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Te Tāhuhu o te Mātauranga

Who doesn't pay back?

The characteristics of borrowers who make no progress in reducing their student loans

Report

Who doesn't pay back? The characteristics of borrowers who make no progress in reducing their student loans

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Disclaimer

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Summary Statistics New Zealand Security Statement: Integrated Data Disclaimer

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 Introduction

Half of those who use the Student Loan Scheme manage to repay their loan completely in about eight years¹. Some borrowers, however, struggle to make any headway in repayment. The median repayment time for Student Loan Scheme borrowers who last studied in 1994 was around six and a half years; yet by the end of 2002, 23 percent of those borrowers still owed as much as, or more than, they owed when they left study². This paper explores the characteristics of borrowers who have not made any progress in reducing their student loan balances and hence, attempts to find some of the reasons for slow repayment.

The paper is designed to complement *Paying off a student loan*, a Ministry of Education paper exploring the progress to full repayment³.

2 The findings

This study found that:

- Those who leave study with a high loan balance are more likely to have made no progress than those with lower leaving balances. The median loan balance on leaving study was higher for the no progress group than for all borrowers.
- Completion of a qualification is a key driver of income and hence, of progress to repayment. Of those who had successfully completed a qualification, 29 percent had made no progress by the end of 2002, compared with 47 percent of those who left study without completing.
- Women are *less* likely than men to have made no progress to repayment, whether they completed or not. This is despite the fact that women have slightly higher loan balances on leaving study than men.
- Whether complete or incomplete, the incidence of no progress is higher among Māori than European. For instance, among those who completed, 42 percent of Māori had made no progress, compared with 25 percent of European. Among those who left without completing, the figures were 60 percent for Māori and 40 percent for European. It will be necessary to do further study to see what factors are driving the apparently slower repayment rate of Māori.
- The incidence of no progress is considerably higher among those who took certificates than among those who took bachelors degrees, when we control for completion status.

¹ Refer to Ministry of Education, Ministry of Social Development and Inland Revenue (2004) page 18. This figure is derived from the Tertiary Education Student Loan Analysis (TESLA) model of student loan repayments

² in nominal terms – ie without any adjustment for the effects of inflation.

³ Ministry of Education (2005c)

- The median income of no progress borrowers five years post study is around or lower than the repayment threshold so that it is likely that most of the no progress group would have made no compulsory repayments at all over their first five years post study.
- The exception is the group of no progress borrowers who were successful in completing a bachelors degree. Their incomes were significantly above other no progress borrowers.

3 The data

'No progress' borrowers are defined as those whose loan balance in at the end of the time period was no smaller than the balance when they last studied.⁴

While this paper has some information about the progress to repayment of borrowers who last studied in 1996 or earlier, the majority of the analysis focuses on the group who last studied in 1997; of that borrower cohort, we look at those whose loan balances at the end of 2002 were no lower than at the end of 1997.

The reason for this focus is that the study draws information from the integrated dataset on Student Loan Scheme borrowers⁵. Because the integrated dataset links data on borrowers' tertiary education history, their demographic characteristics, their borrowing, their loan balances and their post-study income, it enables us to identify those whose balance at the end of 2002 is no less than it was in 1997 and to explore their educational and demographic characteristics.

The integrated dataset has some information on loan balances and incomes of those who finished using the scheme between 1992 and 1996; however, the data held in the dataset on those borrowers hasn't been linked to their educational, demographic and borrowing information.

Linking occurred only after 1997. Thus, the 1997 cohort has had the longest period post-study of any group in the integrated dataset and hence, those features that are associated with slow or no progress to repayment will be most clearly seen in this group. It needs to be noted, however, that many in that cohort are still repaying and many will start to make progress in the future as they find better paid employment and, in some cases, return from overseas.

The 1997 cohort is also an appropriate focus for this study as they had relatively large student loans on leaving study; their median leaving balance was 97 percent of the median leaving balance of those who last studied in 2000. That cohort didn't have the benefit of the fee stabilisation policies that were introduced in 2001. While they have experienced a reasonably strong economy for much of their time post-study, they

⁴ Again, this is in nominal terms.

⁵ For information on the origin, construction, uses and limitations of the integrated dataset, refer to: http://www.minedu.govt.nz/web/downloadable/dl10309_v1/about-the-integrated-dataset.doc

didn't have the benefit in their first few years post-study of the very low unemployment rates that have characterised the New Zealand labour market since 2001. Nor did this group have the benefit of some of the additional targeting introduced in the scheme post 2000; they didn't benefit from the 'no interest while studying' policy and, in their early years post-study, from the base interest adjustment policy⁶. Nor was the borrowing pattern in this cohort distorted by the borrowing entitlement reductions introduced in 1999⁷. Thus, while there are differences between the 1997 leaving cohort and other cohorts, in many ways they are reasonably typical of subsequent cohorts, even if they did not benefit to the same extent from some of the changes made to the scheme since 2000 and even if they didn't face the same strong labour market when they first left study.

At the end of 2000, 49 percent of this cohort had made no progress to repayment⁸. By 2002, this proportion had fallen to 40 percent, with around an additional 2,600 borrowers having started to make progress.

There are 29,211 borrowers students in this cohort. Some of their characteristics are set out in Table 1 below.

Table 1: Selected characteristics of those Student Loan Scheme borrowers who last studied in 1997

	complete	incomplete	median leaving loan balance
Male	16.2%	32.5%	8,750
Female	21.7%	29.7%	9,190
European	27.1%	25.8%	10,400
Māori	5.0%	9.0%	7,350
Pasifika	1.3%	3.1%	8,040
Asian	2.9%	3.3%	5,760
Other	1.2%	1.7%	6,730
Unknown	0.3%	19.3%	7,900
Level 1 - 3 cert	11.6%	15.9%	5,390
Bachelors	15.7%	14.0%	14,800
Other level	10.6%	32.2%	9,230
All	37.9%	62.1%	8,990

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

⁶ The base interest adjustment policy is usually referred to as the 50/50 rule. Under this rule, in some circumstances, where a borrower's income is low in relation to his/her loan balance, part of the base interest is written off. Refer to Ministry of Education, Ministry of Social Development and Inland Revenue (2004) pages 57 and 58 for a full explanation of this policy and of the 'no interest while studying policy'.

⁷ Refer to Ministry of Education, Ministry of Social Development and Inland Revenue (2004) page 21.

⁸ Ministry of Education (2005a) *Living with a student loan*, page 77.

4 The scope of the study

This study considers progress to repayment against two key study variables – completion status⁹ and level of study – that are known to have a significant relationship to repayment rates. It addresses also two demographic variables – ethnic group and gender.

These four are not the only variables that might have been considered. For instance, it would have been possible to have considered the impact of the age of the borrower or the field of study taken on the incidence of no progress. It has been noted elsewhere that those who go overseas following study repay their loans much more slowly than those who stay in New Zealand¹⁰, so we have not explored the relationship between being overseas and no progress.

5 What happens if someone never repays?

It is possible that a Student Loan Scheme borrower may never repay the whole of a loan. This would occur if the borrower's income is low in relation to the level of the borrower's loan balance. This is because the Student Loan Scheme is an income contingent scheme. Borrowers repay at the rate of 10 cents for each dollar earned over the repayment threshold¹¹. If a borrower earns under the threshold, then his or her loan balance is debited with the inflation component of the interest rate and the remainder of the interest on the loan is written off. In those circumstances, the loan rises in nominal terms, although it remains stable in real (ie inflation adjusted) terms. Some people who earn above the threshold but who have a high loan balance will also make slow progress¹². Some will leave the workforce at the end of their working lives and eventually die with some of their loan balance outstanding. In the event of death, the loan balance is completely written off – there is no charge on the deceased borrower's estate.

The rules governing the Student Loan Scheme allow for this possibility; there is a doubtful debt provision that currently stands at 11.4 percent. In other words, the Crown expects that 11.4 cents in each dollar loaned through the Student Loan Scheme will never be repaid¹³.

⁹ Completion status, in this context refers to whether or not the borrower was successful in completing a qualification in the year of finishing study.

¹⁰ Ministry of Education (2005a) pages 136 – 139.

¹¹ In 2004/2005, the threshold is \$16,172.

¹² Refer to Ministry of Education (2005c) page 10 for an illustration of how long it takes to repay a given loan, given different income profiles.

¹³ Further information on the provision for doubtful debt can be found in Ministry of Education, Ministry of Social Development and Inland Revenue (2004) page 16. Note that the doubtful debt provision differs from the fair valuation of the scheme which allows for the delayed timing of payments and thus, is higher.

6 Information on earlier cohorts

As noted above, it is not possible to identify from the integrated dataset the educational characteristics or most of the demographic characteristics of those who used the Student Loan Scheme before 1997. However, we can consider the progress to repayment of the whole group and disaggregate the information by gender.

Of those who used the scheme in its first year, 1992, and then didn't borrow again, around 16 percent had made no progress by the end of 2002 – that is, 10 years post-study. The proportions of men and women who had made no progress were almost identical – 16.2 percent of the women in this group and 16.1 percent of the men had made no progress¹⁴. Some of those 16 percent will start to make repayment progress in the future; 2 percent of the cohort made progress in reducing their loan balance for the first time between 2000 and 2002¹⁵.

Of those who last studied in 1994, 23 percent had made no progress by the end of 2002 – 23.1 percent of the women and 23.3 percent of the men.

It needs to be noted, however, that these two cohorts had low initial student loans; the median leaving balance of the 1992 cohort was \$3,170, while the median leaving balance of the 1994 group was \$5,910. These levels compare with \$8,960 for the 1997 cohort.

7 What are the main drivers of debt reduction?

As noted above, the New Zealand Student Loan Scheme is an income contingent scheme. Therefore, the key determinant of the progress to repayment is the relationship between a borrower's loan balance and his/her income post study. Among the key determinants of post-study income are the borrower's completion status on leaving study and the level at which he/she studied¹⁶. Therefore, this analysis of no or slow progress to repayment will focus on those two study variables.

All other things being equal, the higher the level of the loan balance on completion of borrowing, the more likely it is that the borrower will have made relatively slow progress in reducing the balance. This is simply because a higher loan balance incurs higher interest and hence, unless the borrower has high income and therefore a high compulsory repayment obligation, there is a greater chance that any repayments will not make greater inroads into the principal. Further, if in any year, the borrower's income falls below the repayment threshold, the nominal value of the loan will rise by the interest adjustment rate – effectively, by the rate of inflation. The higher the balance, the greater the increase in absolute dollars to the nominal value of the balance; this will make it harder to reduce the value of the loan to below its original level when the income later rises to above the repayment threshold.

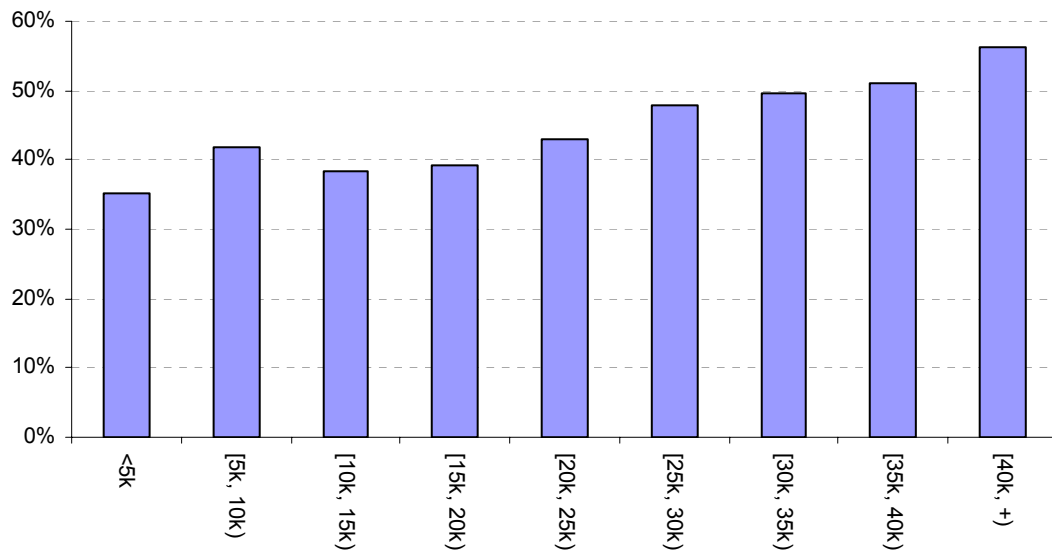
¹⁴ While the income and loan balance data on borrowers who didn't use the loan scheme in 1996 or earlier hasn't been linked to their demographic and educational data, the Inland Revenue data does contain gender information.

¹⁵ Ministry of Education (2005c) pp10, 11.

¹⁶ Ministry of Education (2005b)

Figure 1 below shows the proportions of the 1997 leaving cohort who had made no progress to repayment by the end of 2002 broken down by the level of the loan balance on leaving study.

Figure 1: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by the level of leaving student loan balance



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

The message from figure 1 is clear; in general, those with higher leaving loan balance have a higher incidence of no progress. It needs to be recognised, however, that the number of borrowers with higher balances is relatively small; there were less than 750 with a balance of over \$40,000 and around 600 with a balance between \$35,000 and \$40,000, compared with more than 8,000 in each of the lowest two bands in the graph¹⁷.

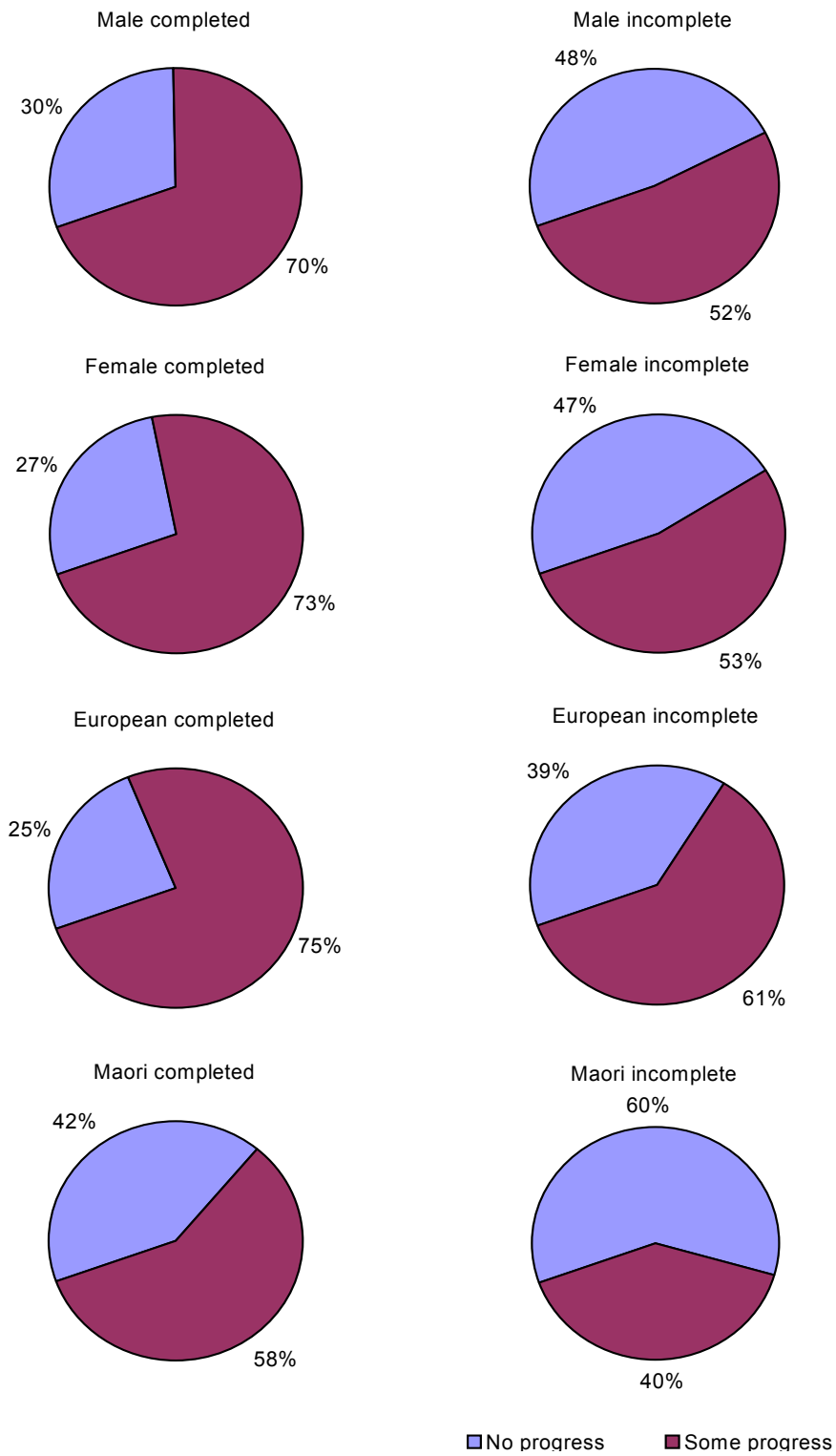
8 The characteristics of no progress borrowers

Completion status

As noted above, completion status is a key driver of income and hence, of progress to repayment. Of the borrowers who last studied in 1997, 40 percent had made no progress by the end of 2002. Of those who had successfully completed a qualification, 29 percent had made no progress, compared with 47 percent of those who left study without completing. The margin that completers have over non-completers applies whether the borrower is male or female and is irrespective of ethnic group. The data are illustrated in Figure 2 below.

¹⁷ That is, more than half – around 55 percent - of the borrowers left with a balance of less than \$10,000 and hence are represented in the lowest two bands. Within that group, those with higher debt had a greater incidence of no progress. The same observation applies to the 45 percent of the people with balances of \$10,000 or over – higher leaving debt implies higher probability of no progress.

Figure 2: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by completion status and gender and by completion status and ethnic group



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

It will be noted from the information presented in figure 2 that women are somewhat less likely to have made no progress than men. This applies both in the case of completers and among those who have not completed. Interestingly, the median leaving loan balance of women in the 1997 cohort was about 5 percent higher than the corresponding figure for men. Among those who have made no progress, the median leaving balance of women from the 1997 cohort is marginally less than the men's median, both among the completers and the non-completers. The implication is that women who have made progress have done so despite having on average larger leaving loans than the men who have made progress.

Figure 2 also shows that there are differences between ethnic groups in the incidence of no progress to repayment. Whether complete or incomplete, the incidence of no progress is higher among Māori than European. For instance, among those who completed, 42 percent of Māori had made no progress, compared with 25 percent of European. Among those who left without completing, the figures were 60 percent for Māori and 40 percent for European.

Table 2 below summarises the incidence of no progress by completion status and gender and by completion status and ethnic group.

Table 2A: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by completion status and gender

Completed		Incomplete	
M	F	M	F
30.2%	27.4%	48.1%	46.6%

Table 2B: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by completion status and ethnic group

Completed					Incomplete				
European	Māori	Pasifika	Asian	Other	European	Māori	Pasifika	Asian	Other
24.6%	41.6%	42.9%	33.3%	40.9%	39.5%	60.1%	61.2%	50.0%	53.4%

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

Although the incidence of no progress is higher among Māori than among European, both among the completers and the non-completers who have made no progress, the median leaving loan balance of Māori is lower than that of European borrowers.

Level of study

The following analysis compares the incidence of no progress among those who studied at the bachelors degree level and among those who studied for a level 1 – 3 certificate – the qualification levels that contain two largest groups of borrowers.

The incidence of no progress is considerably higher among those who took certificates than among those who took bachelors degrees, when we control for

completion status. Those who successfully completed a bachelors degree were less likely to have made no progress than those who completed a level 1 – 3 certificate. Among those who were incomplete on leaving study, those who enrolled for a bachelors degree were less likely to have made no progress than those who took certificate level study. Interestingly, the incidence of no progress was lower among those who were successful in completing a level 1 – 3 certificate than among those who were unsuccessful in bachelors study.

These findings apply equally for men and women and for Māori and European.

The data are set out in Table 3 below.

Table 3A: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by gender and completion status for selected levels of study

Level 1 - 3 Certificate				Bachelors			
Completed		Incomplete		Completed		Incomplete	
M	F	M	F	M	F	M	F
37.7%	38.6%	53.6%	53.6%	26.4%	23.0%	48.7%	42.9%

Table 3B: Proportion of Student Loan Scheme borrowers who last studied in 1997 who had made no progress to repayment by the end of 2002 by completion status, for selected ethnic groups and for selected levels of study

Level 1 - 3 Certificate				Bachelors			
Completed		Incomplete		Completed		Incomplete	
European	Māori	European	Māori	European	Māori	European	Māori
31.5%	51.2%	44.2%	68.4%	22.6%	31.7%	41.3%	53.8%

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

Consistent with the findings described earlier, men are more likely to have made no progress than women at both levels, while Māori are more likely to have made no progress than European borrowers at both levels.

9 What is the income of those who make no progress?

One reason people make no progress to repayment obviously, is that their post-study income is low. Table 4 gives the median income in 2002 of those from the 1997 leaving cohort who had made no progress by the end of 2002, with the figures broken down by level of study, completion status, ethnic group and gender.

Table 4A: Median income in 2002 of Student Loan Scheme borrowers who last studied in 1997 and who had made no progress to repayment by the end of 2002 by gender and completion status for selected levels of study

	Level 1 - 3 Certificate				Bachelors			
	Completed		Incomplete		Completed		Incomplete	
	M	F	M	F	M	F	M	F
No Progress	15,470	14,000	15,460	14,110	23,290	21,950	15,410	14,360
All	27,220	21,920	23,760	16,940	42,390	36,810	29,190	27,340

Table 4B: Median income in 2002 of Student Loan Scheme borrowers who last studied in 1997 and who had made no progress to repayment by the end of 2002 by completion status, for selected ethnic groups and for selected levels of study

	Level 1 - 3 Certificate				Bachelors			
	Completed		Incomplete		Completed		Incomplete	
	European	Māori	European	Māori	European	Māori	European	Māori
No Progress	14,470	14,450	15,070	14,370	23,350		14,260	14,900
All	25,520	21,720	23,050	17,480	38,330	40,090	28,940	25,740

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

Note:

The median income for Māori who have completed is not given as there are too few observations to give the median without breaching the confidentiality undertakings required in the integrated dataset. The *mean* income of Māori in that group, however, was \$23,630, about 1.5 percent above the mean for European men who had completed a bachelors degree and had made no progress.

The table shows that for many of the no progress groups, the median income five years post study is around or lower than the typical repayment threshold for the period 1998 to 2002¹⁸. It is likely that a significant proportion of the population being studied would have made no compulsory repayments at all over their first five years post study.

There was little difference in median income for no progress borrowers who had studied at the certificate level, whether they had completed or not. Nor was there much difference between the median income of no progress borrowers who had studied certificates and the corresponding figure for no progress borrowers who had studied at the bachelors level without success. The exception is the group of no progress borrowers who were successful in completing a bachelors degree. The incomes of no progress borrowers who had completed a bachelors degree were significantly above every other group considered in this paper.

¹⁸ The repayment threshold was \$14,716 in 1998/99 and rose gradually to reach \$15,496 in 2002/03 and \$16,172 in 2004/05.

It is worth noting also that when we control for level of study and completion status, there is very little difference in the median income five years post study of Māori and European who had made no progress. The exception is among those who began study for a certificate and abandoned without completing – there the median income of Europeans was 5 percent above that of Māori.

Differences in median incomes are more marked five years post study between men and women who had made no progress. While the women in this study were less likely to have made no progress than men in every group, the margin in the median income between men and women who made no progress and who had studied at the certificate level was higher. Controlling for level and gender, completion status appeared to make little difference to the income of those no progress borrowers whose study was for a certificate. In other words, the no progress certificate group evidently comprises people who were unable to capture the benefits of completion¹⁹.

Unsurprisingly, there is a very great difference in the median incomes five years post study of no progress borrowers and all borrowers. No progress borrowers in all categories earned much lower incomes than all borrowers. The income margins between men and women and between European and Māori are also quite different when we look at all borrowers, as opposed to no progress borrowers. The patterns observed elsewhere²⁰ apply to the all borrowers data (such as income increasing with the level of study and males earning more than females), even if they break down sometimes in the no progress group.

10 What debt do no progress borrowers leave with?

As noted above, it is the level of the loan balance in relation to income that determines progress. The previous section discusses income five years after study and notes that no progress borrowers earn much less than is typical. Table 5 below shows that, in every category, the median loan balance on leaving study was higher for the no progress group than for all borrowers, consistent with the observation that the incidence of no progress is higher among those who have high leaving loan balance.

Table 5A: Median leaving loan balance of Student Loan Scheme borrowers who last studied in 1997 and who had made no progress to repayment by the end of 2002 by gender and completion status for selected levels of study

	Level 1 - 3 Certificate				Bachelors			
	Completed		Incomplete		Completed		Incomplete	
	M	F	M	F	M	F	M	F
No Progress	5,840	6,470	5,710	5,500	24,970	26,290	14,860	12,170
All	5,430	5,550	5,440	5,130	18,300	17,110	11,890	10,020

¹⁹ Ministry of Education (2005b) makes it clear there is a benefit in general from completion of a certificate. What this finding shows is that there is no such benefit for the no progress borrowers.

²⁰ Ministry of Education (2005b)

Table 5B: Median leaving loan balance of Student Loan Scheme borrowers who last studied in 1997 and who had made no progress to repayment by the end of 2002 by completion status, for selected ethnic groups and for selected levels of study

	Level 1 - 3 Certificate				Bachelors			
	Completed		Incomplete		Completed		Incomplete	
	European	Māori	European	Māori	European	Māori	European	Māori
No Progress	7,410	5,600	6,610	5,200	26,920	25,860	15,400	11,590
All	6,030	5,230	5,740	5,000	17,750	18,760	11,570	10,250

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

While Māori had lower median leaving loan balance than European in all categories, among all borrowers and among no progress borrowers, the margin between the no progress borrowers and all borrowers is relatively small among Māori.

11 Future work

This paper raises interesting questions that will be explored in future work. For instance:

- How much do the no progress borrowers who left study in 1997 owe?
- How many owe more at the end of 2002 than they did when they left study in 1997?
- How many of these borrowers are in default and what role does penalty interest play in their situation?
- How many of these borrowers are out of the work-force – either having no income at all or else, receiving income solely from benefits?

References

Ministry of Education, Ministry of Social Development and Inland Revenue (2004) *Annual Report on the Student Loan Scheme incorporating the Financial Statements to 30 June 2004*

Ministry of Education (2005a) *Living with a student loan: a profile of student loan debt and repayment, post-study income and going overseas*

Ministry of Education (2005b) *Income of Student Loan Scheme borrowers*

Ministry of Education (2005c) *Paying off a student loan: an analysis of progress to full repayment from the integrated dataset*