68% | 198 |
| | Bachelors/adv dip | 28% | 7% | 4% | 4% | 6% | 50% | 1,893 |
| | Certificate | 49% | 12% | 7% | 4% | 4% | 24% | 4,644 |
| | Total | 41% | 10% | 6% | 4% | 5% | 35% | 9,462 |
| \$5,000 to \$14,999 | Masters/honours | 24% | 16% | 15% | 6% | 9% | 30% | 453 |
| | Bachelors/adv dip | 36% | 20% | 13% | 7% | 5% | 21% | 3,675 |
| | Certificate | 60% | 22% | 6% | 2% | 2% | 7% | 4,755 |
| | Total | 49% | 21% | 9% | 4% | 3% | 13% | 13,962 |
| \$15,000 to \$24,999 | Masters/honours | 34% | 30% | 14% | 5% | 3% | 14% | 375 |
| | Bachelors/adv dip | 44% | 33% | 8% | 3% | 2% | 10% | 2,571 |
| | Certificate | 74% | 17% | 4% | 1% | 1% | 3% | 561 |
| | Total | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 |
| \$25,000 and over | Masters/honours | 59% | 29% | 4% | 1% | 1% | 5% | 414 |
| | Bachelors/adv dip | 61% | 27% | 5% | 2% | 1% | 4% | 2,370 |
| | Certificate | 85% | 13% | 2% | | | 2% | 159 |
| | Total | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 |
| Total | Masters/honours | 35% | 22% | 9% | 4% | 5% | 24% | 1,440 |
| | Bachelors/adv dip | 42% | 22% | 8% | 4% | 3% | 20% | 10,509 |
| | Certificate | 56% | 17% | 6% | 3% | 3% | 15% | 10,122 |
| | Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

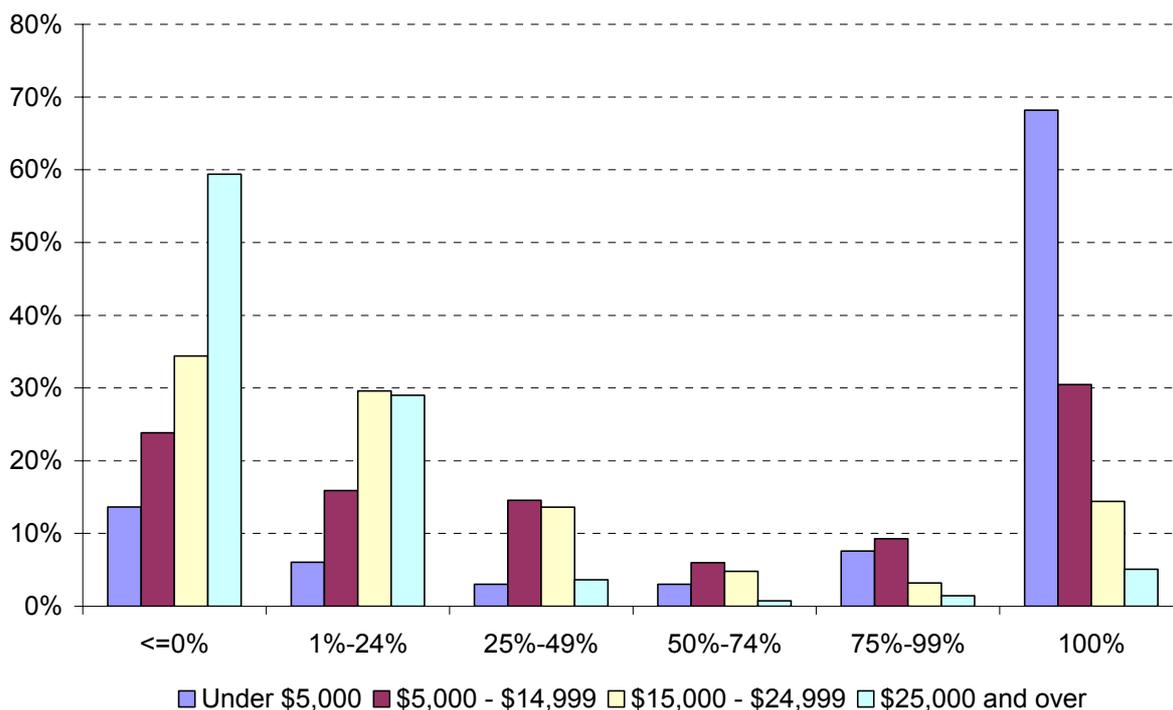
1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. In order to simplify presentation and analysis and because these have fewer students than other categories, study at undergraduate and postgraduate diploma level have been excluded.
3. Doctorates are excluded because of the small numbers in this category for this cohort.
4. The 'Total' row includes all qualification levels.
5. Counts data has been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In all debt bands, the qualification levels with the highest proportion to have completely repaid their debt were masters/honours and postgraduate certificates and diplomas. These levels also had the lowest proportions to have made no progress.

Figure 5.60 shows the repayment profile by debt band of masters/honours students. In the lowest three debt bands the proportion to have made no progress repaying their loans is much lower than for all students (whereas the difference is only slight for the highest debt band). Almost 70 percent of honours/masters students in the lowest debt band have completely repaid their debt, double the proportion of all students.

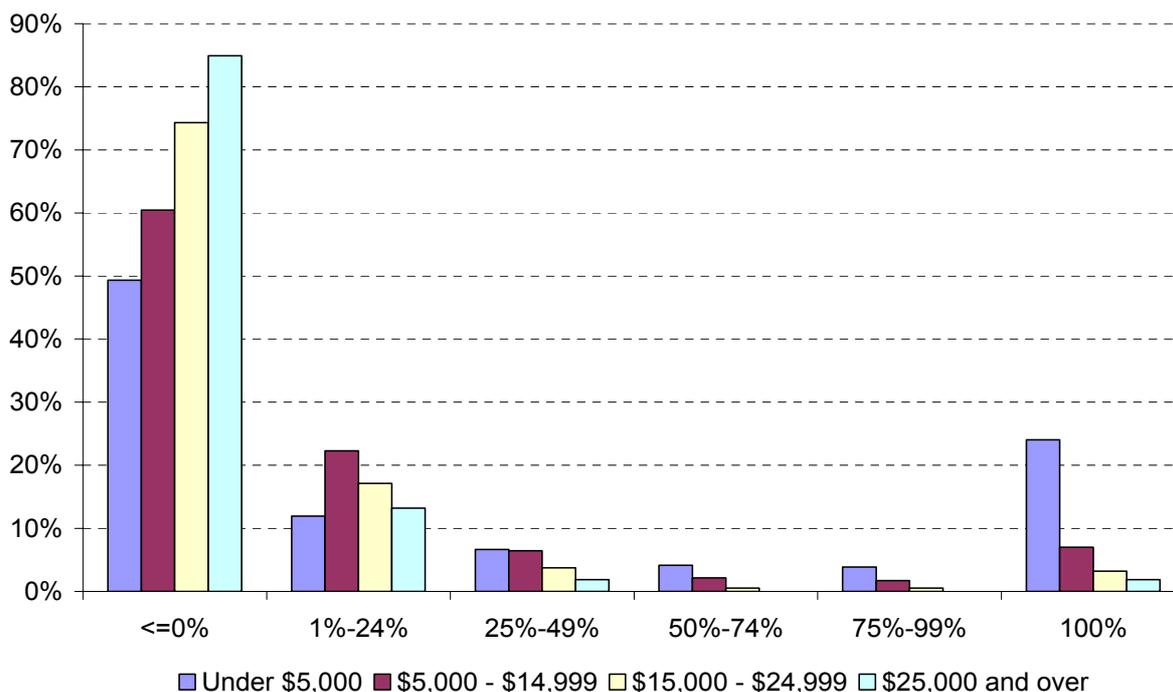
Figure 5.60: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by debt band – honours/masters students



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.61 shows the repayment profile by debt band of certificate students. Almost a quarter of students in the lowest debt band had completely repaid their debt. In other debt bands, however, the proportion that had completely repaid was very low.

Figure 5.61: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by debt band – certificate students



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

For all qualification levels, those who completed their study had a significantly lower proportion to have made no progress compared with those who did not complete. A higher proportion of those who completed their study had completely repaid their debt compared with those who did not complete.

Figure 5.62: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by completion status and qualification level studied in 1997

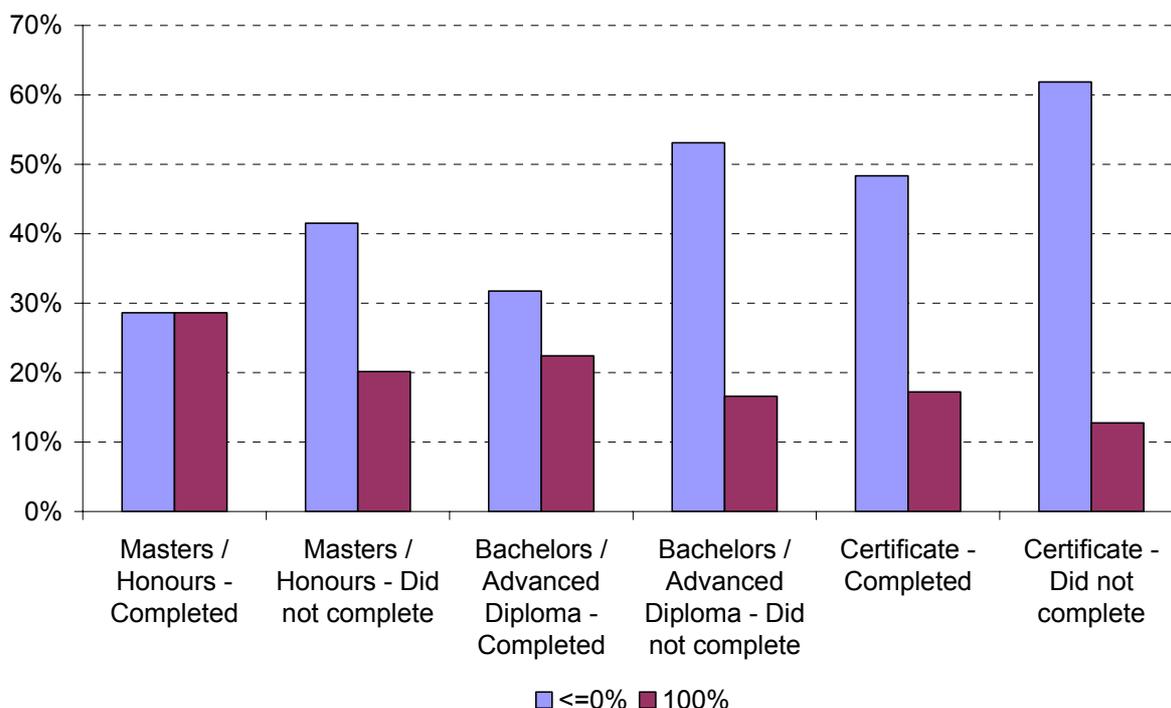
| | | Percent repaid by March 2001 | | | | | | All students |
|----------------------------|------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Masters/Honours | Completed | 29% | 23% | 11% | 4% | 5% | 29% | 681 |
| | Did not complete | 42% | 21% | 8% | 4% | 6% | 20% | 759 |
| Post-Grad. Cert/Dip | Completed | 24% | 21% | 9% | 6% | 6% | 34% | 516 |
| | Did not complete | 38% | 20% | 8% | 4% | 4% | 26% | 564 |
| Bachelors/Advanced Diploma | Completed | 32% | 27% | 9% | 5% | 4% | 22% | 5,340 |
| | Did not complete | 53% | 17% | 7% | 3% | 3% | 17% | 5,169 |
| Diploma | Completed | 37% | 28% | 9% | 4% | 3% | 19% | 1,722 |
| | Did not complete | 51% | 19% | 6% | 4% | 3% | 18% | 2,817 |
| Certificate | Completed | 48% | 20% | 8% | 4% | 3% | 17% | 4,008 |
| | Did not complete | 62% | 15% | 5% | 3% | 2% | 13% | 6,111 |
| Total | Completed | 37% | 24% | 9% | 4% | 4% | 21% | 12,282 |
| | Did not complete | 56% | 17% | 6% | 3% | 3% | 15% | 20,295 |

Notes:

1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. Counts data has been randomly rounded to base 3.
3. Doctorates are excluded because of the small numbers in this category for this cohort.
4. The 'Total' row includes all qualification levels.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

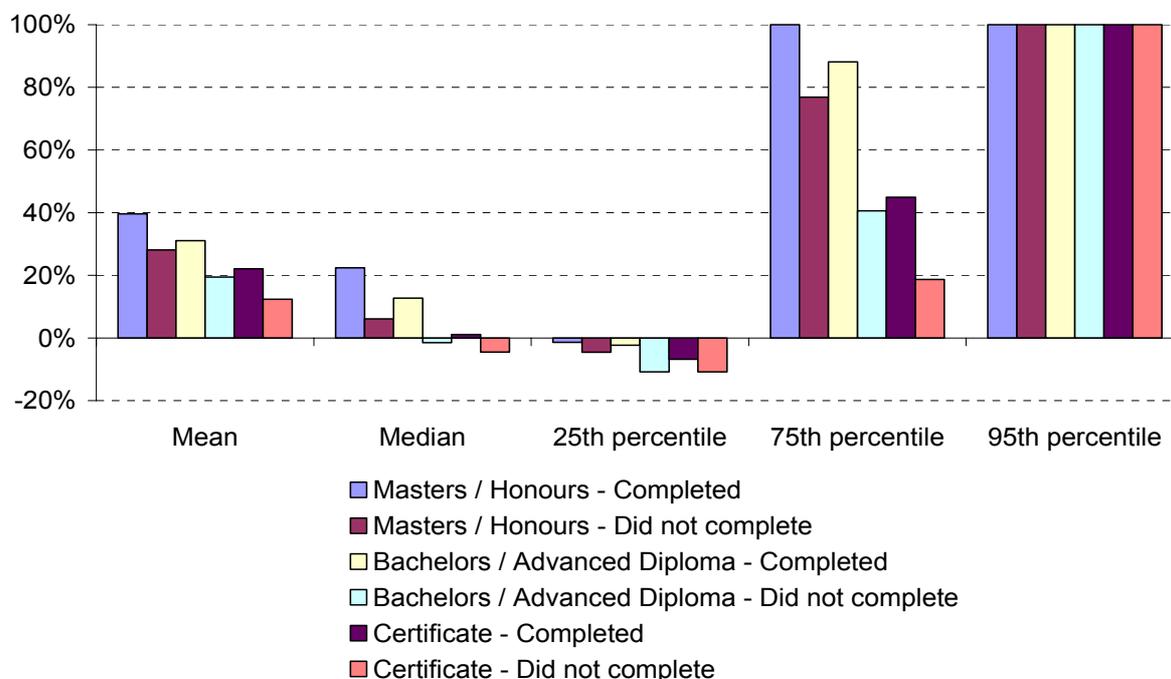
Figure 5.63: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by completion status and qualification level studied in 1997 – selected levels



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.64 shows statistics relating to the percentage of debt repaid by qualification level and completion status. For all qualification levels, those who completed their qualification had a higher mean, median, 25th and 75th percentile percentage of debt repaid. Students who completed a bachelors degree had repaid more of their debt than students who did not complete a masters degree.

Figure 5.64: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by completion status and qualification level studied in 1997 – selected levels



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.65: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by completion status and qualification level studied

| | | Average debt | | | Median debt | | |
|----------------------------|------------------|--------------|----------|----------|-------------|----------|----------|
| | | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Masters/Honours | Completed | \$18,490 | \$13,880 | 25% | \$16,700 | \$9,290 | 44% |
| | Did not complete | \$18,840 | \$16,390 | 13% | \$16,830 | \$12,860 | 24% |
| Post-Grad. Cert/Dip | Completed | \$14,620 | \$10,680 | 27% | \$10,760 | \$5,110 | 53% |
| | Did not complete | \$17,020 | \$14,430 | 15% | \$13,880 | \$8,510 | 39% |
| Bachelors/Advanced Diploma | Completed | \$19,400 | \$15,720 | 19% | \$17,140 | \$13,200 | 23% |
| | Did not complete | \$13,670 | \$12,630 | 8% | \$10,420 | \$9,310 | 11% |
| Diploma | Completed | \$14,330 | \$12,290 | 14% | \$12,600 | \$10,520 | 17% |
| | Did not complete | \$10,660 | \$9,720 | 9% | \$8,520 | \$6,970 | 18% |
| Certificate | Completed | \$6,820 | \$6,000 | 12% | \$5,490 | \$4,830 | 12% |
| | Did not complete | \$6,650 | \$6,330 | 5% | \$5,230 | \$4,950 | 5% |
| Total | Completed | \$14,340 | \$11,760 | 18% | \$10,880 | \$7,670 | 30% |
| | Did not complete | \$10,460 | \$9,610 | 8% | \$7,640 | \$6,500 | 15% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Debt data has been rounded to the nearest \$10.
3. Doctorates are excluded because of the small numbers in this category for this cohort. The 'Total' row includes all qualification levels.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

For the undergraduate students, those who completed their qualification had a higher debt on completion than those who did not complete. The reverse was true for postgraduate students.

For all levels except diploma, those who completed their qualification had a larger percentage reduction in debt between 1997 and 2000 than those who did not complete.

Repayment by sub-sector

Figures 5.66 and 5.67 show repayment profiles by sub-sector.⁴⁵

Figure 5.66: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by sub-sector in 1997

| | Percent repaid by March 2001 | | | | | | All students |
|----------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| University | 42% | 21% | 8% | 4% | 4% | 21% | 10,263 |
| Polytechnic | 51% | 19% | 7% | 4% | 3% | 16% | 15,624 |
| College of Education | 34% | 28% | 9% | 4% | 4% | 20% | 1,617 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

4. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
5. Students are counted in the sub-sector relating to the highest level qualification in which were enrolled in 1997.
6. Counts have been randomly rounded to base 3.
7. Information on the PTE or private provider sub-sector is not available for this cohort. Wānanga statistics are also not presented because of the small size of this group in 1997.

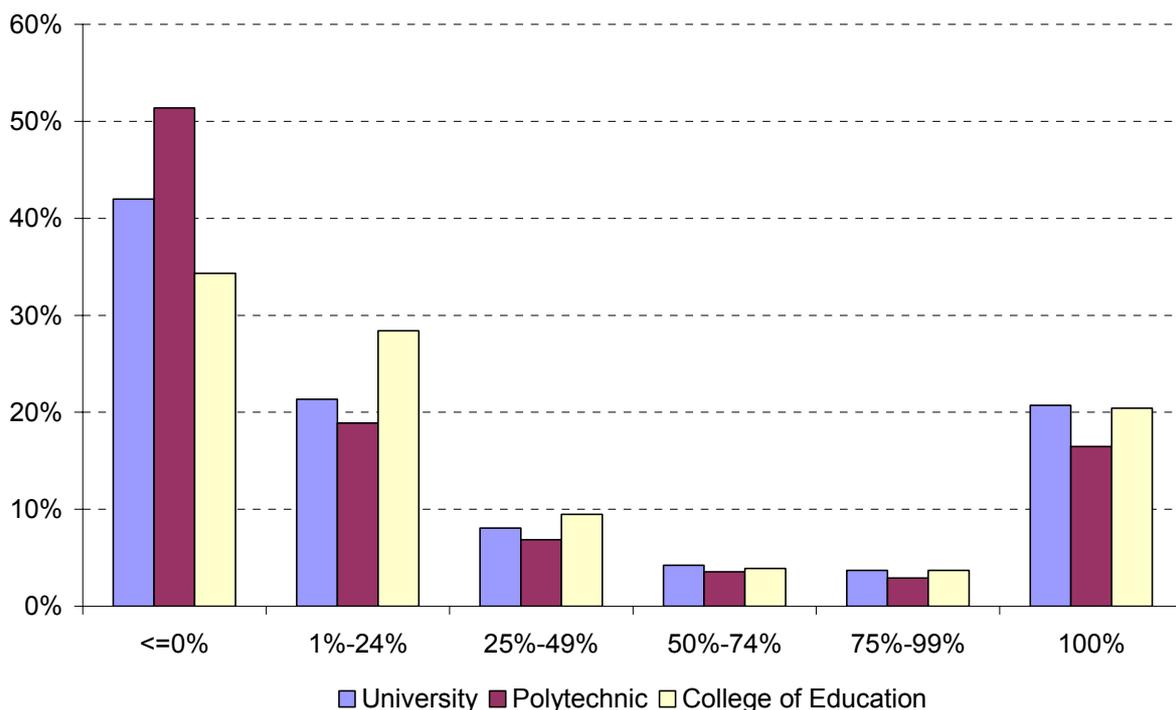
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

University students and college of education students repaid their debt more quickly than students of the other sub-sectors. The vast majority of college of education students would have gone into teaching, which has a relatively high starting salary. Around 20 percent of university and college of education students had completely repaid their debt by 2001 and 24 percent had repaid at least 75 percent of their debt. 34 percent of college of education students and 42 percent of university students had made no progress repaying their loan.

Wānanga students repaid more slowly than students of the other sub-sectors. The dataset covers the period 1997 to 2000 and hence, predates the rapid growth in enrolments in the wānanga that occurred after 2000. There were only 252 wānanga students in the dataset in 1997, with most studying certificates and of Māori ethnicity. Certificate students and Māori students had relatively slow repayment progress. Of the wānanga students who last borrowed and studied in 1997, 86 percent had made no progress repaying their loan, and 5 percent had fully repaid their loan.

⁴⁵ Students are allocated to the sub-sector of the highest level qualification they completed in 1997. If the student did not complete any qualifications in 1997, students are allocated to the sub-sector of the highest level qualification they studied in 1997.

Figure 5.67: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by sub-sector in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

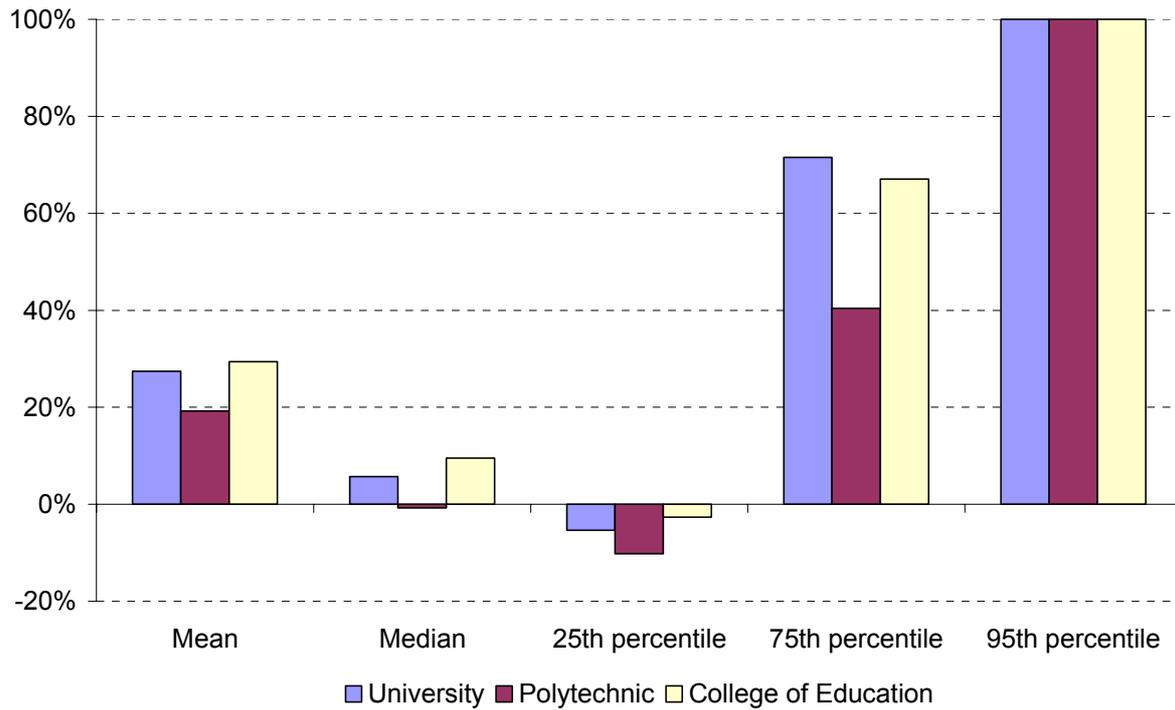
Figure 5.67 shows statistics relating to percentage debt repaid by 2001 by sub-sector.

The 25th percentiles of all sub-sectors were negative (meaning a quarter of all students at all sub-sectors owed more by 2001 than they did in 1997). About half of polytechnic students owed more by 2001 than they did in 1997.

For all statistics⁴⁶ college of education and university students had repaid more debt than polytechnic students. The difference is most pronounced in the 75th percentile (72 percent for university students compared with 40 percent for polytechnic students). The median for polytechnic students was -1 percent compared with 6 percent for university students and 10 percent for college of education students.

⁴⁶ Except the 95th percentile, which was 100 percent for all sub-sectors

Figure 5.68: Percentage of debt repaid by 2001 statistics for those who last borrowed and studied in 1997 by sub-sector in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.69: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by sub-sector in 1997

| Sub-sector | Average debt | | | Median debt | | |
|----------------------|--------------|----------|----------|-------------|----------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| University | \$17,190 | \$14,600 | 15% | \$14,590 | \$10,860 | 26% |
| Polytechnic | \$8,940 | \$8,010 | 10% | \$6,380 | \$5,560 | 13% |
| College of Education | \$15,000 | \$12,490 | 17% | \$13,010 | \$10,420 | 20% |
| Wānanga | \$7,780 | \$8,090 | -4% | \$5,630 | \$6,070 | -8% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Students are counted in the sub-sector relating to the highest level qualification in which were enrolled in 1997.
3. Data is rounded to the nearest \$10.
4. Information on the PTE or private provider sub-sector is not available for this cohort.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.69 shows the mean and median debt of those who last borrowed and studied in 1997 by sub-sector in 1997 and 2000. University students had the highest debt in both years, followed by college of education students. Wānanga students had a lower debt at March 1998 than polytechnic students, but by 2001 polytechnic students had a lower debt than wānanga students. The average and median debt of wānanga students increased between 1997 and 2000. University and college of education students achieved the largest reduction in average and median debt between 1997 and 2000.

The breakdown by of repayment profiles by sub-sector and debt band is shown in figure 5.70 below.

Figure 5.70: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by sub-sector in 1997 and debt band

| Debt at March 1998 | Sub-sector | Percent repaid by March 2001 | | | | | | All students |
|----------------------|----------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | University | 28% | 7% | 4% | 4% | 5% | 51% | 1,845 |
| | Polytechnic | 44% | 11% | 6% | 4% | 5% | 30% | 5,895 |
| | College of Education | 22% | 8% | 5% | 4% | 7% | 55% | 315 |
| | Total | 41% | 10% | 6% | 4% | 5% | 35% | 9,462 |
| \$5,000 to \$14,999 | University | 34% | 19% | 12% | 6% | 5% | 23% | 3,420 |
| | Polytechnic | 53% | 22% | 8% | 4% | 2% | 10% | 7,134 |
| | College of Education | 30% | 25% | 15% | 8% | 5% | 17% | 591 |
| | Total | 49% | 21% | 9% | 4% | 3% | 13% | 13,962 |
| \$15,000 to \$24,999 | University | 44% | 30% | 8% | 4% | 2% | 11% | 2,481 |
| | Polytechnic | 59% | 28% | 6% | 2% | 1% | 5% | 1,722 |
| | College of Education | 32% | 49% | 8% | 1% | 2% | 9% | 444 |
| | Total | 50% | 30% | 7% | 3% | 2% | 8% | 5,253 |
| \$25,000 and over | University | 61% | 26% | 5% | 2% | 1% | 5% | 2,520 |
| | Polytechnic | 70% | 24% | 2% | 1% | 1% | 2% | 876 |
| | College of Education | 63% | 26% | 5% | 1% | 1% | 5% | 264 |
| | Total | 63% | 25% | 4% | 2% | 1% | 4% | 3,900 |
| Total | University | 42% | 21% | 8% | 4% | 4% | 21% | 10,263 |
| | Polytechnic | 51% | 19% | 7% | 4% | 3% | 16% | 15,624 |
| | College of Education | 34% | 28% | 9% | 4% | 4% | 20% | 1,617 |
| | Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. Students are counted in the sub-sector relating to the highest level qualification in which were enrolled in 1997.
3. Counts have been randomly rounded to base 3.
4. Information on the PTE or private provider sub-sector is not available for this cohort. Wānanga statistics are also not presented because of the small size of this group in 1997.

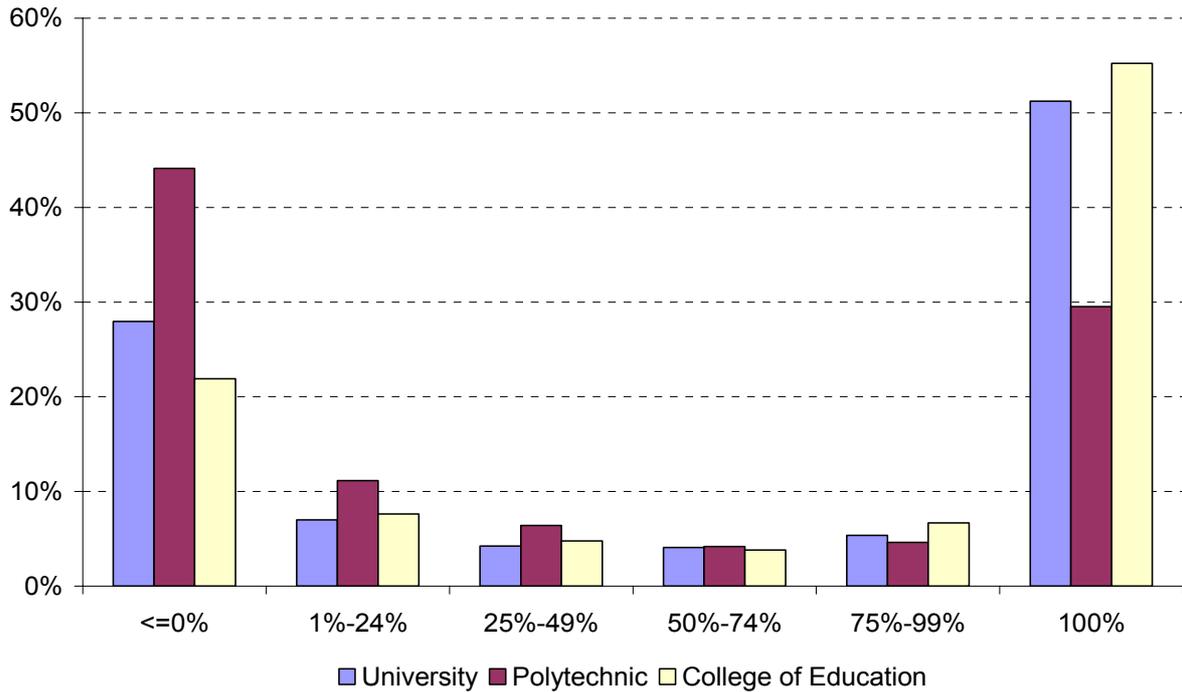
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.71 shows repayment profiles by sub-sector for the lowest debt band and figure 5.72 shows repayment profiles by sub-sector for the highest debt band.

In the lowest debt band polytechnic students had the highest proportion to have made no progress repaying their debt and the smallest proportion to have completely repaid their debt, followed by university students and college of education students.⁴⁷

⁴⁷ This analysis excludes wānanga students because of low numbers. Those wānanga students in the dataset had slower progress to repayment than students in other sub-sectors.

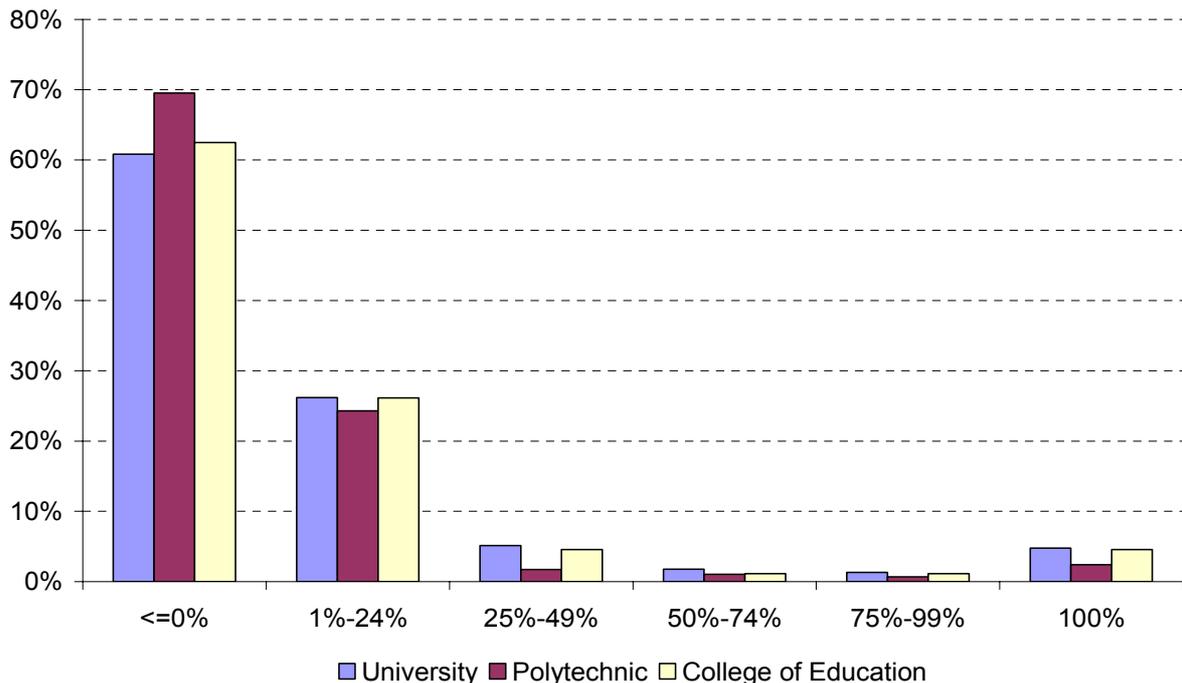
Figure 5.71: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with debt under \$5,000 by sub-sector in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

The difference between the sub-sectors was much smaller in the highest debt band than in the lowest debt band. 70 percent of polytechnic students had made no progress, compared with 63 percent of college of education students and 61 percent of university students. The difference in proportions to have completely repaid their debt was even smaller (21 percent for university students, 20 percent for college of education students and 16 percent for polytechnic students).

Figure 5.72: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with debt over \$25,000 by sub-sector in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment by field of study

Figures 5.73 and 5.74 show repayment profiles by field of study. Field of study relates to the field of study of the students highest level qualification in 1997.⁴⁸

Figure 5.73: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by field of study in 1997

| | Percent repaid by March 2001 | | | | | | All students |
|---|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Natural and physical sciences | 46% | 20% | 8% | 4% | 3% | 19% | 1,704 |
| Information technology | 45% | 18% | 9% | 4% | 4% | 19% | 828 |
| Engineering and related technologies | 35% | 18% | 8% | 6% | 5% | 28% | 1,188 |
| Architecture and building | 45% | 21% | 8% | 5% | 4% | 17% | 501 |
| Agric, environmental & related studies | 48% | 19% | 8% | 4% | 4% | 19% | 1,182 |
| Health | 28% | 26% | 11% | 6% | 4% | 24% | 1,713 |
| Education | 35% | 26% | 9% | 4% | 4% | 21% | 2,400 |
| Management and commerce | 42% | 21% | 7% | 4% | 4% | 21% | 5,088 |
| Society and culture | 53% | 18% | 7% | 3% | 3% | 16% | 5,883 |
| Creative arts | 57% | 19% | 6% | 3% | 2% | 13% | 3,912 |
| Food, hospitality and personal services | 56% | 20% | 6% | 3% | 2% | 13% | 2,406 |
| Mixed field programmes | 56% | 14% | 5% | 2% | 3% | 21% | 954 |
| Unknown | 58% | 16% | 6% | 3% | 3% | 14% | 4,818 |
| All students | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
3. Counts have been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Fields of study where the highest share of students had made no progress repaying their loan were creative arts, food, hospitality and personal services, mixed field programmes and society and culture. These were also the fields of study with the highest proportion of students that had repaid less than 25 percent of their loan.

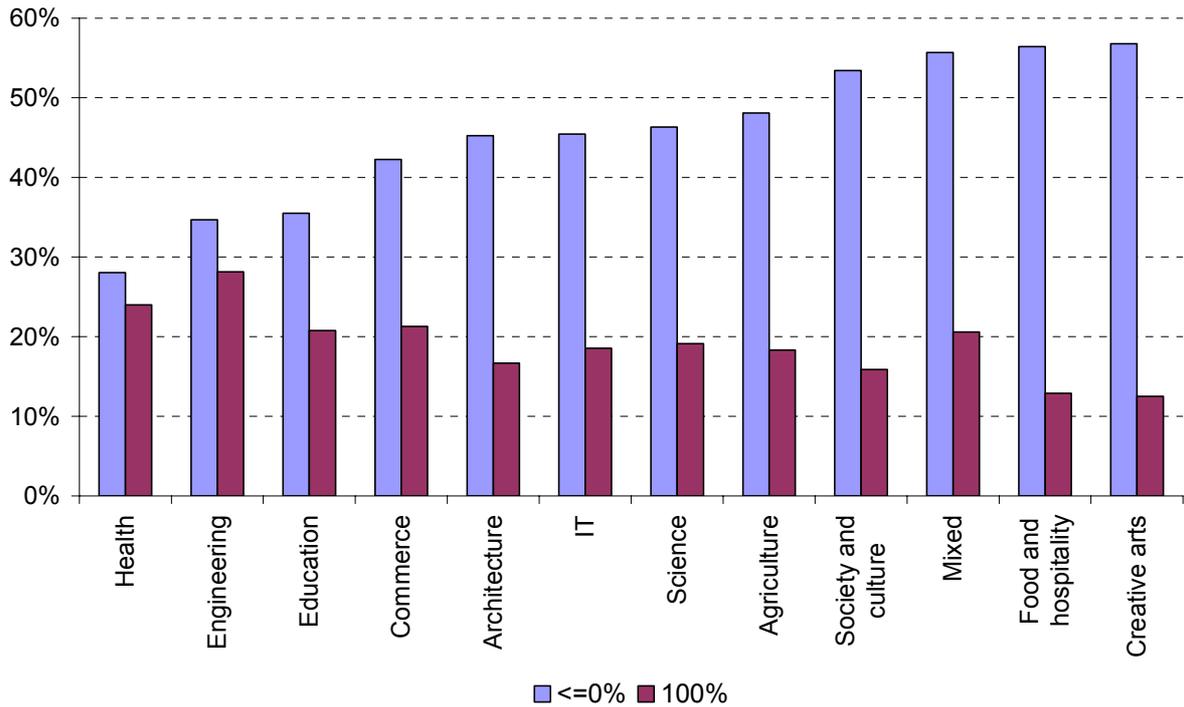
Fields of study where the lowest proportion of students had made no progress repaying their loan were health, engineering and related technologies, education and management and commerce. These were also the fields of study with the fewest students to have repaid at least a quarter of their loan.

The fields of study where the highest share of students had completely repaid their loan by 2001 were engineering and related technologies, health, education, management and commerce and mixed field programmes (mixed field programmes topped the 'all or nothing' rankings by a long way with 77 percent). These were also the fields, along with information technology, where the highest share of students had repaid at least three quarters of their debt.

The fields of study with the lowest proportion of students to have fully repaid their loan by 2001 were creative arts, food, hospitality and personal services and society and culture. These were also the fields with the lowest share of students to have repaid at least three quarters of their debt.

⁴⁸ Students are allocated to the field of study of the highest level qualification they completed in 1997. If the student did not complete any qualifications in 1997, students are allocated to the field of study of the highest level qualification they studied in 1997. While just one field of study is allocated to each qualification, qualifications can comprise courses that cover more than one field of study.

Figure 5.74: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by field of study in 1997

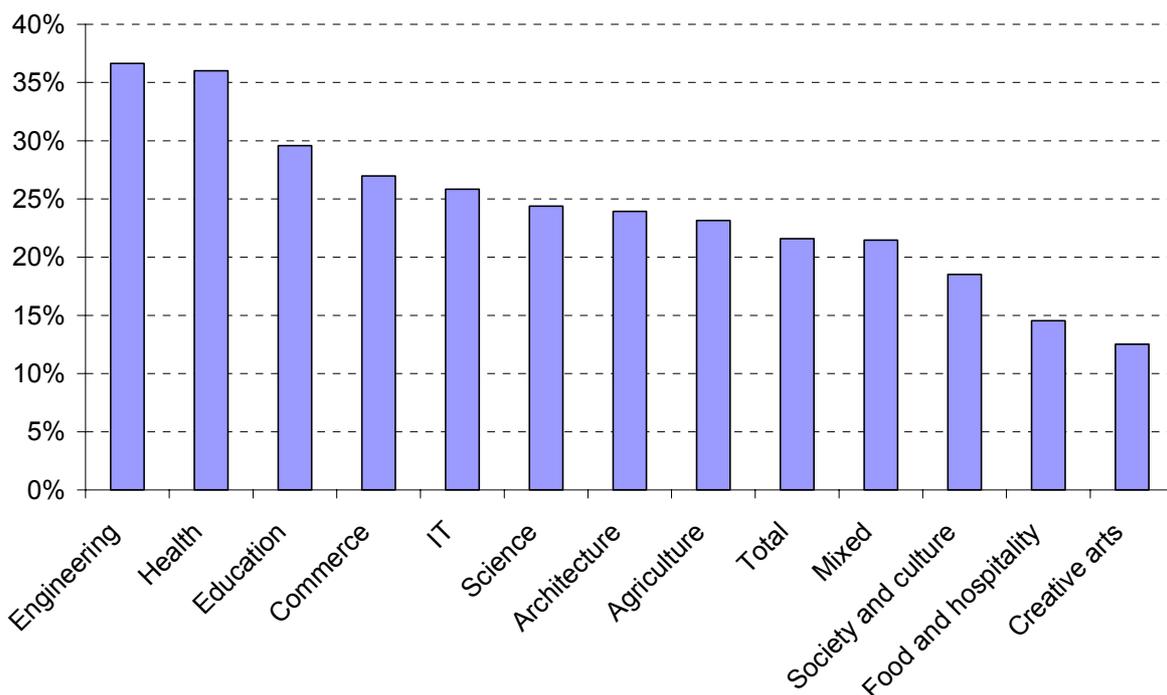


Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.75 shows the mean percentage debt repaid by field of study for those who last borrowed and studied in 1997. The fields with the highest average percentage debt repaid were engineering and health, significantly ahead of education, commerce and information technology.

The fields with the lowest average debt repaid were creative arts, food, hospitality and personal services, society and culture and mixed field programmes.

Figure 5.75: Mean percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by field of study in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.76: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by field of study in 1997

| | Average debt | | | Median debt | | |
|---|--------------|----------|-----|-------------|----------|-----|
| | 1997 | 2000 | | 1997 | 2000 | |
| Natural and physical sciences | \$15,680 | \$13,620 | 13% | \$12,980 | \$10,380 | 20% |
| Information technology | \$9,130 | \$7,660 | 16% | \$6,180 | \$4,850 | 22% |
| Engineering and related technologies | \$12,270 | \$9,270 | 24% | \$9,170 | \$5,100 | 44% |
| Architecture and building | \$16,590 | \$14,570 | 12% | \$14,230 | \$11,770 | 17% |
| Agric, environmental & related studies | \$9,860 | \$8,340 | 15% | \$6,420 | \$5,370 | 16% |
| Health | \$18,590 | \$14,250 | 23% | \$14,390 | \$9,650 | 33% |
| Education | \$14,810 | \$12,350 | 17% | \$12,570 | \$9,840 | 22% |
| Management and commerce | \$11,900 | \$10,100 | 15% | \$8,730 | \$6,020 | 31% |
| Society and culture | \$13,280 | \$12,190 | 8% | \$9,980 | \$8,490 | 15% |
| Creative arts | \$9,950 | \$9,250 | 7% | \$6,650 | \$6,140 | 8% |
| Food, hospitality and personal services | \$8,470 | \$7,910 | 7% | \$6,810 | \$6,290 | 8% |
| Mixed field programmes | \$8,550 | \$7,450 | 13% | \$4,340 | \$3,370 | 22% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Notes:

1. Debt in 1997 and 2000 relates to the loan balance at 31 March of the following year.
2. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
3. Data is rounded to the nearest \$10.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.76 shows the mean and median leaving debt, and debt three years later for those who last borrowed and studied in 1997. Students with the highest leaving debt had studied health, architecture, science and education. Students with the lowest leaving debt had studied mixed field programmes, information technology, agriculture, creative arts or food, hospitality and personal services.

The fields of study where students had achieved the largest reduction in average and median debt were engineering, health, commerce and education. The fields of the study where there

was less difference between 1997 and 2000 average and median debt were creative arts, food, hospitality and personal services, society and culture and mixed field programmes.

Figures 5.77 to 5.80 show the repayment profiles of each debt band by field of study.

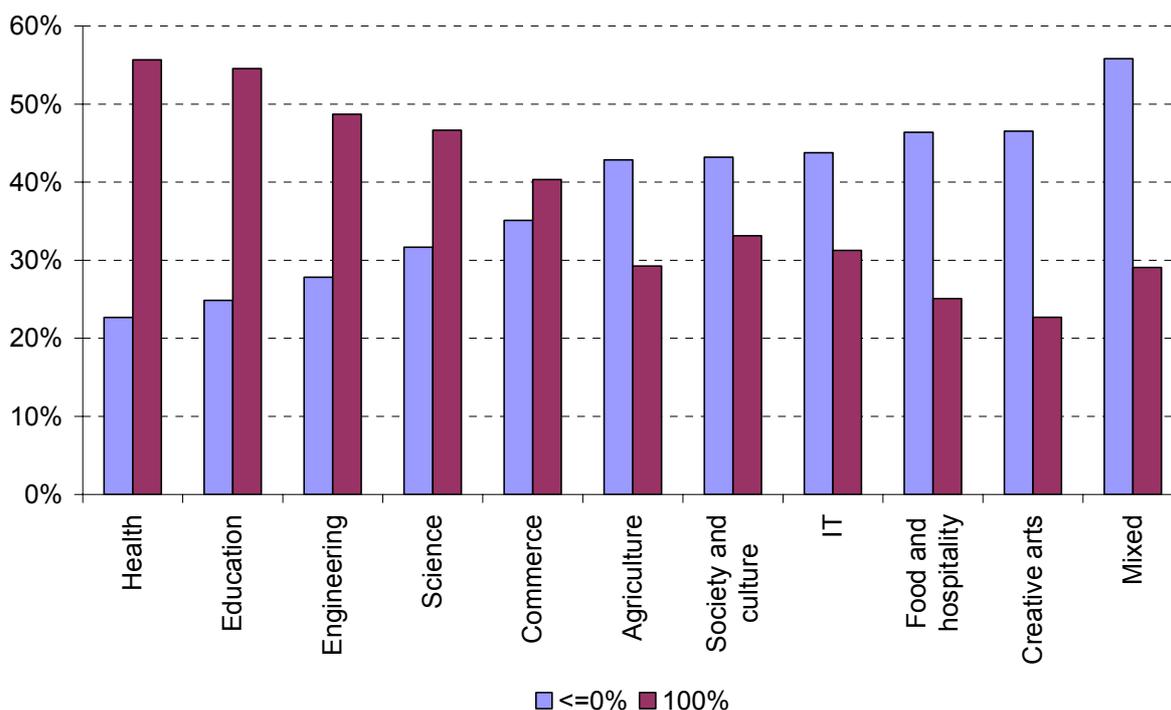
In the lowest debt band there were only 84 architecture students (omitted from the graph and following analysis).

Health, education, engineering, science and commerce had the highest proportion to have completely repaid their debt and the lowest proportion to have made no progress.

The fields with the highest proportion to have made no progress were mixed field programmes, creative arts and food and hospitality.

The fields with the lowest proportion to have completely repaid their debt were creative arts, food and hospitality, mixed field programmes, agriculture and information technology.

Figure 5.77: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt under \$5,000 by field of study in 1997



Notes:

1. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

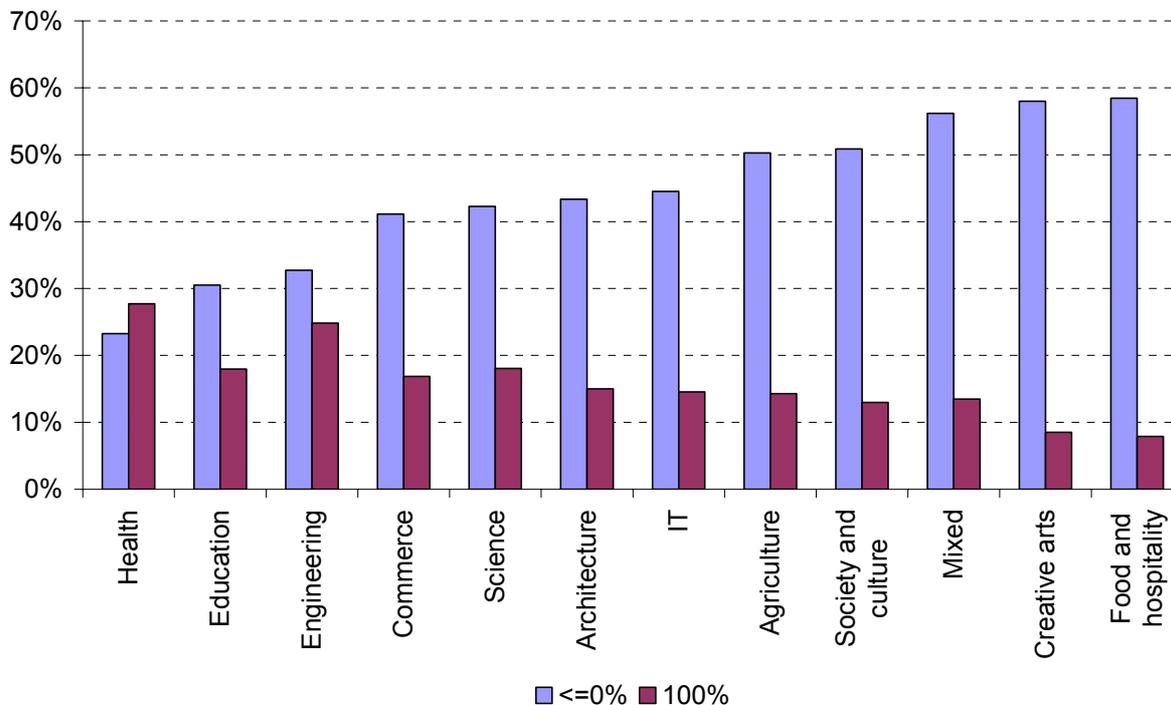
In the second debt band, health, engineering, science, education and commerce had the highest proportion to have completely repaid their debt.

Health, education and engineering had the lowest proportion to have made no progress.

The fields with the highest proportion to have made no progress were food and hospitality, creative arts, mixed field programmes, society and culture and agriculture.

The fields with the lowest proportion to have completely repaid their debt were creative arts, food and hospitality, mixed field programmes and society and culture.

Figure 5.78: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt between \$5,000 and \$14,999 by field of study in 1997



Notes:

1. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In the third debt band there were only 84 mixed field programme students, who were omitted from the graph and the following analysis.

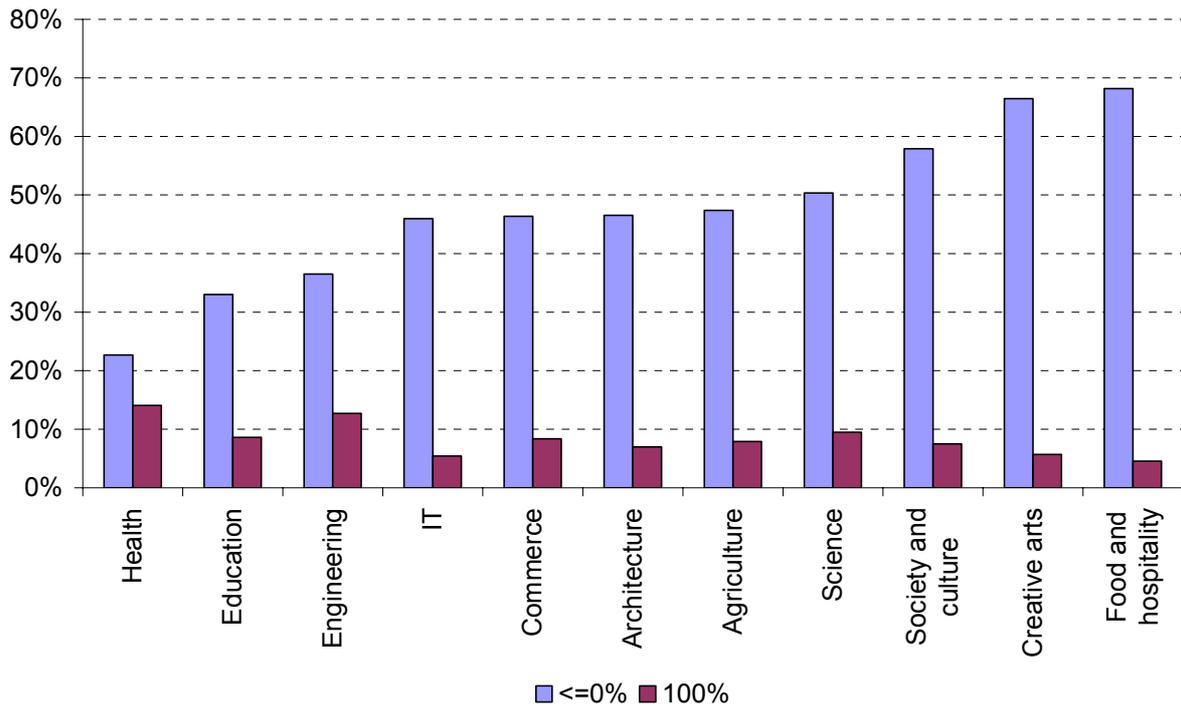
Health, engineering, science and education had the highest proportion to have completely repaid their debt.

Health, education and engineering had the lowest proportion to have made no progress.

The fields with the highest proportion to have made no progress were food and hospitality, creative arts and society and culture.

The fields with the lowest proportion to have completely repaid their debt were food and hospitality, information technology, creative arts, society and culture and architecture.

Figure 5.79: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt between \$15,000 and \$24,999 by field of study in 1997



Notes:

1. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
- Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In the highest debt band the fields with less than 100 students (omitted from analysis) were information technology, mixed field programmes, food and hospitality and agriculture.

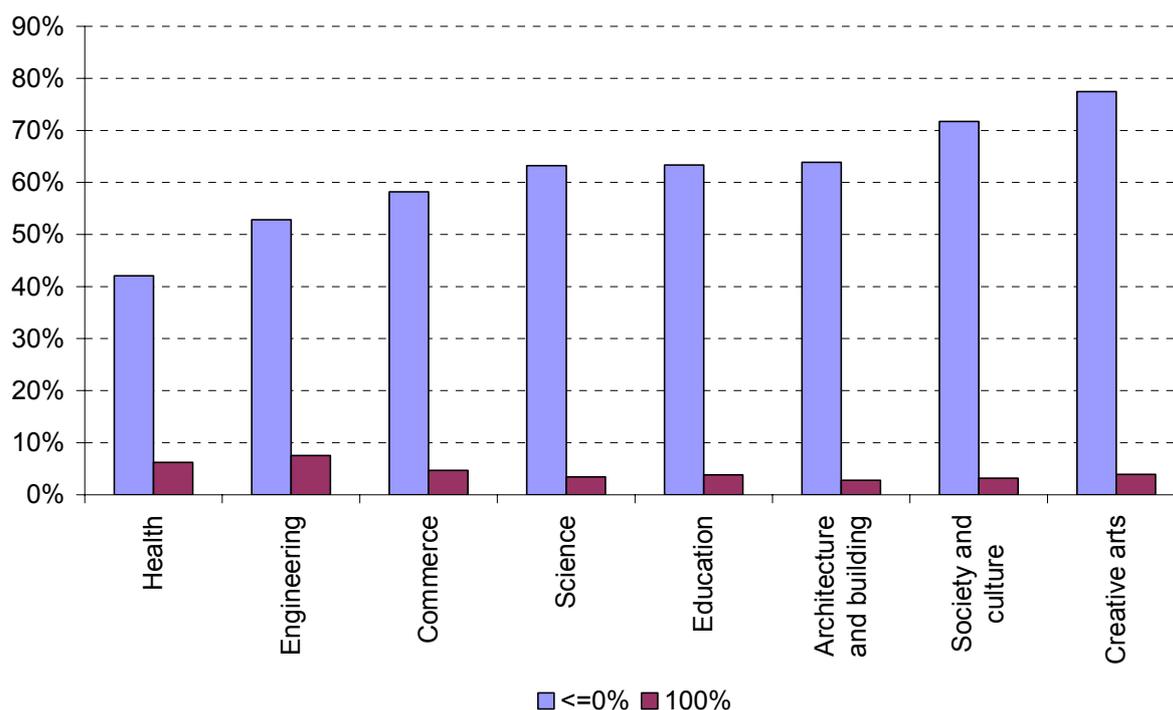
The fields with the highest proportion to have repaid all of their debt were engineering, health and commerce.

The fields with the lowest proportion to have made no progress were health, engineering and commerce.

The fields with the highest proportion to have made no progress were creative arts and society and culture.

The fields with the lowest proportion to have repaid all of their debt were science, architecture and society and culture.

Figure 5.80: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with a debt over \$25,000 by field of study in 1997



Notes:

1. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
- Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Repayment profiles for selected qualifications

This analysis examines the repayment profiles of those students who successfully completed a Bachelor of Arts, Bachelor of Commerce or Business (or similar), Bachelor of Laws, Bachelor of Medicine & Bachelor of Surgery, Bachelor of Nursing, or another bachelors degree or advanced diploma.

Figure 5.81: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by professional qualification completed in 1997

| | Percent Repaid by March 2001 | | | | | | All students |
|-------------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Arts | 46% | 22% | 7% | 3% | 2% | 19% | 654 |
| Commerce | 30% | 31% | 9% | 6% | 4% | 21% | 948 |
| Law | 33% | 30% | 4% | 11% | 4% | 15% | 81 |
| Medicine | 21% | 30% | 14% | 5% | 5% | 26% | 129 |
| Nursing | 20% | 31% | 13% | 8% | 4% | 24% | 615 |
| Other bachelors degrees | 32% | 26% | 10% | 5% | 4% | 23% | 2,880 |

Notes:

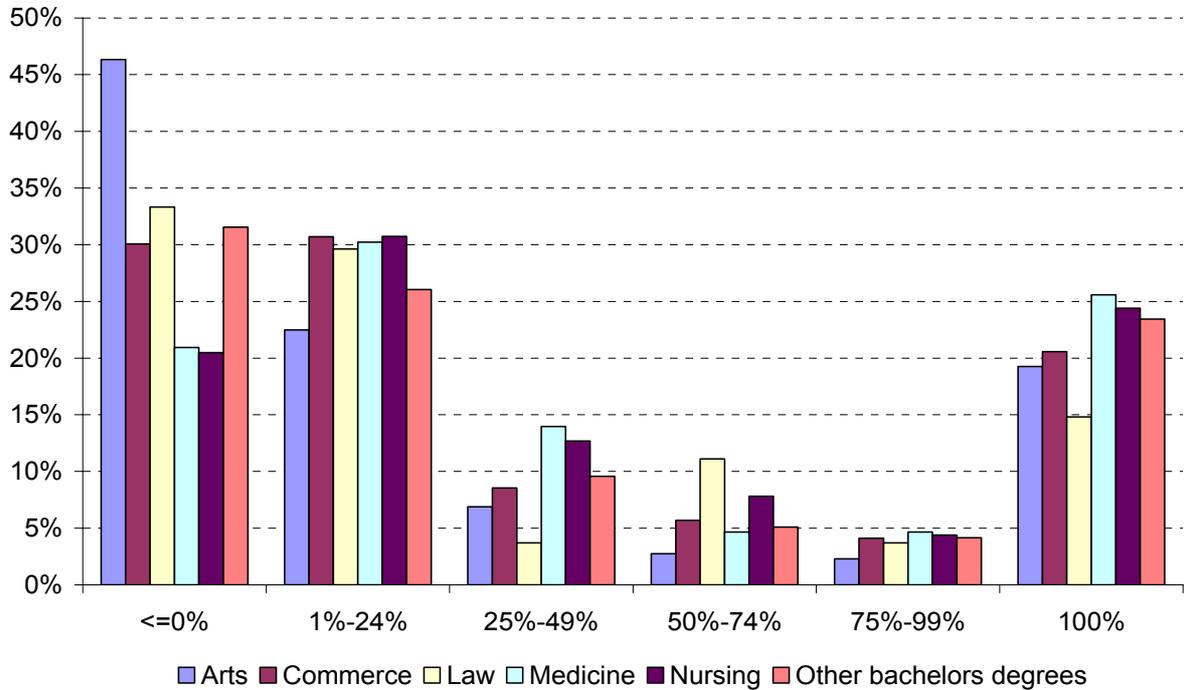
1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. Counts have been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Medicine and nursing had a smaller proportion to have made no progress than other bachelor degrees, while arts had a higher proportion to have made no progress. The other professional qualifications were very similar to other bachelor degrees.

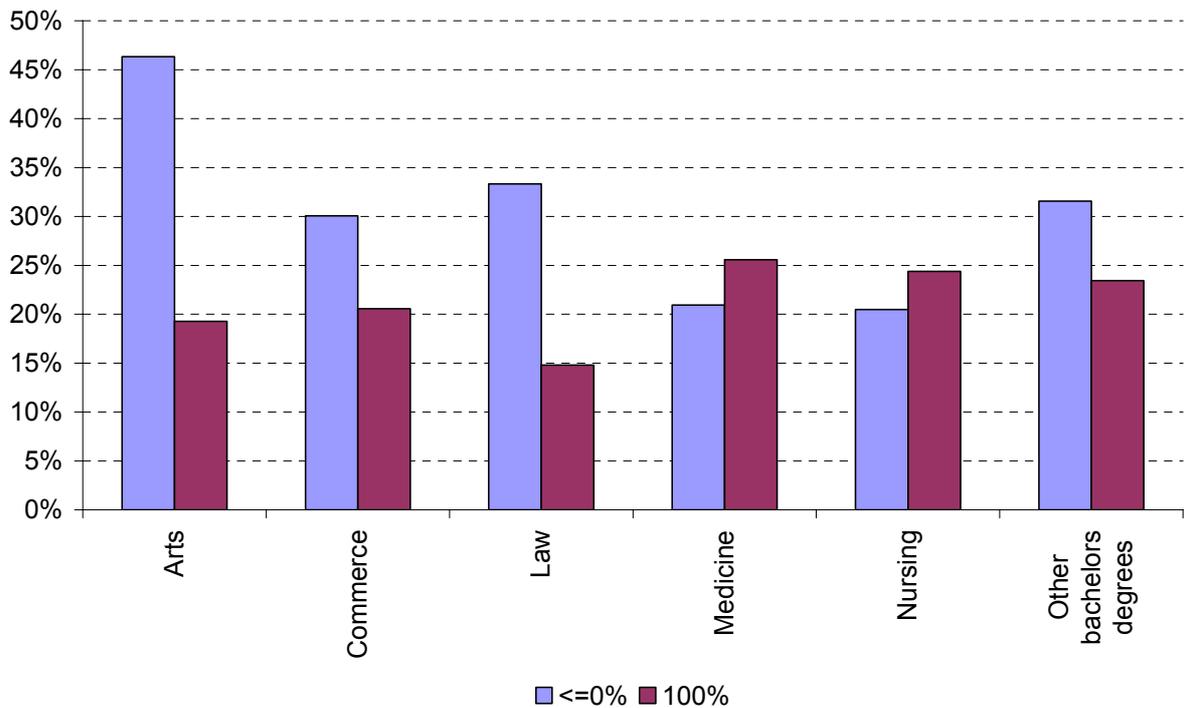
Medicine and nursing also had a slightly higher proportion to have completely repaid their debt than other bachelors degrees. Law, arts and commerce had a smaller proportion to have completely repaid their debt.

Figure 5.82: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by professional qualification in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.83: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by professional qualification in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Figure 5.84 shows repayment profiles for selected qualifications by debt band. Disaggregating the already small numbers in some qualifications by debt band resulted in very small numbers in many categories. In medicine the majority of borrowers were in the highest debt band, especially those groups with small numbers to begin with.

Figure 5.84: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by professional qualification completed in 1997 and debt band

| Debt at March 1998 | | Percent repaid by March 2001 | | | | | | All students |
|--------------------|-------------------------|------------------------------|--------|---------|---------|---------|------|--------------|
| | | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Under \$5,000 | Arts | 12% | 6% | 6% | 0% | 6% | 76% | 51 |
| | Commerce | 14% | 5% | 5% | 5% | 9% | 68% | 66 |
| | Nursing | 7% | 3% | 3% | 7% | 10% | 66% | 87 |
| | Other bachelors degrees | 14% | 6% | 3% | 5% | 8% | 65% | 330 |
| \$5,000 to 14,999 | Arts | 26% | 27% | 12% | 4% | 5% | 26% | 222 |
| | Commerce | 16% | 20% | 15% | 10% | 8% | 31% | 318 |
| | Nursing | 11% | 23% | 20% | 13% | 5% | 30% | 240 |
| | Other bachelors degrees | 17% | 19% | 15% | 10% | 7% | 33% | 900 |
| \$15,000 to 24,999 | Arts | 56% | 27% | 5% | 3% | 2% | 8% | 192 |
| | Commerce | 29% | 45% | 10% | 3% | 2% | 11% | 273 |
| | Medicine | 14% | 14% | 14% | 14% | 14% | 57% | 21 |
| | Nursing | 23% | 50% | 14% | 4% | 2% | 7% | 168 |
| | Other bachelors degrees | 31% | 40% | 10% | 4% | 3% | 12% | 819 |
| Over \$25,000 | Arts | 73% | 18% | 3% | 2% | 2% | 3% | 180 |
| | Commerce | 53% | 35% | 2% | 3% | 2% | 4% | 279 |
| | Medicine | 25% | 38% | 16% | 6% | 3% | 9% | 96 |
| | Nursing | 47% | 42% | 3% | 5% | 3% | 3% | 114 |
| | Other bachelors degrees | 58% | 29% | 6% | 1% | 1% | 5% | 801 |
| All students | | 32% | 27% | 9% | 5% | 4% | 22% | 5,388 |

Notes:

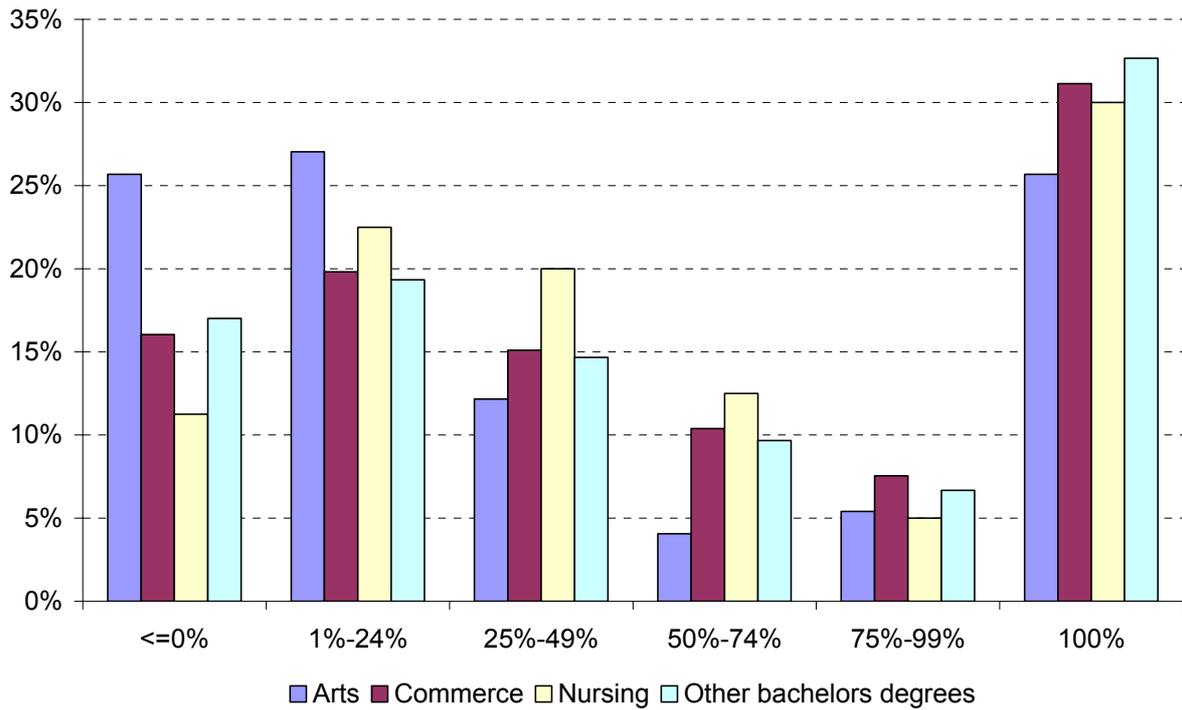
1. Percentage repaid relates to loan balance at 31 March 2001 compared with loan balance at 31 March 1998.
2. Students are counted in the field of study of the highest level qualification in which were enrolled in 1997.
3. Counts have been randomly rounded to base 3.

Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

In the lowest debt band, there was not much difference between arts, commerce, nursing and other bachelor degrees.

In the second lowest debt band there was more variation. Arts had a higher proportion to have made no progress and a smaller proportion to have completely repaid their debt. Nursing had a smaller proportion to have made no progress and the highest proportion to be “in progress”. Other bachelor degrees had the highest proportion to have completely repaid their debt.

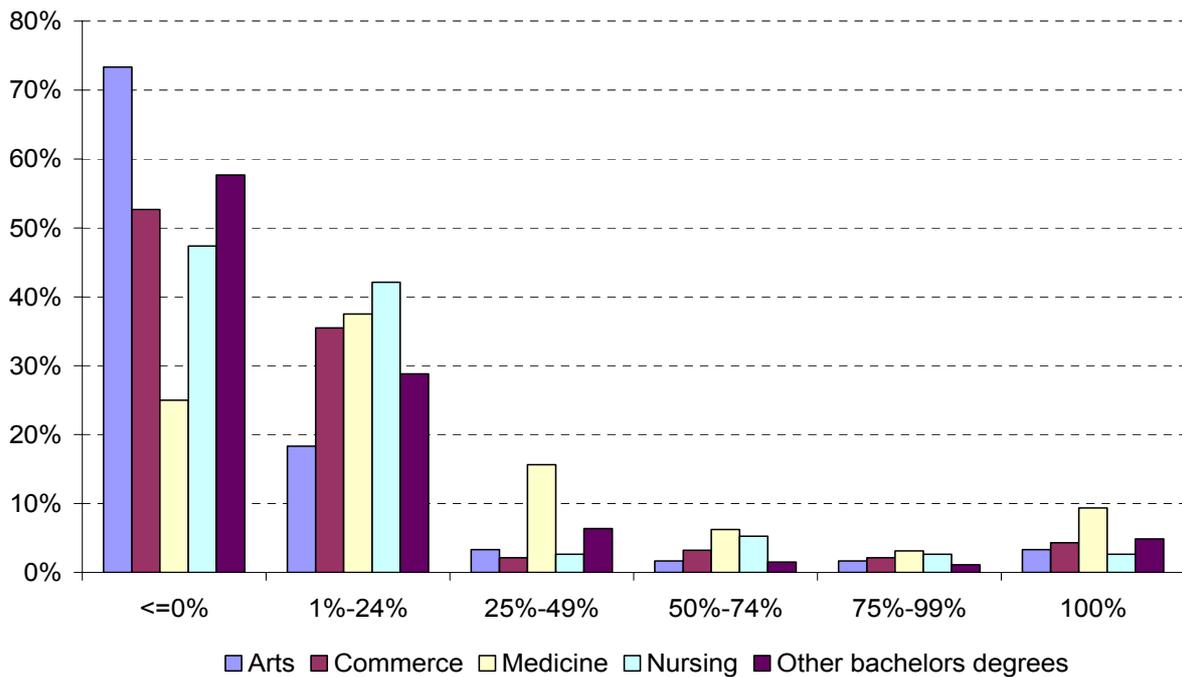
Figure 5.85: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with debt between \$5,000 and \$14,999 by professional qualification completed in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

Over 70 percent of arts students in the highest debt band had made no progress repaying their debt, along with 58 percent of other bachelor degrees. Only a quarter of medical students had made no progress repaying their debt. Nine percent of medical students had completely repaid their debt. Only 3 percent of arts and nursing students had repaid all of their debt and 5 percent of other bachelor students.

Figure 5.86: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 with debt over \$25,000 by professional qualification completed in 1997



Source: Statistics New Zealand, Integrated Dataset on Student Loan Scheme Borrowers.

6 Debt and Going Overseas

Introduction

Concerns have been raised about the number of young people who leave New Zealand following tertiary education. It is sometimes alleged that student loan debt is a factor that encourages young people to go overseas.

There is nothing wrong with New Zealanders travelling, living and working overseas for a period following graduation. There is a long tradition of New Zealanders travelling overseas in the years following completion of tertiary study⁴⁹. That is not necessarily a problem; those who travel and work overseas pick up skills, insights and perspectives that enhance their contribution to New Zealand on their return. So there are benefits for the country as those people return to New Zealand, having had the experience of working in other countries.

There is only a problem with graduates going overseas after study if those people do not return to work in New Zealand in significant numbers. Recently published data indicates that the majority of student loan borrowers who go overseas following study do return to New Zealand after several years⁵⁰.

This chapter uses information drawn from the integrated dataset on Student Loan Scheme borrowers and other sources to explore what factors are associated with the propensity of people to travel overseas following tertiary education.

The context

More than 550,000 people have borrowed under the Student Loan Scheme since it began. Less than 5 percent of all those who have ever used the scheme were recorded as overseas in 2004. About 25,400 (or 6 percent of) borrowers with a current balance were recorded as non-resident as at 30 June 2004⁵¹. The corresponding figure for 2003 was 24,700 (also 6 percent). The relative stability of this figure implies there is no evidence of large numbers of New Zealanders leaving the country to avoid repaying student loan debt.

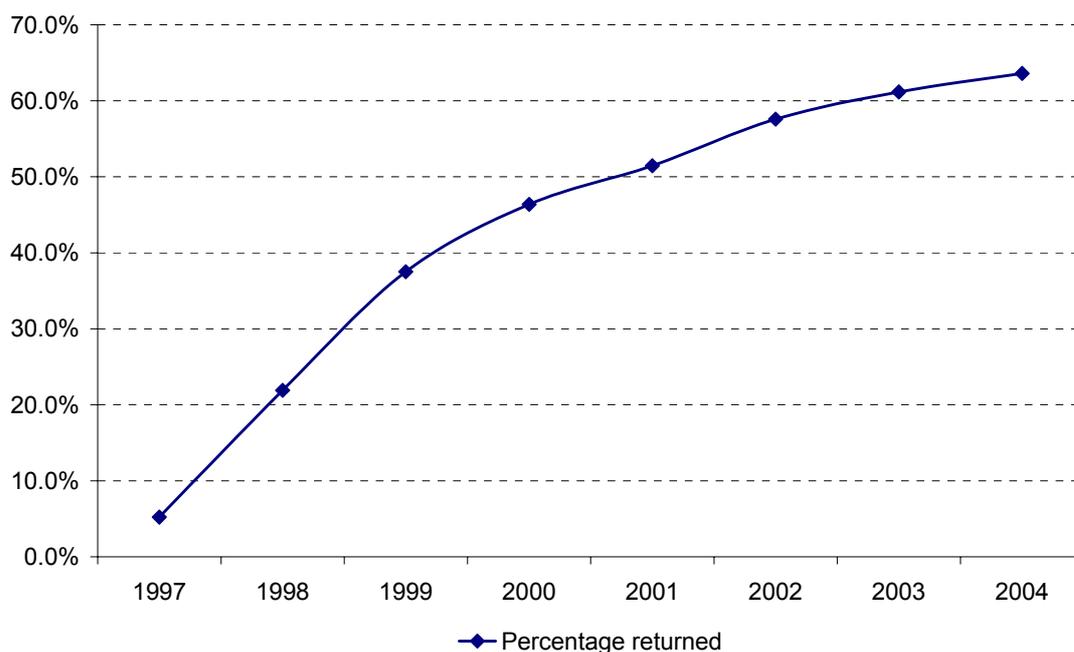
A study of the time spent away from New Zealand by those with Student Loan Scheme debt confirms that the majority do return to New Zealand. Of the borrowers who left the country in 1996, nearly two-thirds had returned to New Zealand by June 2004. Of those who returned, more than half did so after three years or less. About two thirds did so within four years.

⁴⁹ It has estimated that nearly 14 percent of New Zealand born people live outside New Zealand and that around 19 percent of New Zealand's population is foreign born. Refer to Bryant J and D Law (2004) *New Zealand's Diaspora and Overseas-born Population*. The Treasury.

⁵⁰ Ministry of Education, Ministry of Social Development and Inland Revenue (2004) *Student Loan Scheme Annual Report to 30 June 2004*, page 31.

⁵¹ The number of borrowers overseas may be higher than reported due to borrowers leaving New Zealand without advising Inland Revenue.

Figure 6.1: Borrowers who left New Zealand in the year 1 July 1995 to 30 June 1996 and who have returned to New Zealand



Source: Inland Revenue

Around two-thirds of all borrowers still overseas have been away from New Zealand for less than four years and hence a significant majority of them are expected to return to New Zealand. The data on those student loan borrowers who left New Zealand in the year to 30 June 1996 shows that those who remain out of New Zealand for more than five years have a low propensity to return, however⁵². Interestingly, it appears the proportion of New Zealanders with a student loan living overseas is lower than the proportion of all New Zealand born people living overseas – estimated to be around 13 – 14 percent⁵³.

What the integrated dataset shows about loan borrowers travelling overseas

Data from the integrated dataset shows that the likelihood that someone travels overseas following study is associated with a number of interrelated factors. An analysis of the residency status in 2000 of those who borrowed between 1997 and 1999, but did not borrow in 2000 shows that the proportion is higher among those taking higher level qualifications, with about half of all of those overseas having studied at the bachelors level. It is higher among those who were successful in completing qualifications than among those who did not complete.

The proportion is lower among Māori and Pasifika borrowers, while the proportion of people of Asian ethnicity overseas was not significantly different from the rate among borrowers as a whole. In the first year post-study, men and women were equally likely to leave New Zealand, but women had a higher probability of departing in subsequent years. Those who studied at a university were more likely to leave the country than those who studied at a polytechnic. Citizenship status – whether a person is a New Zealand citizen or a permanent resident –

⁵² While there is an inevitable loss of the investment made by the government in tertiary education whenever a highly qualified person emigrates, research shows that the number of immigrants with high qualifications matches the numbers emigrating. Refer to Glass H and W K Choy (2001) *Brain Drain or Brain Exchange?* The Treasury.

⁵³ Refer to Bryant J and D Law (2004) *New Zealand's Diaspora and Overseas-born Population*. The Treasury.

makes only a marginal difference in the likelihood that a borrower goes overseas; permanent residents have a very slightly higher tendency to go overseas following study⁵⁴.

The integrated dataset also enables us to look at the time spent overseas and hence, allows us to make an initial assessment of the probability that different groups will return to New Zealand. Student loan borrowers who have declared that they are overseas tend to have higher loan balances than those resident in New Zealand. The mean loan balance of those who used the loan scheme between 1997 and 1999 and who were overseas in 2000 was \$6,990 or 53 percent higher than the balance of borrowers living in New Zealand⁵⁵.

In part, the difference in loan balance results from the fact that repayment rules are different for people resident overseas. They do not, for example, have the benefit of the income contingent compulsory repayment rule. Therefore, borrowers who go overseas are more likely to have overdue repayment obligations and to incur penalties that will serve to increase their loan balance. Nor do borrowers resident overseas benefit from the convenience of having repayments collected through the tax system. In part, however, the difference results from the fact that those who complete study with higher debt have a greater tendency to travel overseas.

The remainder of this chapter explores some of the key characteristics of those who travel overseas following study. Most of the analysis focuses on those who last borrowed and studied in 1997 and looks at their declared residency status in 2000. The focus is largely on the relationship between the likelihood of being overseas and the level of the loan balance in 1997⁵⁶ and the level and area of study.

The relationship between travelling overseas and debt level

Around 8 percent of the people who last studied and borrowed in 1997 had declared that they were residing overseas in 2000⁵⁷. The table below also shows that, of those who last borrowed and studied in 1997, people with higher debt are more likely to have declared themselves overseas in 2000 than those with lower debt. Nearly one in five of those whose debt at 31 March 1998 was over \$25,000 was recorded as being overseas in 2000, while fewer than one in 20 of those with a debt of under \$5,000 at 31 March 1998 was overseas in 2000.

⁵⁴ While New Zealand citizens were found to have a lower propensity to be resident overseas, the difference was not significant (5.6 percent against 6.3 percent).

⁵⁵ Statistics New Zealand (2002), *Integrated Data on Student Loan Borrowers 1997 – 2000*, Hot Off The Press 10 December 2002. www.stats.govt.nz

⁵⁶ In this chapter the term 'loan balance in 1997' refers to the loan balance held by Inland Revenue as at 31 March 1998.

⁵⁷ As noted above, the number of borrowers declared overseas understates the actual number overseas. This is because some borrowers move overseas without notifying Inland Revenue.

Figure 6.2: Percentage of borrowers who last borrowed and studied in 1997 declared as overseas in 2000 by debt at 31 March 1998

| Debt at 31 March 1998 | All borrowers | | | Borrowers whose 1997 study was at the bachelors level | | |
|-----------------------|---------------|--------|---------------------|---|--------|---------------------|
| | Overseas | Total | Percentage overseas | Overseas | Total | Percentage overseas |
| Under \$5,000 | 297 | 9,462 | 3% | 81 | 1,893 | 4% |
| \$5,000 - \$14,999 | 942 | 13,962 | 7% | 378 | 3,675 | 10% |
| \$15,000 - \$24,999 | 666 | 5,253 | 13% | 369 | 2,571 | 14% |
| \$25,000 and over | 714 | 3,900 | 18% | 438 | 2,370 | 18% |
| Total | 2,619 | 32,577 | 8% | 1,266 | 10,509 | 12% |

Notes:

1. Counts data has been randomly rounded to base 3 according to Statistics New Zealand confidentiality provisions.

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

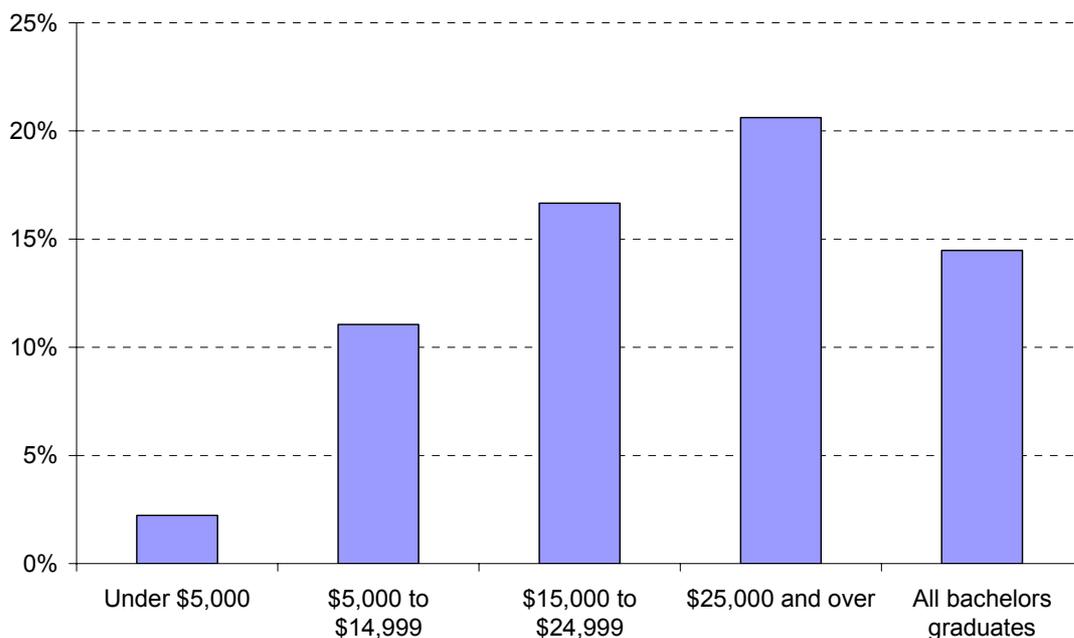
The proportions overseas are higher for those whose 1997 enrolment was at the bachelors level. Of those who studied at the bachelors level, roughly one in eight was declared overseas in 2000, compared with one in 12 of all those who last studied and borrowed in 1997. The difference between bachelors students and others applies at all debt levels.

Those who were successful in completing a bachelors degree were more inclined to travel. Many of them will see the successful completion of a qualification as an appropriate time to gain some overseas experience before returning for to New Zealand to build a career. Having completed a degree, most will see themselves as having improved employment prospects overseas. Others will go overseas for postgraduate study.

While 12 percent of all who last studied and borrowed at the bachelors level in 1997 were overseas in 2000, the proportion rises to 14 percent if one restricts one's view to those who successfully completed a bachelors degree in 1997. This applies at all debt levels except for the lowest. Among those with a balance of between \$15,000 and \$24,999, the proportion of those who successfully completed a bachelors degree in 1997 who had declared themselves overseas in 2000 was 17 percent, compared with 14 percent among all of those who last borrowed and studied at the bachelors level and 13 percent among all who last borrowed and studied in 1997. Similar margins apply among those whose 1997 loan balance was over \$25,000 and among those with a balance of between \$5,000 and \$14,999.

Figure 6.3 below shows the proportions overseas in 2000 of those who successfully completed a bachelors degree in 1997 and did not study between 1998 and 2000.

Figure 6.3: Percentage of bachelors graduates who last borrowed and studied in 1997 who were declared overseas in 2000 by debt at 31 March 1998



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Much of the focus of public comment about people travelling overseas has been on those who complete bachelors degrees in certain fields. The integrated dataset was used to examine the likelihood that bachelors graduates in certain fields would have declared themselves as overseas.

The fields selected for analysis were:

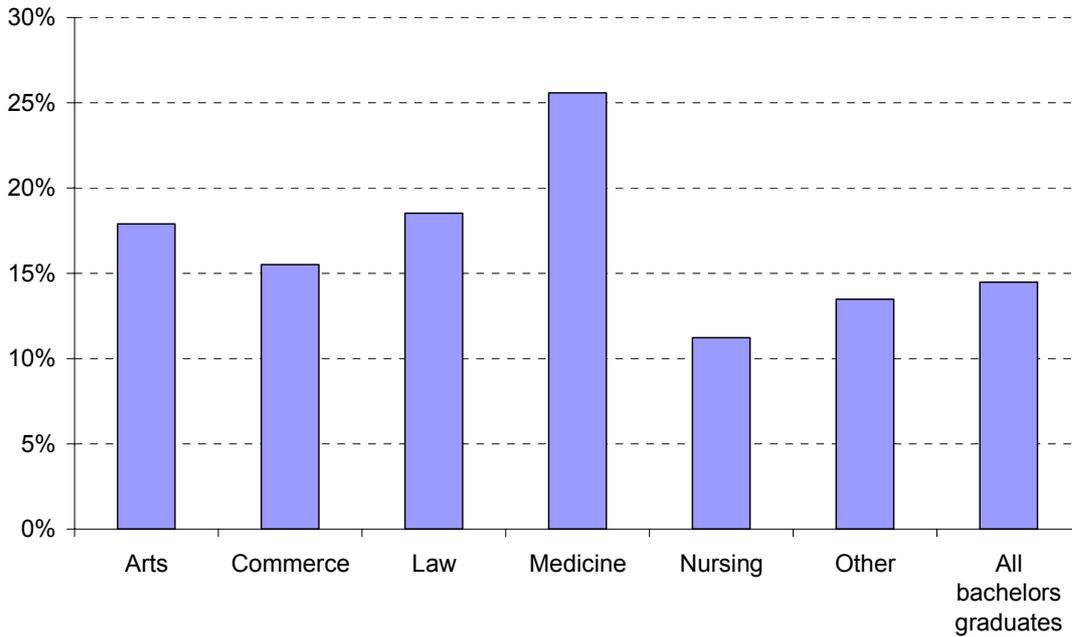
- arts
- commerce
- law
- medicine
- nursing

The proportions successfully completing bachelors degrees in those fields in 1997 and then declaring themselves overseas in 2000 were compared with the proportions for all bachelors graduates.

Of the degrees studied, the one that had the lowest percentage overseas was nursing, where 11 percent of those who completed in 1997 were declared overseas in 2000, compared with 14 percent for all bachelors graduates. The low proportion of nursing graduates overseas is likely to reflect a relatively high demand in New Zealand for nursing graduates in recent years.

Graduates with bachelors degrees in commerce, law and arts were somewhat more inclined to be overseas in 2000 than all bachelors graduates. The highest percentage of 1997 graduates declared overseas was in medicine where 26 percent of those who completed in 1997 had declared themselves overseas in 2000. The very high proportion in this field reflects the strong employment market internationally for medical graduates, as well as a long tradition among New Zealand doctors spending several years working in overseas hospitals in the early years of their careers. There are also some areas of specialisation where doctors travel overseas to complete further postgraduate study.

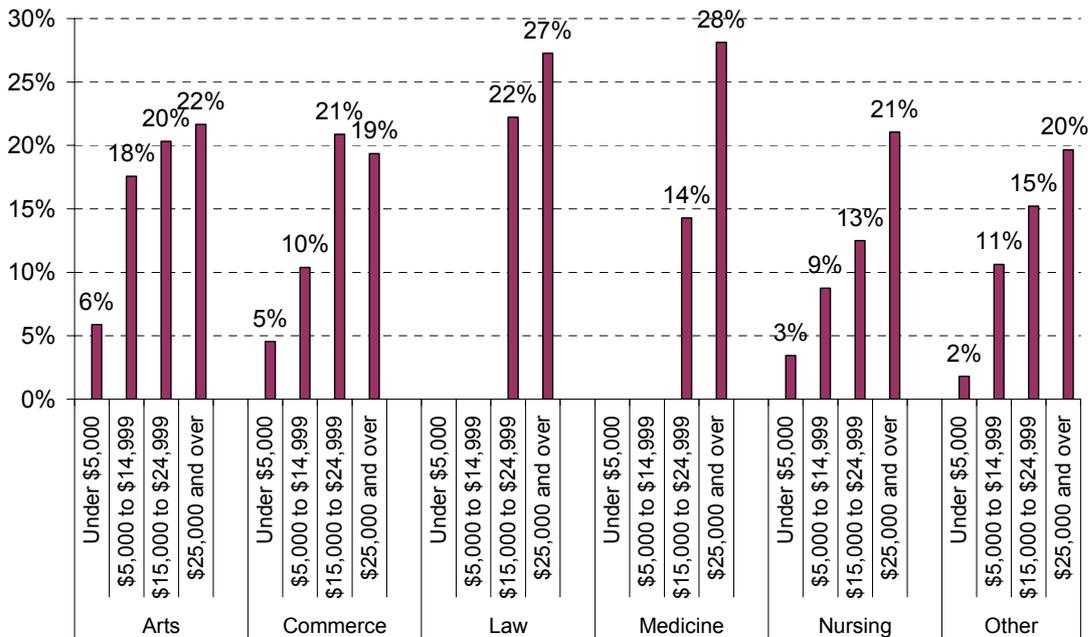
Figure 6.4: Percentage of bachelors graduates who last studied and borrowed in 1997 who were declared overseas in 2000 - selected fields of study



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

Looking at those fields of study by the level of the loan balance shows that, in most of the degrees studied, there is a relationship between the level of loan balance 1997 and the likelihood that the graduate is overseas in 2000. The information is displayed in Figure 6.5.

Figure 6.5: Percentage of bachelors graduates who last studied and borrowed in 1997 who were declared overseas in 2000 by debt at 31 March 1998 - selected fields of study



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

Note: No percentage has been calculated where there are fewer than 20 borrowers in a debt band and qualification.

Of those who completed their degrees in 1997, those with the higher 1997 loan balances were more likely to be overseas in 2000. That relationship applies in all of the degrees selected.

It was noted above that the majority of people who travel overseas following completion of tertiary study return to New Zealand within four or five years of leaving. Those who stay away from New Zealand longer appear to have a lower likelihood of returning. Therefore, it is useful to look at the length of time spent overseas between 1997 and 2000 by those borrowers who completed bachelors degrees in 1997 and who were recorded as being overseas in 2000.

The duration spent overseas by this group is not an indicator of longer term intentions and therefore, it would be wrong to infer from this information whether people may be likely to return to New Zealand. The maximum number of years anyone from that group could have spent overseas would be three years. To have spent that time overseas, a person would have had to have left New Zealand in 1998 and to have made an overseas declaration in 1999 and 2000. Some people spend several years working before going overseas; such people will not appear in this percentage, even if, ultimately, they spend an extended period overseas.

Around 11 percent of the 1997 medical graduates had spent three years overseas by 2000, compared with 9 percent for arts, 7 percent for law and commerce and 3 percent for nursing.

Of all of the 1997 medical graduates overseas in 2000, around 30 percent had been away from New Zealand for all three years. Of the medical graduates who had been overseas for all three years, the proportion was lower among men (8 percent) and among those aged 24 or less on graduation (10 percent) but higher among those of Asian ethnicity (25 percent) and among those with the highest debt levels (15 percent of those with a 1997 loan balance of \$25,000 or more).

Of those who had completed a Bachelor of Nursing in 1997, the proportion that had spent three years overseas was higher among men (6 percent), those aged 40 and over on graduation (7 percent), those of European ethnicity (4 percent) and those with a graduating loan balance of over \$25,000 (9 percent) or between \$5,000 and \$15,000 (5 percent). About one in five of the 1997 nursing graduates away from New Zealand in 2000 had been declared resident overseas for all three years.

A high proportion – 40 percent - of the 1997 arts graduates who had declared themselves overseas in 2000 had spent three years away from New Zealand. The corresponding figure for commerce was 35 percent while for law, the proportion was about 20 percent.

Repayment rates of borrowers who declare themselves overseas

The Student Loan Scheme repayment rules are different for people resident overseas. They are not eligible, for instance, for most of the interest write-offs or reductions given to low-income people following study. Nor do they have the benefit of having their regular repayments paid directly to Inland Revenue through the tax system. They have to repay at a minimum rate of \$1,000 per year plus interest or at a higher rate which will retire their debt within 15 years. As a result of these differences, repayment rates are poorer for those resident overseas.

Figure 6.6 shows the percentage of debt repaid by 2001 for those who were resident in New Zealand who had declared themselves overseas in 2000. Nearly three in five (59 percent) of those overseas had made no progress compared with 48 percent for those resident in New

Zealand in 2000. Around 19 percent of those who were in New Zealand had repaid all of their debt compared with 3 percent for those overseas.

Figure 6.6: Percentage of debt repaid by 2001 for those who last borrowed and studied in 1997 by residency status in 2000

| | Percent repaid by 2001 | | | | | | All students |
|----------------|------------------------|--------|---------|---------|---------|------|--------------|
| | Zero or less | 1%-24% | 25%-49% | 50%-74% | 75%-99% | 100% | |
| Overseas | 59% | 23% | 8% | 4% | 2% | 3% | 2,619 |
| In New Zealand | 48% | 19% | 7% | 4% | 3% | 19% | 29,958 |
| Total | 49% | 20% | 7% | 4% | 3% | 18% | 32,577 |

Notes:

1. Counts data has been randomly rounded to base 3 according to Statistics New Zealand confidentiality provisions.

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

Figure 6.7: Debt in 1997 and 2000 for those who last borrowed and studied in 1997 by residency status in 2000

| | Average debt | | | Median debt | | |
|----------------|--------------|----------|----------|-------------|----------|----------|
| | 1997 | 2000 | % change | 1997 | 2000 | % change |
| Overseas | \$18,450 | \$18,050 | 2% | \$16,010 | \$14,560 | 9% |
| In New Zealand | \$11,350 | \$9,750 | 14% | \$8,300 | \$6,380 | 23% |
| All students | \$11,920 | \$10,420 | 13% | \$8,750 | \$6,840 | 22% |

Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers.

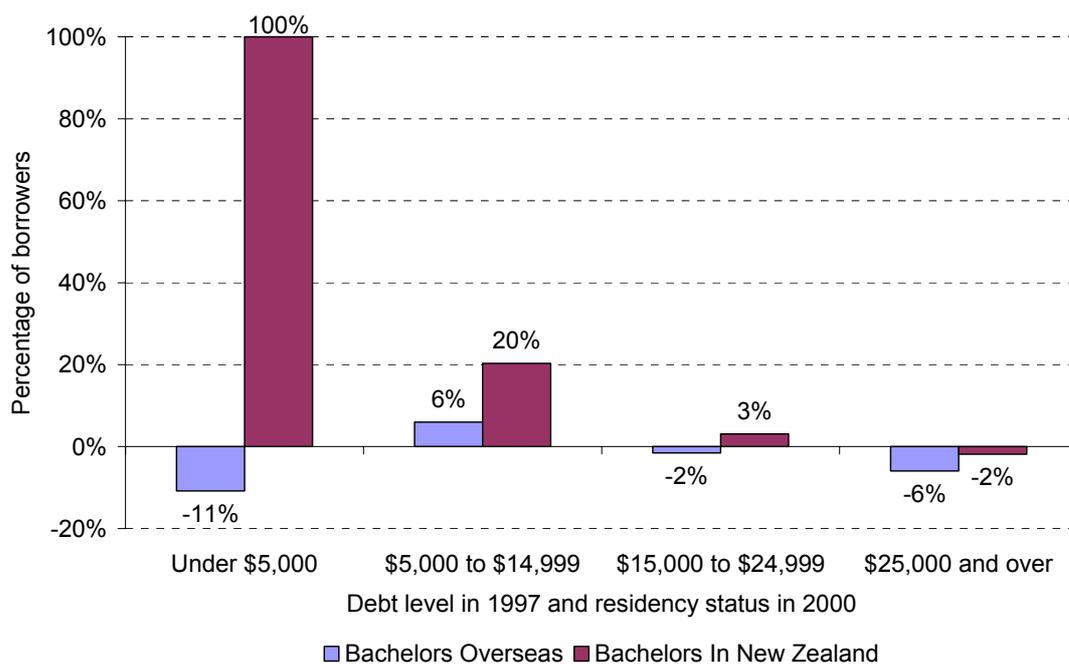
Figure 6.7 shows the mean and median leaving debt, and debt three years later for those who last borrowed and studied in 1997 by residency status in 2000. Those who were overseas in 2000 had a higher leaving debt and a higher debt three years later. The median debt for both those overseas and those in New Zealand decreased over the three years, but the average debt of those overseas did not decrease by very much.

The data in Figure 6.8 below considers the progress made by students who last studied and borrowed at the bachelors level in 1997 and contrasts the situation of those in New Zealand in 2000 and those overseas in 2000. It shows that the majority of those in this group with a 1997 loan balance of less than \$5,000 had completely repaid – the median percentage repaid by 2000 was 100 percent.

Among those overseas with 1997 loan balances of less than \$5,000, the median loan balance was 11 percent higher⁵⁸ in 2000 than it was in 1997. The median balance of those overseas in 2000 whose 1997 balance was between \$5,000 and \$15,000 had reduced by 6 percent. That level of reduction was, however, lower than the reduction experienced by those in New Zealand (20 percent).

⁵⁸ A loan balance can grow following study in a number of circumstances. If the interest charged is greater than the amount repaid, then the loan will grow in nominal terms. Because those overseas are ineligible for interest write-offs, there is a greater probability that a borrower resident overseas will experience an increase in loan balance. In addition, borrowers who do not meet their compulsory repayment obligations are liable for penalties.

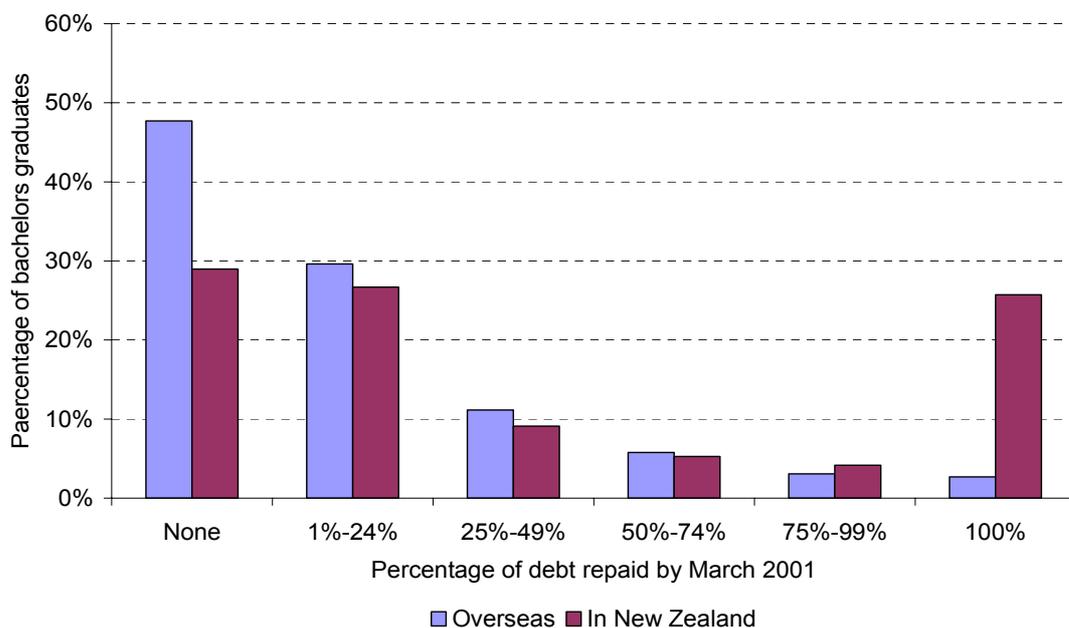
Figure 6.8: Median percentage of debt repaid in 2000 - borrowers who last borrowed and studied at the bachelors level in 1997 by residency status in 2000 and by level of debt in 1997



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

The progress to repayment graph below for those who studied at the bachelors level in 1997 again illustrates the difference between the repayment performance of those in New Zealand and those overseas. It shows that nearly half (48 percent) of those who successfully completed a bachelors degree in 1997 and were declared overseas in 2000 had made no progress at all in reducing their loan balance. This contrasted with 29 percent for those resident in New Zealand in 2000. Similarly, more than a quarter (26 percent) of those resident in New Zealand had repaid completely by 2000, compared with only 3 percent of those overseas. Three quarters of those overseas had reduced their loan balances by less than 25 percent.

Figure 6.9: Percentage of debt repaid by 2000 of bachelors graduates who last borrowed and studied in 1997 by residency status in 2000

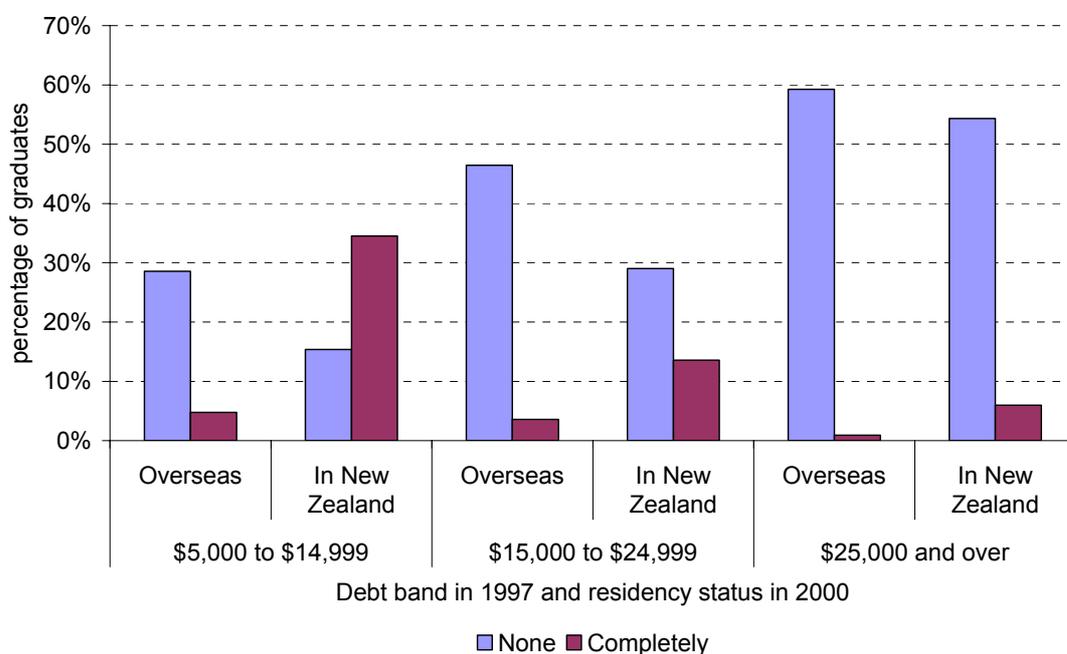


Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

It was noted in Chapter 5 of this report that of those who last studied and borrowed in 1997, repayment rates were faster for those whose loan balance at the end of their studies was lower. Given the fact that those overseas make slower progress to repayment, it is not surprising that repayment rates are especially slow for those with high graduating debt who are overseas.

Figure 6.9 below shows that, of those who completed a bachelors degree in 1997 with a loan balance of between \$5,000 and \$15,000, 29 percent of those overseas in 2000 had made no progress and 5 percent had repaid completely. The corresponding figures for those resident in New Zealand in 2000 were 15 percent having made no progress and 35 percent having repaid completely. Of those with debt \$25,000 or over, 1 percent of those overseas had repaid completely, compared with 6 percent of those in New Zealand. Fifty-nine percent of those overseas had made no progress as against 54 percent for people in New Zealand.

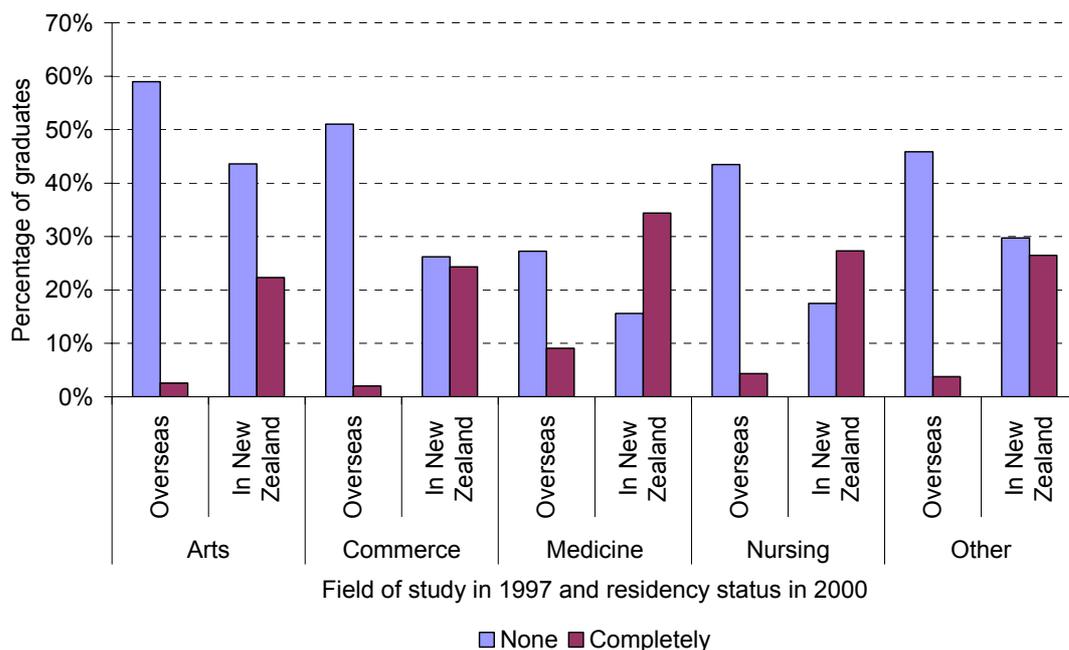
Figure 6.10: Share of debt repaid by 2000 of bachelors graduates who last borrowed and studied in 1997 by residency status in 2000 and by level of debt in 2000



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

Figure 6.11 below looks at the percentage of those who completed a bachelors degree in 1997 who had completely repaid their loans by 2000 and the percentage who had made no progress at all to repayment. In each of the degrees selected, the percentage of those overseas who had made no progress was higher than the percentage of those in New Zealand who had made no progress. And the percentage overseas who had repaid completely was much lower than the percentage in New Zealand who had repaid completely.

Figure 6.11: Share of debt repaid by 2000 of bachelors graduates who last borrowed and studied in 1997 by residency status in 2000 - selected fields of study



Source: Statistics New Zealand: Integrated Dataset on Student Loan Scheme Borrowers

Of the qualifications selected, those with a medical degree had made the most progress; 27 percent of those overseas had made no progress, a lower percentage than for any of the other degrees, while 9 percent had repaid completely, a higher percentage than any of the others. The relatively better progress to repayment of those overseas with medical degrees matches the fast progress to repayment of medical graduates in New Zealand; among those in New Zealand in 2000, medicine had a lower percentage who had made no progress and a higher percentage who had repaid completely.

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