## A

MINISTRY OF EDUCATION TE TĀHUHU O TE MĀTAURANGA

## 4



ANNUAL REPORT 2014/15

INCORPORATING THE FINANCIAL SCHEDULES FOR THE YEAR ENDED 30 JUNE 2015


This report is also available on the Ministry of Education's website: www.educationcounts.govt.nz/publications/

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## Foreword

Education is central to New Zealand's future success. Government has set priorities including getting young people into careers, and delivering the skills that industry needs. We know that those with a tertiary education are more likely to be healthy, prosperous and satisfied with their lives. New Zealand as a whole also benefits from tertiary education, through gaining skilled people who make meaningful contributions to our society and the economy. These benefits will continue to grow, through better education for all New Zealanders.

Student Ioans enable all New Zealanders to access tertiary education by sharing the costs of education between government and students and families.

This report summarises the current performance of the Student Loan Scheme, providing a snapshot of its performance its impacts, and an update on trends in the scheme.

Government agencies work together to improve the Student Loan Scheme. The Ministry of Education, the Ministry of Social Development and Inland Revenue cooperated to produce the information in this report.

I recommend the report to you.


Peter Hughes
Secretary for Education

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## Introduction

The purpose of this annual report is to inform Parliament and the New Zealand public about the performance of the Student Loan Scheme in 2014/15. It also includes the audited financial schedules of the scheme for the year ending 30 June 2015.

The report describes how the loan scheme operates in the context of the New Zealand tertiary education system and the goals of the Tertiary Education Strategy; the contribution it makes in enabling greater access to, and participation in, tertiary education; and developments to the loan scheme and student support policy over time.

It also looks at the outcomes of the scheme and provides detailed information about borrowers and their lending and repayment patterns. Finally, the report gives a detailed financial analysis of costs and the valuation of the Ioan scheme.

## Sources

## Data from agencies

This report uses data from four principal sources.
The information on active borrowers and borrowers in study is largely drawn from the Ministry of Social Development (MSD). Inland Revenue has supplied data on the repayments, Ioan balances and borrower segments. Tertiary education data and information on borrowing in the years before 2000 were supplied by the Ministry of Education.

The source data for the graphs and tables in this report, as well as additional Ministry of Education research cited, can be found on the Education Counts website, www.educationcounts.govt.nz

Other data has come from Statistics New Zealand's Integrated Data Infrastructure (see below). Data from these sources is complemented by information drawn from the Census, the Household Labour Force Survey and other published data sources. Each table and graph states the source of its data.
Where data in the tables and graphs is provisional and subject to minor change at a later stage, this has been noted.

Different timeframes apply to the data series depending on the nature of the activity. Application and borrowing data is for the calendar year (January to December) in keeping with the academic year. Financial data is based on the government's financial year (July to June).

Each agency endeavours to provide accurate and relevant information, and methods of gathering and reporting data are continually being enhanced. When new data is collated, it not only provides information for the most recent year, but is also linked back across historical figures to take advantage of improvements in data quality. Revised data is used in this report, so readers might notice small changes in historical data reported in the current year compared with previous reports.

## The Integrated Data Infrastructure (IDI)

The IDI includes data on student loans and allowances, but is not limited to these. It is managed by Statistics New Zealand according to the requirements of the Statistics Act 1975. The data has been made available according to strict privacy and confidentiality protocols developed with guidance from the Privacy Commissioner.

The IDI includes the following data on student loans and allowances:

- information collected by tertiary education providers on students, enrolments and courses
- information collected by the Ministry of Social Development on students' borrowings under the loan scheme and their student allowance payments
- data on student Ioan balances, repayments, income and tax status from Inland Revenue.

The dataset has been updated with records to 31 March 2014.

## Terms used in this report

## Nominal dollars

In this report, unless otherwise stated, all financial data is expressed in nominal dollars without adjustment for inflation.

## Ethnicity

Statistics on ethnicity and ethnic groups are obtained from student declarations on enrolment and Ioan application forms. It should be borne in mind when using these statistics that declaration of ethnicity is not mandatory and where information is provided, students may choose to select more than one ethnicity.

## Definitions

Many of the terms used within the Student Loan Scheme and in this report are specific to the scheme. Refer to the Glossary (Appendix 3) for specialised terms and their definitions to help with the accurate interpretation of this report.

## CHAPTER 1

The Ioan scheme in the tertiary education system

## CHAPTER 1 The loan scheme in the tertiary education system

This chapter sets out the Government's priorities for tertiary education and gives the 'big picture' view of access and participation in the tertiary sector. It also covers the latest policy issues for the sector.

## Better Public Services targets:

- increase the proportion of 25-34 year olds with advanced trade qualifications, diplomas and degrees
- increase the proportion of 18 year olds with NCEA Level 2 or an equivalent qualification.


## The strong labour market since 2010 has meant:

- a reduction in part-time study
- fewer student numbers overall
- lower overall participation rates by domestic students.


## Major Iong-term trends:

- a shift to higher qualifications-in 2006, 56 percent of student loan borrowers were enrolled at bachelors level or higher, in 2014 this was 68 percent
- an increasing proportion of borrowers are under 26 years old-in 2006 it was 65.2 percent, in 201472.5 percent.



### 1.1 Government priorities

The Tertiary Education Strategy (TES) describes the long-term strategic direction for tertiary education and the Government's more immediate priorities for the next three to five years.

The most recent TES was published in March 2014 and sets out the Government's six strategic priorities for tertiary education from 2014 to 2019. The strategy was developed to build on the positive achievements of the tertiary system, and to contribute to the Government's focus on improving New Zealand's economic outcomes, particularly in a period of increasing global competitiveness and technological innovation. The six strategic priorities are:

- delivering skills for industry
- getting at-risk young people into a career
- boosting achievement of Māori and Pasifika
- improving adult literacy and numeracy
- strengthening research-based institutions
- growing international linkages.

In 2012, the Government set targets-the Better Public Services targets-intended to ensure that the public sector can respond more effectively to the needs and expectations of New Zealanders. Two of the 10 targets relate to tertiary education:

Increase the proportion of 25-34 year olds with advanced trade qualifications, diplomas and degrees (in 2018, 60 percent of 25-34 year olds will have a qualification at level 4 or above).

Increase the proportion of 18-year-olds with NCEA Level 2 or equivalent qualification (in 2017, 85 percent of young people will have achieved NCEA Level 2 or an equivalent qualification).

A third target is central to the way the government agencies manage the loan scheme and their interactions with borrowers:

New Zealanders can complete their transactions with the Government easily in a digital environment.

Information in this chapter sets out how the tertiary funding and student support systems contribute to tertiary education goals through:

- supporting affordable, equitable access to quality, relevant tertiary education through tuition subsidies and student support, particularly student allowances and loans
- ensuring that students' own financial contributions through fees are affordable, predictable and fair.

In this report, the term 'student support' is used to refer to the Student Loan Scheme and the Student Allowances Scheme, which act together to provide financial assistance directly to students while studying. The two schemes are closely linked:

- The Student Allowances Scheme provides eligible full-time students with a weekly payment to help with their living expenses. The allowance paid is based on the financial and personal circumstances of the student and their family, making sure that those from a low income background are supported while studying. The assistance helps people in the initial years of their study and does not have to be repaid.
- The Student Loan Scheme provides funding for tuition fees as well as a contribution towards course-related costs and living costs for full-time students. The amount for living costs is calculated less any amount paid as an allowance. All amounts borrowed under the loan scheme have to be repaid. Section 3.1 gives details of the amounts paid as allowances and the living costs borrowed.

The Student Loan Scheme is currently available to New Zealanders who are enrolled in approved courses of study provided they meet eligibility criteria and performance conditions. For the eligibility criteria see Appendix 1.

### 1.2 Access and participation

The number of funded student places in tertiary education has more than doubled since the Student Loan Scheme was established in 1992. Student support has helped maintain the affordability of tertiary education for students, and helped our tertiary education system to become more diverse, inclusive and accessible.

Figure 1 Participation by domestic students in tertiary education


Source: Ministry of Education.

## Notes:

1. Comprehensive data is not available for the period before 1994.
2. Data before 1999 excludes private training establishment and 'other tertiary education provider' students.
3. Data relates to domestic students enrolled at any time during the year.
4. The participation rate is the number of enrolments, in a calendar year, as a percentage of Statistics New Zealand's estimate of the population aged 15 and over at 31 December each year.
5. Participation excludes industry training, non-governmentfunded private training establishments, formal courses of a week or less, and all non-formal learning.
Figure 1 shows student numbers, equivalent full-time student numbers (EFTS),' and the rate of participation in tertiary education from 1994 to 2014. Over the period:

- the number of domestic students enrolled in tertiary education increased by 48 percent between 1994 and 2014-from 245,000 to 364,000 , with a peak of 453,000 in 2005 . Since 2005 the number of people participating in tertiary education has gone down, mainly due to a decline in enrolments in certificate-level qualifications between 2005 and 2011. This was largely in response to moves to strengthen the quality and relevance of lower-level qualifications.
- the number of equivalent full-time student places grew steadily until it reached a peak in 2010 and declined slightly to 2014. This was mainly the result of the reduction in part-time student numbers from 2005 onwards. These changes have taken place against a background of a stronger labour market since 2010, which has influenced students' decisions on whether to study or not and contributed to the lower rates of participation in tertiary education.
- the overall participation rate for domestic students in tertiary education declined-also because of the stronger labour market since 2010.
Table 1 shows details of participation of domestic students in tertiary education. The table shows that the participation rate:
- was 10.2 percent overall in 2014, down from 10.5 percent in 2013 and 10.7 percent in 2012.
- in the 18-19 years age group remained at an all-time high of 49.4 percent in 2014
- in the 20 to 24 group fell from 33.1 percent in 2013 to 32.1 percent in 2014
- for all ethnic groups, with the exception of Māori which remained at 14.7 percent, exhibited a fall in 2014.

Data for the completion of qualifications is also shown in table 1. In 2014 there were 126,000 domestic students completing qualifications, a decrease of 2.5 percent from 2013 and the total number of domestic students completing qualifications in the tertiary system was 144,000. Note that some students complete more than one qualification in a year.

Table 2 gives a summary of government funding for the tertiary sector. The figures in the table are on a cash expenditure basis. In 2014:

- the number of government-funded (Student Achievement Component) equivalent full-time student (EFTS) places was 230,000, 2.2 percent lower than in 2012. The drop in funded places reflects the overall drop in participation in the tertiary education system.
- after repayments are taken into account, the amount provided by the government through student loans was $\$ 404$ million (in the 2014/15 financial year). This compares with expenditure of $\$ 520$ million on student allowances and $\$ 2,307$ million on tuition subsidies (Student Achievement Component of \$2,026 million) and the Performance-Based Research Fund (\$281 million).

[^0]Table 1 Participation by domestic students in
tertiary education

| Participation and completion |  | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: |
| Participation of | Number (000) | 373 | 369 | 364 |
| domestic students | Participation rate by age group in the population |  |  |  |
| education | All ages | 10.7\% | 10.5\% | 10.2\% |
|  | 18-19 years old | 49.3\% | 49.4\% | 49.4\% |
|  | 20-24 years old | 33.7\% | 33.1\% | 32.1\% |
|  | Participation rate by gender |  |  |  |
|  | Female |  | 12.0\% | 11.6\% |
|  | Male | 9.1\% | 9.0\% | 8.7\% |
|  | Participation rate by ethnic group |  |  |  |
|  | Māori | 14.5\% | 14.7\% | 14.7\% |
|  | Pasifika | 11.3\% | 11.9\% | 11.4\% |
|  | European | 10.1\% | 10.2\% | 9.9\% |
|  | Asian | 9.5\% | 8.9\% | 8.2\% |
| Domestic students completing qualifications | Level of qualification: |  |  |  |
|  | Non-degree (000) | 86 | 87 | 84 |
|  | Bachelors (000) | 30 | 30 | 30 |
|  | Postgraduate (000) | 13 | 13 | 12 |
|  | Adjustment for multiple qualifications completed | - | (1) | - |
|  | Total students completing qualifications (000) | 129 | 129 | 126 |

Source: Ministry of Education.

## Notes:

1. The participation rates have been age standardised to enable comparisons to be made between groups and over time. These rates have been age standardised based on the structure of the New Zealand population in 2014.
2. A small number of students complete qualifications at different levels in the same year, hence the sum of the three levels does not always add to the total of students completing their qualifications in a given year.

Table 2 Funding of tertiary education

| Government-funded places |  | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: |
| Student | Funded places (000) | 235 | 233 | 230 |
| Component EFTS | Actual places (000) | 237 | 232 | 228 |
| Government expenditure |  | 2012/13 | 2013/14 | 2014/15 |
| Expenditure (\$ million) | Student loansnet new lending | \$1,470 | \$1,511 | \$1,518 |
|  | Student loansrepayments | -\$1,054 | -\$1,032 | -\$1,114 |
|  | Student allowances | \$596 | \$539 | \$511 |
|  | Tuition subsidies and PerformanceBased Research Fund | \$2,280 | \$2,298 | \$2,307 |
|  | Total | \$3,293 | \$3,316 | \$3,222 |
|  | Total as \% of GDP | 1.5\% | 1.4\% | 1.3\% |

Source: Ministry of Education, Tertiary Education Commission and the Treasury.

## Notes:

1. Tuition subsidies are represented by the student achievement component.
2. Government expenditure is exclusive of GST.

## Some major trends in tertiary education

## Shift to higher-level qualifications

In 2014, there were nearly 240,000 domestic equivalent full-time student (EFTS) units enrolled in tertiary study, about 33 percent more than in 1999, but 5.7 percent below the peak in 2010. There was a decline of 11 percent in the number of New Zealanders enrolling in tertiary education at the certificate 1-3 level between 2007 and 2014, while the numbers enrolled at degree level and above rose by 15 percent, in EFTS terms. This change reflects a deliberate shift in the Government's priorities for the system-towards a higher proportion of enrolments by younger people in higher-level qualifications.

As enrolments in tertiary education have risen, so has the number of people completing tertiary qualifications. Data from Statistics New Zealand's Household Labour Force Survey shows a steady rise in the number of people in New Zealand holding tertiary qualifications, especially at degree level. In 2014, 51 percent of New Zealanders aged 15 years or older held a tertiary qualification, up from 44 percent in 1999, while the proportion with a bachelors degree or higher qualification rose from 10 percent to 21 percent.

Figure 2 Trends in the level of study among borrowers

## More enrolments by younger people

The trend towards enrolment in higher-level qualifications has been complemented by the trend towards a higher proportion of enrolments by younger people-the greatest gain in human capital from education comes from the education of younger people. This is partly because younger people have a longer period in the workforce following their education. It also reflects the fact that young people have had less time to acquire learning in the workforce. This trend is reflected in data on student loans. Between 2006 and 2014, the percentage of borrowers 26 or under rose from 65.2 to 72.5 percent (see Figure 3).

Figure 3 Trends in the age profile of borrowers


Source: Ministry of Education and StudyLink

Source: Ministry of Education.
The shift to enrolments in higher-level qualifications is also reflected in the data on student loan uptake. In 2006, 56 percent of borrowers were enrolled in qualifications at bachelors level or higher. By 2014, the proportion had risen to 68 percent. Over the same period, the proportion of borrowers enrolled in certificates declined. The trends are shown in Figure 2.

### 1.3 Current issues

Since the global financial crisis, the main challenge for the government has been to manage government's tertiary education expenditure, while ensuring that tertiary education remains affordable to students. The Government has reduced spending in low-value areas (particularly in student support) and improved the way the system targets need. This has created savings which have been reinvested in higher-value tertiary expenditure and in policies that improve the performance of the system.
As the economy has improved, and in a fiscal environment that is still tight, the Government has continued to target expenditure to where it will have the most impact in achieving its priorities. For example, in Budget 2014 funding has been targeted to areas that will result in strong research outcomes that will contribute to New Zealand's economic future and strengthen connections between tertiary education, employers and industry. This includes increases in government subsidies for engineering, science, and agriculture at degree level and above from 2015.

## Student allowances

Student allowances have been refocused to target those in their initial years of study and continue to support those from low socio-economic backgrounds. The Government has also looked at inconsistencies between the wider social assistance and tax systems and where opportunities may exist to improve the incentives to enter study. For example, a student allowance change implemented this year aligns the student support system for sole parents more closely with the benefit system. This ensures that sole parents will receive the same amount of support in the student allowance system as they would if they were on benefit

## Student Ioans

Since Budget 2010, the Government has made a number of changes to help reduce the cost of lending by restricting eligibility to borrowers who are less likely to repay their student loans, or where the economic returns are likely to be low for the borrower and the Government. Changes have also been made to increase student loan repayments from both New Zealand and overseas-based borrowers.

For example, the scheme no longer allows for re-lending to those in default of their student loans and has introduced a performance test for continued borrowing. The Government is also speeding up repayments from borrowers by increasing the repayment rate and suspending the inflation adjustments to the repayment threshold for domestic borrowers. Government funding policy has also been changed to provide fees-free access to level 1 and 2 courses for 20-24 year old students to
reduce their student loan levels. The Government has undertaken to extend this policy to all age groups from 2017.
An ongoing priority is to improve the collection of student loan repayments from overseas-based borrowers. These borrowers have much lower repayment compliance and slower repayment times than New Zealand-based borrowers (see Section 3.2). Recent initiatives have been designed to:

- increase borrowers' awareness of their repayment obligations and ensure that contact is maintained between borrowers and Inland Revenue by expanding tracing and collection activities and using information matching and sharing arrangements between government agencies to follow up on those who cross the border or renew their passport.
- make it easier for overseas-based borrowers to repay their loans by providing several fee-free payment options.
- reduce repayment times for borrowers living overseas with recent adjustments to the overseasbased borrower repayment policy (see Appendix 1 for overseas repayment obligations).
Further information on the cost of lending can be found in Chapter 4. A full list of student support policy changes is also available on educationcounts.govt.nz


### 1.4 Changes in 2015

## Information sharing arrangement with the Australian Taxation Office

An information-sharing arrangement between the Inland Revenue Department (IRD) and the Australian Taxation Office on student loans was announced in February 2015. It is expected that IRD will be able to start receiving information from Australia in mid2016.

## The student allowance parental income threshold is maintained

The Government has maintained the student allowance parental income at $\$ 55,027.96$ without CPI adjustment until March 2019.

On 1 April 2012, the student allowance parental income threshold was maintained at \$55,027.96 without CPI adjustment until March 2016 in Budget 2012. This current initiative maintains the threshold for an extended period of time.
Student allowance eligibility for students aged under 24 years without dependent children is determined in part by parental income. The parental income threshold determines the point at which allowances are abated. Under this amount students are eligible for a full allowance.

## Increases to student allowance rates for families with children

Student allowance rates for families with dependent children will increase by $\$ 25$ a week (after tax) from 1 April 2016. This policy is part of the Government's wider Budget 2015 package to increase support for ow income families with dependent children.

## Setting the annual maximum fee movement at 3 percent for 2016

The Annual Maximum Fee Movement (AMFM) will be 3 percent in 2016, lower than the 4 percent maximum in previous years. The AMFM sets the maximum level of tertiary education fee increases. While the AMFM is not a student support policy it has the effect of reducing the amount of money students need to borrow for fees through the Student Loan Scheme.

## Implementation of earlier decisions

The following initiative comes into effect this year, implementing Budget 2014 decisions:

- Student loan repayment threshold fixed: Consumer Price Index (CPI) adjustments to the student loan repayment threshold (currently \$19,084 p.a./ $\$ 367$ weekly) are suspended until 31 March 2017. The repayment threshold has been set at this level since 1 April 2009.
- Additional accommodation support for sole parents: From 1 July 2015, sole parents taking up full-time study receive at least the same level of accommodation support from student support as they would from the benefit system. Prior to this, sole parents may have received up to $\$ 165$ less per week.

The Government is also intending to amend the rules around child support, which can be affected if sole parent students need a benefit during academic breaks.

## CHAPTER $\mathbf{2}$

Outcomes

## CHAPTER 2 Outcomes

## The loan scheme aims to give a wide range of people access to tertiary education. The outcomes of the scheme are to:

- Enhance human capital and labour skills
- Make the scheme affordable in the long term for students and taxpayers.

The scheme helps to increase human capital - people with higher qualification levels have much higher earnings and employment rates. There is a significant jump in earnings for young domestic graduates with postgraduate qualifications. Bachelors degree graduates have median earnings 46 percent higher than the national median income, five years after graduating, and masters degree graduates' median incomes are 68 percent higher.

To help students make informed choices about tertiary education, extensive information resources are provided about careers and study paths.

## The scheme is affordable for borrowers and taxpayers:

- The cost of tertiary education is shared between the student and the government-effectively the government pays 80 percent of the cost.
- Policy changes have been made to make the scheme more affordable for the government and the rate of repayment has been raised to improve the value of the loan portfolio.


### 2.1 Outcomes framework

The overall aim of the Student Loan Scheme is to enable a wide range of people to access high-quality tertiary education to gain qualifications, knowledge and skills that enhance the economic and social wellbeing of New Zealanders. The two primary outcomes sought from the scheme are:

- enhanced human capital and labour skills
- long-term affordability of the loan scheme for borrowers and taxpayers.

Human capital refers to the abilities and skills of an individual acquired through investment in education and training that enhance potential income earning.
Figure 4 shows the outcomes of the scheme and identifies the indicators we monitor to assess whether it is achieving the desired outcomes.

Figure 4 Outcomes of the Student Loan Scheme

| Vision Statement | The Student Loan Scheme aims to enable a wide range of people to access tertiary education, gaining knowledge and skills that enhance the economic and social wellbeing of New Zealand |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Primary Outcomes | Enhanced human capital and labour skills |  | A long-term affordable loan scheme for students and taxpayers |  |
|  | $\uparrow$ | $\uparrow$ | $\uparrow$ | $\uparrow$ |
| Immediate Outcomes | More borrowers gain relevant qualifications that assist employment | More people have the opportunity to access tertiary education | Borrowers meet their repayment obligations of their own accord | Increased value and performance of the student loan asset |
|  | $\hat{\lambda}$ | $\hat{\$}$ | $\hat{0}$ | $\hat{\lambda}$ |
| This will mean that... | - students make better-informed study choices <br> - more borrowing is focussed towards quality high-level courses <br> - more graduates find relevant employment | - good information about career pathways, study options, and available support is more accessible <br> - more young people are engaged in education, training, or employment | - borrowers know and understand their repayment obligations <br> - borrowers maintain contact with Inland Revenue <br> - overall compliance increases | - future lending has better returns <br> - the return on the student loan asset improves |

This chapter looks at the extent to which the loan scheme has succeeded in achieving these outcomes. It also explores evidence of any unintended outcomes. In doing so, we summarise the evidence for the longer-term effects of the scheme and we look at the trends that are set out in more detail in Chapter 3 of the report (which looks at borrowing and repayment trends) and Chapter 4 (which analyses the costs of the scheme).

### 2.2 Human capital and labour skills

Many economists measure gains in human capital by looking at people's earnings, based on the reasoning that an employer pays for the value the worker creates. So if a group of people enjoy an earnings premium over another group, we take this as a sign that the first group has greater human capital than the second. In this section, we look at research that establishes how employers in New Zealand value people's qualifications.

Statistics New Zealand's Integrated Data Infrastructure shows that employers pay a premium to those who have completed qualifications. For instance, on average young people who complete a bachelors degree and go into the workforce, earn more than 46 percent above the national median earnings five years after graduation. ${ }^{2}$

A study of the premium paid by employers to recent young graduates shows a clear earnings advantage to those with qualifications, that this advantage emerges soon after graduation, and that it grows over time. Figure 5 shows the median and lower and upper quartile earnings for young New Zealand graduates in the first seven years after completing their qualification. The analysis focused on a subgroup of these graduates-referred to as 'young graduates!'3 They represent the students who moved to tertiary education more or less directly from school and who were more likely to be completing their first period of tertiary education and entering the labour market for the first time. Education is likely to have more of a direct influence on earnings for young people than for older students, who perhaps already hold qualifications or have a number of years of work experience.

Figure 5 shows that the higher the qualification, the higher the expected earnings. It shows that five years after graduation:

- the median earnings of young bachelors degree graduates were 31 percent above those with a diploma and 45 percent above those with a level 1-3 certificate
- the median earnings of young masters degree graduates were 15 percent higher than those who completed a bachelors degree, and 67 percent higher than a young level 1-3 certificate completer.
Using the data above and comparing the median earnings of young graduates with the national median earnings, we see that for those above bachelors level, earnings are significantly higher five years after graduation.

The Government has given greater priority to enrolments by younger people in higher-level qualifications because that is more effective in raising human capital.

Table 3 Median annual earnings of young domestic graduates, one, two and five years after study, as a percentage of the national median earnings by qualification level.

| Qualification level | Years after study $\%$ |  |  |
| :--- | :---: | :---: | :---: |
|  | One | Two | Five |
| Doctorate | 177 | 186 | 202 |
| Masters degree | 123 | 142 | 168 |
| Level 8—bachelors honours, pg dip or cert | 125 | 141 | 171 |
| Graduate certificate or diploma | 132 | 139 | 167 |
| Bachelors degree | 107 | 123 | 146 |
| Diploma at levels 5-7 | 81 | 92 | 111 |
| Certificate at level 4 | 72 | 82 | 101 |
| Certificate at levels 1-3 | 72 | 80 | 101 |

Figure 5 Median earnings (red line) and lower to upper quartile range in earnings (shaded area).


Source: Statistics New Zealand, Integrated Data Infrastructure,
Ministry of Education interpretation.
Note: earnings are annual, gross and in 2012 dollars. Only young domestic graduates classified in the employment destination are included in these results.

[^1]
## Information to help study and career decisions

A wide range of information or guidance services is available for potential students to access to help them determine the benefits and nature of tertiary study that suits them. In addition to career information and advisory services provided by schools and tertiary organisations, information is available from Careers NZ, the Ministry of Business, Innovation and Employment, the Tertiary Education Commission and other agencies.

Reliable information on the outcomes of tertiary education is important for learners to make informed tertiary education decisions. This information enables them to assess the likely value of available tertiary education options. There are a number of projects underway across agencies focused on improving the quality and availability of information to support informed decisions (see Table 4).

Table 4 Information resources supporting study choices

| Information/service | Introduced in | By | Overview |
| :--- | :--- | :--- | :--- |

### 2.3 Affordability for borrowers and taxpayers

## Sharing the costs of tertiary education

## The shared benefits of education

Tertiary education has many benefits for individuals, society and the economy. The discussion in the previous section shows that people who gain higher qualifications have higher earnings on average. That advantage in earnings benefits the individual, but also suggests that the individual is making a greater contribution to the economy.
In addition to the economic benefits of education, there is also a range of non-economic benefits associated with having a higher qualification. Research shows that success in education is associated with a higher quality of life, better health and other benefits for individuals. It also lifts social cohesion and reduces the proportion of the population who are dependent on support from the public through the health system and other social services. The benefits of education are shared between the person who gains a qualification and society at large.

## Sharing the costs

Since tertiary education benefits individuals, society and the economy in many ways, it is appropriate that costs are shared. The loan scheme has enabled the government to share costs with students and their families, helping to provide funding for more places in tertiary education organisations. Without shared funding, the government would have to reduce the number of places it funds and many providers would need to further limit entry to programmes.

Since 2000, the government has shifted the balance between the share of the full cost of tertiary education borne by students and their families and the share paid by government. ${ }^{4}$ In 2000, students paid 33 percent of the full cost through their tuition fees. However, as a result of policies restricting fee increases, this figure was 29 percent in 2014.

While the government's share was nominally 71 percent in 2014, in practice it is larger. This is because much of the student share is met by 'discounted' interest-free borrowing through the Student Loan Scheme to pay compulsory fees, creating an implicit government subsidy. The government's share rises to around 82 percent after taking the implicit subsidy into account.

## The costs of the loan scheme to students

There are four ways of assessing the cost of tertiary education to students:

- the level of tertiary education fees compared with the level of earnings in the labour market
- the size of people's loans when they leave tertiary education
- the amounts people repay on their loans
- the time it takes to repay loans.

The first measure is assessed by means of a proxy for the level of tuition fees over the life of the Student Loan Scheme, using the average fee for a Bachelor of Arts degree at a New Zealand university. Figure 6 traces the trend in the affordability of tertiary education. We calculate how many weeks it takes for a person with an average income to earn the average full-time university Bachelor of Arts fee.

Figure 6 Ratio of the average full-time university Bachelor of Arts fee to average weekly earnings


Source: Universities New Zealand and Statistics New Zealand (Quarterly Employment Survey). Ministry of Education interpretation. Notes:

1. Excludes fees at AUT and Lincoln University.
2. Average ordinary time weekly earnings for a full-time equivalent employee are derived from the June quarter of the Quarterly Employment Survey.
Figure 6 shows that fees rose sharply during the 1990 s as the loan scheme was phased in and as the government transferred a greater share of the cost of tertiary education to students and their families. By 2000, it took 5.0 weeks for the average earner to earn a full-time, full-year BA fee. Between 2001 and 2003, fees were frozen while earnings rose, so the number of weeks needed to earn the BA fee fell to 4.5. Under the fee and course costs maxima policy between 2004 and 2009, the real cost of study was stable. Since 2010, fee stabilisation has operated under the annual maximum fee movement (AMFM) policy, while earnings growth has been constrained in response to the tight fiscal environment. These two factors have seen a small, gradual increase in the number of weeks of earnings required to meet the full-time BA fee cost-from 4.5 weeks in 2009, to 5.0 weeks in 2015.
[^2]The median size of loans on 30 June 2015 was $\$ 14,421,3.9$ percent up on the previous year. About 37 percent of borrowers had a loan balance of $\$ 10,000$ or less, compared with 38 percent the year before.
Figure 7 shows the median loan size on leaving study from 2000 to 2011. Between 2001 and 2011, the median rose by 43 percent. When we account for inflation in this period, the change in the size of the leaving loan balance amounts to an increase of 9.4 percent.

Figure 7 Median Ioan balance on leaving study


Source: Statistics New Zealand, Integrated Dataset on Student Loans and Allowances, and IDI.
Note: This graph shows data only to 2011 as we cannot be sure if a borrower is likely to have left study until they have had no enrolment for two years.

Repayments from borrowers in New Zealand depend on income. The New Zealand Student Loan Scheme is an income-contingent scheme, under which people with low incomes are not required to make repayments, while for those above the repayment threshold the repayments increase as a person's income goes up, so that those with the highest incomes make the largest repayments. The repayment threshold has been held at \$19,084 from April 2009 and will remain at that level until March 2017.
As borrowers' incomes have risen, they have paid slightly more of their income to repay their loans. The repayment obligation was raised in 2013 from 10 cents in each dollar of income above the repayment threshold to 12 cents in the dollar. This increase will have the effect of bringing repayments forward.

For borrowers in New Zealand, Ioans are interestfree. Therefore borrowers have the benefit of the 'time value of money'. This means that, over time, the value of the money on Ioan is gradually eroded so that the value of the repayments being made is less than the value of the money borrowed.

## Cost of the loan scheme to the government

The Student Loan Scheme is a significant financial asset. The cost of the scheme depends on the amount of money lent and on the cost of lending each dollar. These in turn depend on a range of factors which are discussed below.

## Volume of lending

The demand for tertiary education and the policies that the government uses to manage demand affect the volume of borrowing. For instance, the government's approach to tuition fees has a bearing on the amount of money each borrower draws from the scheme: the regulation of fees through the AMFM policy and new policies on fees for foundation-level qualifications, all constrain the volume of lending.
The government also sets policies that limit access to borrowing, such as the academic performance requirements that must be met if a student is to retain the right to borrow and the 'stand-down' period, during which new permanent residents may not borrow. These place a volume constraint on the amount of money lent.

## The cost of lending

The cost of lending is affected by lending policies and by economic factors such as interest rates and changes in incomes and employment.
The most important cost is the time value of money-effectively a discount-that must be applied to new loans, partly because loans for New Zealandbased borrowers are interest free. The repayment of loans is also conditional on income being above a threshold and therefore some loans may never be repaid. Loans are also written off if a borrower dies or is declared bankrupt. These policies have a significant effect on the overall costs that make up the discount factors applied to new loans.
The economic environment determines the discount rate used to calculate the time value of money, as well as influencing borrowers' ability to repay. If incomes are rising and/or unemployment is falling, repayments increase, but in a period of high unemployment or low earnings growth, more people will have low incomes, or be below the repayment threshold and will not be obliged to make repayments. Longer repayment times increase the costs of the loan scheme by adding to the time value of money.

The cost per dollar lent is the key measure of the cost of new loans. It has varied over time depending on the external economic factors described aboveespecially shifts in interest rates-and lending policies that affect the value of the loan scheme such as the forecast rate of repayment (see Figure 8). The movements over recent years have reflected the relative importance of the external and internal pressures that have influenced lending costs at the time. These are discussed in detail in Section 4.1 of this report.

Figure 8 Cost of lending in cent per dollar lent.


Source: Valuation of the Student Loan Scheme
To make the scheme more affordable, a high priority has been given to policy changes to improve the value of the student loan asset. These changes have focused on the rate of repayment and on the compliance of overseas borrowers in meeting their obligations. The slower the repayment rate, the greater the loss in value and hence the higher the cost to the government.

If many borrowers choose to go overseas once they finish their studies, this reduces the value of the scheme because it is more difficult to collect repayments-the repayment rates are slower and therefore the costs higher. The low compliance of overseas borrowers is one of the major drains on the cost of the loan scheme and provides the rationale for the extra effort going into collection from borrowers who are overseas.

Measures taken since 2010 include:

- policy changes aimed at reducing repayment times, in particular:
- suspending cost of living adjustments to the repayment threshold to 2017 (Budgets 2010, 2011 and 2014)
- increasing the repayment obligation from 10 cents per dollar to 12 cents per dollar of income over the repayment threshold (Budget 2012)
- improving the efficiency of collections and compliance by New Zealand-based borrowers
- initiating a programme of collection of loans from overseas-based borrowers
- replacing the automatic three-year repayment holiday for those going overseas with a one-year holiday on request, provided that an alternative contact person in New Zealand is provided.

Another important measure of the financial performance of the loan scheme is the ratio of the carrying value of the asset to the nominal value. The value of the scheme in the Crown's accounts on 30 June 2015 was 59.7 percent of the total amount of money on loan or nominal value. This is virtually unchanged from the previous year. This is shown in Figure 9 below.

Figure 9 Ratio of carrying value of the Student Loan Scheme to nominal value at 30 June


Source: Valuation of the Student Loan Scheme

### 2.4 Unintended outcomes

The Student Loan Scheme is a targeted scheme with income-contingent repayments. This means that there will be some people who might not be able to repay for a variety of reasons-for example, they have no income at all or their income is below the repayment threshold. However, it is desirable that most borrowers are able to repay their loans within a reasonable timeframe.
A number of recent initiatives are expected to help reduce the numbers who repay slowly, or who never repay at all. These include introducing a performance requirement for students to retain loan eligibility, an annual and life-time limit on the study for which they can borrow, adjusting overseas-based borrower repayment obligations and improved collection activity by Inland Revenue. In addition to these measures, the Youth Guarantee and fees-free tertiary provision policies will help reduce student loan costs for people who undertake lower-level study and whose income when they leave study, may not have been enough for them to repay their student loans fully.

## Are borrowers left with large debts for many years?

The introduction of the interest-free student loans policy in 2006 and the changes made to the rules governing repayment by borrowers overseas have led to two changes in repayment behaviour. Firstly, it is less likely that people get into 'negative repayment'-a situation where the loan balance increases once borrowing has finished. In the past, those who took time out from the workforce or went overseas would often see their nominal loan balance increase as base interest was added to their account, while their repayments had stopped. Secondly, there was a fall-off in voluntary additional repayments after the introduction of interest-free loans.

Borrowers who remain in New Zealand have shorter repayment times than is often thought. Half of those who left study in 2011 and are staying in New Zealand until repayment will have managed to settle their loan in under six years, while three-quarters repay in just over nine years. But borrowers who spend time outside of the country will have much longer repayment times. Based on forecasts for 2011 leavers, their median repayment time will be about 15 years.

## Other unintended outcomes

Some surveys have concluded that students may be encouraged to go overseas after completing study and their student loans deter them from returning. It has been claimed their loans may discourage home ownership or cause them to delay having children. ${ }^{5}$

The effects of loans on trends in child bearing, overseas travel and home ownership are difficult to verify. However, the available research indicates that there is no statistical evidence that the presence of income-contingent loans causes adverse effects in these areas. For a review of this research refer to previous annual reports.
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## CHAPTER $\mathbf{3}$

The state of play how the scheme is working

## CHAPTER 3 the state of play how the scheme is working

This chapter describes the state of play of the loan scheme-the uptake of loans by current tertiary students and the collection of repayments. To help understand the state of play, it also analyses the borrower population as a whole and links the size of borrower segments to their debt balances.

## Borrowing:

In the 2014 academic year:

- 72.4 percent of eligible students took out a loan, down from 73.8 percent in 2013
- students borrowed $\$ 1,601$ million, virtually the same as last year, but borrower numbers have declined
- more full-time students are in the borrowing mix and they are studying at a higher level.
The trend in borrowing is consistent with the decline in domestic enrolments in tertiary education.


## Repayments and arrears:

In the 2014/15 financial year:

- overall repayments were up by 8 percent
- repayments from overseas-based borrowers were up by 17 percent
- overdue repayments were up by 21 percent, mainly due to increasing arrears of overseas-based borrowers, and the end of the three year repayment holiday, which tended to mask the repayment status of many overseas borrowers.


## Borrowing and repayments - long-term trends



Source: Ministry of Education, Inland Revenue and Ministry of Social Development.

## Important definitions of borrower segments:

Active borrowers: those who took a loan during the academic year-from January to December

Active repayers: those who made repayments in the government's financial year-July to June

Both borrowing and repaying: those who borrowed and also repaid in the government's financial year-July to June

Inactive status: those who did not borrow or repay in the government's financial yearJuly to June.

### 3.1 Borrowing

This section covers borrowing from the scheme in the academic year that ended in December 2014. Note that there is a significant segment of scheme participants who are borrowing as well as repaying (see Section 3.3). First-time borrowers are an important gauge of developing trends in the scheme and the characteristics of this group are also highlighted in this section.

## Borrower uptake

## Long-term trends in borrower numbers

Fewer students took up loans in 2014, a trend that was consistent with the decline in domestic enrolments in the tertiary sector since 2010 described in Chapter 1. In 2014, out of 258,000 who were eligible for a loan, 186,000 students, or 72 percent, borrowed from the scheme. The longterm trend in active borrower numbers is shown in Figure 10.

Figure 10 All active borrowers and new borrowers by academic year


Source: Ministry of Social Development —, Statistics New Zealand, integrated dataset -

Note: 2014 data on new active borrowers was provided by the Ministry of Social Development and is provisional. A dot is used to distinguish this data from data provided by Statistics New
Zealand from the integrated dataset, which does not yet include 2014 data. The two sets of data are derived from different datasets and therefore are not directly comparable.

The new borrower intake is a key indicator of activity in the loan scheme because it reflects the current demand for loans. The decline in new borrower numbers began in 2010 and has taken place in the context of three factors:

- the general strengthening of the labour market since the recession of 2010, although the employment conditions for the group aged 15 to 19 years continues to be weak
- changes in loan policy, such as academic performance requirements and residency status, which have restricted eligibility
- the easing of the demographic impact of the 'bubble' in the proportion of young people in the population, so that now there is a lower ratio of younger people in the population than previously.

In 2014, active borrowers represented about 5.2 percent of the estimated population living in New Zealand aged 15 and over.

## Loan uptake rates

The loan uptake rate-the number of eligible students taking up loans-is shown in Figures 11, 12 and 13. The overall uptake rate was 72.4 percent, slightly lower than in 2013. Full-time students had an uptake rate of 82.9 precent and the part-time rate was 39.9 percent.
The uptake has generally tracked the trend in enrolments, but the rate for part-time students has declined more markedly than the overall trend. This is partly due to policy changes in 2012 which meant that part-time, full year students could no longer borrow for course-related costs.

Between 2005 and 2010, there was a steady rise in part-time, full-year borrowers. In 2012, however, there was a significant drop-23 percent-to the levels seen earlier. This reflects a move away from part-time enrolments and is probably due to parttime borrowers returning to the workforce when the labour market recovered. The number of part-time, part-year borrowers is similar to full-year, part-time students, with a one-year lag after 2010.

Figure 11 Overall loan uptake


Figure 12 Full-time uptake


Figure 13 Part-time uptake


Source: Ministry of Social Development and Ministry of Education.

## Amounts borrowed

## Borrowing in 2014

In the 2014 academic year, students borrowed $\$ 1,601$ million from the scheme. Although borrower numbers have declined, the amount borrowed is virtually the same as in 2013. This was mainly due to:

- increases in the amount borrowed for course fees between 2012 and 2014
- increases in the proportion of full-time students in the overall borrowing mix
- the shift to higher study levels with higher course fees.

This trend is reflected in the rising median and average amounts borrowed (see Figure 15).

## Overview of historical borrowing trends

Figure 14 highlights the factors that have influenced borrowing since 1992. As the loan scheme developed and enrolments in tertiary education increased during the 1990s, the total amount borrowed per year grew significantly as a consequence of the steady rise in fees. In 1999, the amount that could be borrowed for course-related costs was reduced, leading to a fall in total borrowing that year. The following year, that reduction was reversed, which contributed to a rise in total borrowing by 39 percent between 1999 and 2000 (from $\$ 537$ million to $\$ 744$ million).

From 2001 to 2005, the aggregate amount borrowed was relatively stable. There are three main reasons for this:

- The controls on fees since 2001 meant that fees, the largest component of borrowing, stabilised.
- Enrolment growth began to slow.
- Although there was an increase in enrolments by part-time students, they have lower entitlements and are therefore more likely to finance their studies privately.

Figure 14 Borrowing trends since 1992


Source: Ministry of Social Development and Ministry of Education.
In 2006, the introduction of interest-free student loans for New Zealand-based borrowers contributed to an increase in the number of active borrowers. From 2005 to 2006, the number of borrowers increased by 8.4 percent and the amount borrowed by 12 percent. Increased levels of enrolment in tertiary education in 2009 resulted in a significant rise in the number of students borrowing. The total number of active borrowers rose from 198,738 in 2009 to 212,485 in 2010, an increase of 7 percent. In 2011, the number of borrowers in the scheme fell for the first time since 2005; 207,330 students borrowed a total of $\$ 1,471$ million from the loan scheme, reflecting a reduction in tertiary education enrolments. In 2013, the number of active borrowers fell by 4.4 percent; 192,257 students borrowed \$1,599 million.

Figure 15 Average and median amounts borrowed since 1992


Source: Ministry of Social Development and Ministry of Education
Note: the median amount was not calculated before 2000
The average amount borrowed in 2014 was $\$ 8,517$, 3.3 percent more than in 2013. Over the previous three years the increases were: 6.3 percent (2013), 2.5 percent (2012) and 4.6 percent (2011). The median amount borrowed in 2014 was $\$ 7,708$ an increase of $3.6 \%$ over 2013.

## Loans by component

As noted above, the overall uptake rate in 2014 was 72.4 percent of eligible students. Most borrowers use the loan scheme to pay for the compulsory fees charged by the tertiary education provider. Since the beginning of 2007, fees can only be borrowed for government-funded courses. Students can also borrow for living costs and up to $\$ 1,000$ for courserelated costs.

In 2014:

- 93 percent borrowed to pay fees
- 65 percent borrowed to help meet course-related costs
- 56 percent borrowed towards meeting their living costs
- 23 percent borrowed to pay fees only.

Amounts drawn by component as a percentage of total borrowing are as follows:

- From 2000 to 2013, the total amount drawn to pay for fees was 63 percent of all money drawn from the loan scheme. In 2014, \$1,053 million was taken up to pay for fees, 66 percent of the amount drawn in 2014.
- Money used to pay for course-related costs was 7.7 percent of all amounts drawn in 2014.
- Money used to pay for living costs was 26.2 percent of all amounts drawn in 2014.

Figure 16 Total amounts drawn by loan

Source: Ministry of Social Development
The proportion of loans drawn to pay for fees increased largely because entitlements were not frozen for fees, but the entitlement for courserelated costs was. Living costs entitlements were frozen until 2008, with increases at the rate of inflation since 2009.

Table 5 presents the average, median and total amounts drawn by loan components for the period 2005 to 2014. Over this period, the average amount borrowed to pay for fees increased by 43 percent.

Table 5 Average and median amounts borrowed by component

|  | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Course fees \$ |  |  |  |  |  |  |  |  |  |
| Average | 4,253 | 4,408 | 4,576 | 4,743 | 4,766 | 5,076 | 5,441 | 5,571 | 5,850 | 6,074 |
| Median | 4,068 | 4,230 | 4,455 | 4,618 | 4,744 | 5,084 | 5,422 | 5,666 | 5,925 | 6,189 |
|  | Living costs \$ |  |  |  |  |  |  |  |  |  |
| Average | 3,835 | 3,847 | 3,871 | 3,875 | 3,815 | 3,832 | 3,710 | 3,774 | 3,944 | 4,036 |
| Median | 4,050 | 4,129 | 4,256 | 4,256 | 3,900 | 3,851 | 3,537 | 3,599 | 3,800 | 3,958 |
|  | Course-related fees \$ |  |  |  |  |  |  |  |  |  |
| Average | 943 | 950 | 948 | 955 | 987 | 992 | 990 | 988 | 988 | 987 |
| Median | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

Source: Ministry of Social Development.

## Living costs and support for students

Students are helped to meet their daily expenses by the provision of student loans or student allowances, or a combination of both. Student allowances do not have to be repaid and entitlement depends on personal and family circumstances. However, living costs paid as part of a student loan must be repaid.

For the 2014/15 tax year, full-time students could borrow up to $\$ 175.96$ a week for living costs from the loan scheme, less any student allowances they receive. The maximum entitlement is adjusted annually for inflation on 1 April each year, and has increased to $\$ 176.86$ for the 2015/16 tax year.

The average amount borrowed for living costs increased slightly by 2 percent in 2014.

In 2014:

- 44 percent of people receiving student allowances used the loan scheme to supplement their living costs. This is an increase compared with 45 percent in 2013.
- 19 percent of all borrowers borrowed for living costs under the loan scheme and also received student allowances. In 2013, this group was 20 percent of all borrowers.

Table 6 presents the number of living costs borrowers and recipients of student allowances, and the average living costs and allowances received in 2014.

Table 6 Student allowances compared with student loan living cost borrowings in 2014

|  | Number of <br> students | Average <br> allowances | Average <br> living costs <br> loan | Average <br> allowances <br> and living <br> costs loan |
| :--- | ---: | ---: | ---: | ---: |
| Student <br> allowances only | 44,588 | $\$ 7,400$ |  | $\$ 7,400$ |
| Student <br> allowances and <br> living costs loan | 35,084 | $\$ 6,077$ | $\$ 1,873$ | $\$ 7,950$ |
| Living costs loan <br> only | 68,310 |  | $\$ 5,146$ | $\$ 5,146$ |

Source: Ministry of Social Development.
The number of students borrowing a living costs loan and/or receiving student allowances is illustrated by Figure 17. There was a declining trend in the number of students borrowing living costs and/or receiving student allowances from 2003 to 2005. However, after 2005 there was a steady increase, with a sharp rise in 2010.
The significant increase in the number of students receiving a student allowance in 2009 was a result of three factors:

- the reduction in the age limit for parental income testing to establish eligibility for an allowance from 25 to 24 years
- the 10 percent increase in the parental income threshold for student allowances
- the economic downturn that resulted in higher unemployment and lower family incomes.

Borrower numbers have continued the decline which began after 2010. This is largely because the gradual recovery from the economic downturn has encouraged students to return to the workforce.

In 2014:

- 147,982 students either borrowed the student Ioan living costs component, or received student allowances, or both, a 2 percent fall from the 2013 level (2,858 fewer students).
- 44,588 students received student allowances only, a fall of 5.6 percent, or 2,622 fewer recipients, from the 2013 level, because of changes in eligibility rules for allowances and the effect of improving economic conditions-as the recovery from the recession of 2008 took place, family incomes rose, meaning that fewer students qualified for full student allowances.
- 35,084 students received student allowances and also borrowed living costs, a decrease of 7.4 percent, or 2,805 students, over the 2013 level.
- 68,310 students borrowed living costs only, an increase of 4 percent from 2013, or 2,569 additional borrowers.

Figure 17 Living cost support for studentsstudents borrowing living costs and receiving student allowances


## Provider type

Table 7 shows the number of students who borrowed course fees from 2010 to 2014, categorised by provider type and the proportion they represent out of all students borrowing course fees. Overall, there has been little change in the composition of borrowers over the past five years, with students attending universities consistently representing the largest proportion of course fee borrowers.

The average course fees borrowed by provider type are shown in Figure 18. Universities and polytechnics had a year-on-year increase in the average course fees borrowed. Universities recorded an increase of 3.6 percent (\$227) in fees borrowed, as the balance of enrolments shifted to qualifications with higher fees and as fees increased. Polytechnic students' average fee borrowings rose by 4.4 percent (\$190). The average course fees borrowed increased by 2.4 percent (\$161) for students at private training establishments and increased by 2.1 percent (\$71) for wānanga students.

Source: Ministry of Social Development and Ministry of Education
Table 7 Students who borrowed course fees by provider type

| Provider type | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% | n | \% | n | \% | n | \% |
| Universities | 107,631 | 53 | 103,769 | 53 | 103,302 | 54 | 100,625 | 55 | 99,598 | 56 |
| Inst. of technology and polytechnics | 57,546 | 28 | 58,570 | 30 | 58,107 | 30 | 53,706 | 29 | 49,453 | 28 |
| Private training establishments | 33,837 | 17 | 31,593 | 16 | 27,890 | 15 | 26,307 | 14 | 24,404 | 14 |
| Wānanga | 3,205 | 2 | 3,309 | 2 | 2,883 | 2 | 2,911 | 2 | 2,755 | 2 |
| Total | 202,219 | 100 | 197,242 | 100 | 192,182 | 100 | 183,550 | 100 | 176,210 | 100 |

$\mathrm{n}=$ number of borrowers
Source: Ministry of Social Development.

## Notes:

1. Students studying at more than one provider type have been counted in each provider type. As a result, the sum of the borrowers in this table will be greater than the total number of borrowers elsewhere in this report.
2. Universities include college of education students.
3. Percentages do not always add to 100 due to rounding.

Figure 18 Average course fees borrowed by provider type


Source: Ministry of Social Development.

## Qualification level

Table 8 gives a breakdown of active borrower numbers and amount borrowed by the level of qualification. Overall there were 3.0 percent fewer borrowers in 2014. The largest decline has been in diplomas and certificates, which have been falling since 2010. The largest group however-bachelors level-increased consistently to 2012, but fell in 2013 and again in 2014. The masters, honours and postgraduate levels increased by 3 percent in 2014, partially because students tend to enrol for honours programmes to obtain an entitlement to student allowances.

Table 8 Student loan borrowers by level of qualification and average amounts borrowed

| Qualification level | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \$ avg | n | \$ avg | n | \$ avg | n | \$ avg | n | \$avg |
| Doctorates | 1,546 | \$6,919 | 1,548 | \$7,117 | 1,573 | \$7,239 | 1,541 | \$8,542 | 1,517 | \$8,502 |
| Masters, honours, postgraduate certificates and postgraduate diplomas | 20,425 | \$8,039 | 19,930 | \$8,377 | 19,465 | \$8,627 | 19,295 | \$9,592 | 19,876 | \$10,040 |
| Bachelors degrees, graduate certificates and diplomas | 106,705 | \$7,937 | 106,849 | \$8,289 | 108,497 | \$8,507 | 106,349 | \$9,025 | 105,330 | \$9,342 |
| Diplomas | 28,618 | \$7,357 | 26,316 | \$8,174 | 24,936 | \$7,761 | 22,100 | \$7,898 | 20,675 | \$7,933 |
| Certificates | 54,320 | \$5,750 | 51,511 | \$5,754 | 46,440 | \$5,906 | 42,807 | \$6,204 | 39,052 | \$6,168 |
| Other | 871 | \$6,877 | 1,073 | \$6,349 | 276 | \$5,583 | 165 | \$4,137 | 27 | \$3,829 |
| Total | 212,485 | \$7,298 | 207,330 | \$7,633 | 201,187 | \$7,822 | 192,257 | \$8,315 | 186,477 | \$8,587 |

Source: Ministry of Social Development. Qualification classifications from the Ministry of Education.

## Notes:

1. Some borrowers were enrolled in qualifications at more than one level.
2. This data is provisional.
3. Years are calendar years.
4. A small number of borrowers have not been assigned any qualification level.

Table 9 Demographic characteristics of active student loan borrowers

## New active borrowers ${ }^{6}$

## Number

The number of new borrowers in 2014 was 49,038, a fall of 5.2 percent from 2013.

## Gender

Female borrowers represented 56 percent of new active borrowers in 2014 and outnumbered males by 6,318. In 2013, there were 56 percent female borrowers, outnumbering males by 6,222.
Age
The average age of new active borrowers was 23 years in 2014 and the median was 19 , the same as the previous year. The number of new active borrowers in the 27-50 age group decreased by 868 or 10.0 percent and for those over 50 years it decreased by 108 , or 8.7 percent, in 2014.

## Ethnicity

Of new active borrowers in 2014, 61 percent identified themselves as European, 20 percent as Mäori, 14 percent as Asian and 10 percent as Pasifika.?

## Active borrowers overall

## Gender differences

In 2014, the number of female borrowers accessing the Student Loan Scheme was 110,210 , compared with 76,267 males. The average amount borrowed by female borrowers increased by $\$ 288$ in 2014, or 3.6 percent (from $\$ 8,085$ in 2013 to $\$ 8,373$ ). The average amount borrowed by male borrowers increased by $\$ 251$ on average or 3 percent (from $\$ 8,644$ in 2013 to $\$ 8,895$ ).
Age
Between 2013 and 2014, the number of active borrowers in the over-50 group fell from 5,336 to 4,712 , a decrease of 11.7 percent. The 27-50 year demographic also fell by 4.9 percent, from 49,052 borrowers in 2013 to 46,643 in 2014. The 20 and under age group also fell, down 2.7 percent, from 63,361 in 2013 to 61,621 in 2014. The 21-26 age group fell from 74,508 in 2013 to 73,501 in 2014, a decrease of 1.4 percent. In $2014,72.5$ percent $(135,122$ ) of all active student loan borrowers were under the age of 27 . Those borrowers aged 27 to 50 represented 25 percent of active borrowers, while the over- 50 age group constituted just 2.5 percent of all active borrowers. Ethnicity
In 2014, 63 percent of active borrowers identified themselves as European, 20 percent as Māori, 14 percent as Asian and 10 percent as Pasifika.
Further details on demographic characteristics of borrowers are available in the tables on the Education Counts website.

## Leaving balances

Figure 19 gives the median leaving balances of male and female borrowers in the leaving cohorts from 1992 to 2011. Between 1999 and 2008, male borrowers left with larger median loan balances than females. However, since 2009 this trend has been reversed, with female borrowers' balances at \$14,070 and males at \$13,830 in 2011.

The largest volume of borrowing has tended to be by students at bachelors level. Figure 19 also tracks the Ioan balances of those who studied at this level and left between 1997 and 2011. Male borrowers who studied bachelors-level qualifications leave their study with higher leaving Ioan balances than female borrowers. The level of the loan balance on leaving depends on many factors such as the field of study, the provider attended, and the individual's pass rate.

Figure 19 Median Ioan balances for leavers by gender-all borrowers and those who studied at bachelors level


Source: Statistics New Zealand, Integrated dataset and IDI.
Note: 2011 is the latest leaving cohort available
Between 2001 and 2011, the median leaving balance for men rose by 38.6 percent and for women by 53.8 percent. Adjusting for inflation over that period, these amounted to a rise of 6.0 percent and a rise of 17.7 percent respectively.

[^3]
### 3.2 Repayment performance

## Analysis of repayments

The factors that affect loan repayment are:

- the size of the borrower segment actively repaying loans
- economic conditions that influence employment and incomes
- legislative changes to repayment obligations
- the proportion of borrowers in New Zealand and those overseas
- circumstances or events anticipated in the legislation such as having a low income, death or bankruptcy
- non-compliant behaviour by borrowers and the effectiveness of measures to improve compliance.

This section deals with these factors in more detail.

## Trends

In the year to June 2015, repayments were over $\$ 1.1$ billion, an increase of 8.0 percent from last year-see Table 10.

Table 10 Loan repayments

| Repayments | $2012 / 13$ | $2013 / 14$ | 2014/15 |
| :--- | ---: | ---: | ---: |
| PAYE | $\$$ million |  |  |
|  | $\$ 599.6$ | $\$ 749.1$ | $\$ 794.8$ |
|  | $\$ 454.3$ | $\$ 282.6$ | $\$ 318.9$ |
| All payment channels | $\$ 1,053.9$ | $\$ 1,031.7$ | $\$ 1,113.7$ |
|  | Annual \% change |  |  |
|  | $37.3 \%$ | $-2.1 \%$ | $8.0 \%$ |

Source: Inland Revenue administration data.
Payments through PAYE were 6.1 percent higher than in 2013/14. This was due to the annual repayment threshold being kept at $\$ 19,084$ and an increase in borrower income, leading to relatively more being collected compared with previous years. The large increase in 2013/14 was mostly because of an increase in the repayment rate from 10 percent to 12 percent of every dollar earned above the repayment threshold.

Table 11 shows the payment received directly from borrowers. In 2012/13 there was a spike in repayments directly from borrowers because of the ending of the voluntary repayment bonus in 2013. The move to pay period repayment obligations has decreased the amount paid directly by borrowers because New Zealand-based borrowers earning a salary or wage now fully meet their obligations through the PAYE system.

Table 11 Loan repayments directly from borrowers

| Repayments directly from <br> borrowers | $2012 / 13$ | $\mathbf{2 0 1 3 / 1 4}$ | $2014 / 15$ |
| :--- | :---: | :---: | ---: |
| Overseas based | $\$$ million |  |  |
|  | $\$ 160.3$ | $\$ 158.1$ | $\$ 184.7$ |
|  | $\$ 293.9$ | $\$ 124.6$ | $\$ 134.2$ |
| Overall change | $\$ 454.3$ | $\$ 282.6$ | $\$ 318.9$ |
|  | Annual \% change |  |  |
|  | $89.5 \%$ | $-37.8 \%$ | $12.8 \%$ |
|  | $40.7 \%$ | $-1.4 \%$ | $16.8 \%$ |
|  | $133.6 \%$ | $-57.6 \%$ | $7.7 \%$ |

Source: Inland Revenue administration data.
The amount repaid directly by borrowers increased 12.8 percent on the previous year. This was caused by:

- an increase in the number of overseas-based borrowers who met their repayment obligations
- a change to assessment levels for overseas-based borrowers-now borrowers with loan balances of $\$ 45,000$ to $\$ 60,000$ need to pay $\$ 4,000$ and borrowers with balances over \$60,000 need to pay \$5,000
- an ongoing programme of work to collect overdue student loan debt from overseas-based borrowers
- increased communications and education activities.


## Loans fully repaid ${ }^{8}$

In the year to June 2014, 39,018 borrowers repaid their loans in full. Nearly 450,000 borrowers have repaid their loans since the scheme began, and Inland Revenue has collected $\$ 10,271$ million in repayments.
Figure 20 shows the number of loans repaid over the last 10 years. The increase in repayments from 2008 reflects more recent policy and administration changes such as better management of collections by Inland Revenue leading to better compliance.

The high volume of loans paid in full for 2013 was due to increased repayments in the final year of the voluntary repayment bonus and increasing repayments through PAYE.

Figure 20 Number of loans fully repaid at 30 June


Source: Inland Revenue administration data.
Note: Historical data can be changed because loans can be booked to previous tax years when they are repaid.

## Write-off due to death or bankruptcy

The Ioan balances of borrowers who die or who are declared bankrupt are written off. In the year to 30 June 2015, \$16 million was written off due to bankruptcy and $\$ 19$ million due to the death of the borrower. Administrative and legal processes associated with bankruptcy and the notification of a death mean that there is often a delay before write-offs are made in Inland Revenue's administrative system. The large increase in writeoffs for death in 2015 is partly due to process improvements to reduce these delays.

Table 12 Write-offs due to bankruptcy or death

| Write-offs | $2012 / 13$ | 2013/14 | 2014/15 |
| :--- | ---: | :---: | :---: |
| Bankrupt | \$ million |  |  |
|  | $\$ 9$ | $\$ 15$ | $\$ 16$ |
|  | $\$ 13$ | $\$ 9$ | $\$ 19$ |
| Bankrupt | Number of cases |  |  |
|  | 422 | 685 | 544 |
|  |  | 937 | 720 |

Source: Inland Revenue administration data.
The long-term trend in the rate of write-offs is shown in Figures 21 and 22. Although there is considerable variability from year to year, we can draw some general conclusions about the trend over time.

Figure 21 shows data for the last 10 years of the number of bankruptcy and death cases per 100,000 student loan borrowers. In 2006, at the start of the period, there were 172 bankruptcy cases per 100,000 borrowers and in 2015 this declined to 75 cases. The trend in write-off due to deaths was the opposite-in 2006 there were 85 per 100,000 borrowers, but in 2015 this reached 172.

Figure 21 Write-off cases due to bankruptcy or death per 100,000 borrowers


Source: Inland Revenue administration data
The value of write-offs is shown in Figure 22 and indicates the same trend as the number of cases In 2006, at the start of the period, $\$ 1,257$ was written off due to bankruptcy per $\$ 1$ million of nominal balances and in 2015 this declined to $\$ 1,078$. The trend in the write-off due to death follows the same trend as in Figure 21, with the write-offs per $\$ 1$ million of nominal balance of $\$ 502$ in 2006, rising to $\$ 1,281$ in 2015 .

Figure 22 Value of write-offs due to bankruptcy or death per $\$ 1$ million of nominal balance


Source: Inland Revenue administration data.
Bankruptcies were high in 2008 and 2010. This is probably due to the financial difficulty experienced at the time of the world financial crisis and the recession which followed. There is less certainty about the trend in write-off due to the death of a borrower even though improvements have been made to the write-off process. The deaths are probably under-reported and less likely to have a consistent trend because relatives may not advise Inland Revenue of the borrower's death, or because the death occurred overseas and the borrower no longer has links to New Zealand.

## Overdue repayments

## Trends

Table 13 presents a summary of overdue repayments by borrowers' status as New Zealand or overseas based. In 2015 they rose by 21 percent on 2013/14, the same increase as the year before. As in the previous year, the increase was driven by defaulting overseas-based borrowers. The overdue amount owed by this group rose by 23 percent which has influenced the average amount overdue. Overdue repayments from New Zealand-based borrowers have risen by 6.9 percent ( $\$ 6.0$ million) from 2013/14.

The rise in the overdue amount owed by overseasbased borrowers reflects the transition out of the old three year repayment holiday policy. Significant numbers of borrowers become non-compliant at the end of their three year repayment holiday, and with the change of the policy to a one year opt-in holiday, this non-compliant group is not offset by new borrowers starting a three year holiday. 2014/15 is the last year such a large cohort of borrowers will become non-compliant in this way as at the end of the year the last of the three-year payment holidays are completed.

Table 13 Overdue student Ioan repayments at 30 June

| Overdue repayments | 2013 | 2014 | 2015 | \% Change |
| :---: | :---: | :---: | :---: | :---: |
| Borrowers based: | Overdue amount \$ millions |  |  |  |
| - in New Zealand | \$100.8 | \$86.1 | \$92.1 | 6.9\% |
| - overseas | \$535.1 | \$683.3 | \$840.9 | 23.1\% |
| Total | \$635.9 | \$769.4 | \$933.0 | 21.3\% |
|  | Number of borrowers |  |  |  |
| - in New Zealand | 39,379 | 28,484 | 28,296 | -0.7\% |
| - overseas | 64,908 | 81,260 | 80,830 | -0.5\% |
| Total | 104,287 | 109,744 | 109,126 | -0.6\% |
| Borrowers based: | Average amount outstanding \$ |  |  |  |
| - in New Zealand | \$2,559.7 | \$3,024.5 | \$3,255.8 | 7.6\% |
| - overseas | \$8,244.0 | \$8,408.4 | \$10,403.5 | 23.7\% |
| All borrowers | \$6,097.6 | \$7,011.0 | \$8,550.1 | 22.0\% |

Source: Inland Revenue administration data.
Table 14 shows the age of overdue repayments for the last three years. Though the proportion of overdue payments over two years old has stayed fairly similar since last year, the proportion over five years old has increased, reflecting the continuing non-compliance of overseas-based borrowers.

Table 14 Age of overdue repayments at 30 June

| Age of <br> overdue <br> repayments | 2013 |  | 2014 |  | 2015 |  |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| \$-1 month | 9.4 | $1.5 \%$ | 9.3 | $1.2 \%$ | 8.7 | $0.9 \%$ |
| 2-3 months | 113.7 | $17.9 \%$ | 146.5 | $19.0 \%$ | 168.6 | $18.1 \%$ |
| 4-6 months | 8.2 | $1.3 \%$ | 5.2 | $0.7 \%$ | 6.8 | $0.7 \%$ |
| 7-12 months | 9.4 | $1.5 \%$ | 8.8 | $1.1 \%$ | 13.1 | $1.4 \%$ |
| 1-2 years | 98.9 | $15.6 \%$ | 113.1 | $14.7 \%$ | 144.3 | $15.5 \%$ |
| 2-5 years | 268.1 | $42.2 \%$ | 272.6 | $35.4 \%$ | 299.4 | $32.1 \%$ |
| >5 years | 128.2 | $20.2 \%$ | 214.0 | $27.8 \%$ | 292.2 | $31.3 \%$ |
| Total | 635.9 | $100.0 \%$ | 769.4 | $100.0 \%$ | 933.0 | $100.0 \%$ |

Source: Inland Revenue administration data.

## Improving repayment compliance

Inland Revenue continued its programme of work to collect overdue student loan repayments owed by overseas-based student loan defaulters.

One of the keys to increasing compliance of overseas-based borrowers is having up-to-date address details to keep them informed of their obligations, and to follow up on their arrears. While borrowers must keep their contact details up to date many do not do so. Inland Revenue uses private sector agencies to track and trace overseas-based borrowers. Its information-sharing agreements with other government agencies also enable it to obtain information from New Zealand Customs when borrowers arrive in the country and from the Department of Internal Affairs when student loan borrowers apply for their New Zealand passport. Since starting this work on overseas-based student Ioan defaulters in 2010, Inland Revenue has collected an additional $\$ 202$ million in repayments as at 30 June 2015, which it expected would not have been received if these measures were not in place. The return on investment for this is $\$ 14.80: \$ 1$, against a target of $\$ 5.20$ : $\$ 1$.

Student loan borrowers who are significantly behind on their overseas-based repayment obligations and continue to ignore their repayment obligationdespite previous contacts from Inland Revenuemay have an arrest warrant issued, stopping them from leaving New Zealand until they resolve their arrears. At the time of preparing this report no actual arrests had been made. Serious defaulters are first contacted to discuss their arrears and have time to make payments before the arrest sanction is imposed. If these negotiations are unsuccessful Inland Revenue will consider whether they warrant monitoring for the arrest sanction.

The Commissioner of Inland Revenue and the Australian Commissioner of Taxation signed an Arrangement in March 2015 to share information on New Zealand student Ioan borrowers. Once legislation is in place in both New Zealand and Australia, this arrangement will allow for the exchange of contact details of New Zealand borrowers in Australia. It is expected that this sharing could start in the middle of 2016. In the future the Australian Taxation Office may be able to request similar information from Inland Revenue.

These initiatives are expected to help improve overseas-based borrowers compliance over time. Some of these initiatives are passive, such as New Zealand Customs and the passport match, as it does rely on borrowers entering the country or making applications to renew their passports and as a source of information is slower than track and trace. Overseas-based borrowers still represent a disproportionate share of the total amount overdue. In 2015 overseas-based borrowers:

- made up 15 percent of all borrowers (2014: 15 percent)
- made up 74 percent of all borrowers with overdue payments (2014: 74 percent)
- had 90 percent of the amount overdue (2014: 89 percent).


### 3.3 Loan balances and borrower segments

This section provides an analysis of loan balances and the characteristics of the borrower population as a whole.

## Number of borrowers

At 30 June 2015 there were 728,348 student loan borrowers, compared with 721,437 last year-see Figure 23. The large increase between 2011 and 2012 was due to the changes made in the way loans are administered when the Student Loan Scheme Act 2011 took effect. ${ }^{9}$ The flat trend in the growth of borrower numbers since then was due to the combined effect of the:

- slowdown in new entrants to the scheme since the peak in 2010, when there were 63,535, compared with 49,038 in 2014
- increase in borrowers who repaid in full, peaking at 42,000 in 2013 when the voluntary repayment bonus ended.

Figure 23 Number of borrowers at 30 June


Source: Inland Revenue administration data.

## Nominal value of loan balances

The nominal value of all loans was $\$ 14.8$ billion at 30 June 2015. This is an increase of $\$ 602$ million, or 4.2 percent, over the year, and a slightly smaller increase than the previous year. The nominal value includes all borrower obligations-the loan principal outstanding, interest and late payment interest.

Over the year, the total loan balances increased due to:

- lending made by StudyLink, including establishment fees (see Section 3.1)
- interest applied to loans held by overseas-based borrowers
- late payment interest
- administration fees.
and was reduced by:
- payments received from borrowers (see Section 3.2)
- loans written off due to death or bankruptcy, or small balance write-offs.

The nominal value is the basis for other calculations such as the carrying value and average and median balances. For details of the valuation of the portfolio see Chapter 4 and the financial statements for the scheme in Chapter 5.

The value of total nominal balances since 2006 is shown in Figure 24.

Figure 24 Aggregate nominal balances of student loans at 30 June


Source: Inland Revenue and Ministry of Social Development to 2011; from 2012 Inland Revenue's consolidated data base

As the number of participants in the scheme increases and loans remain outstanding, the nominal balance continues to grow. The increase in the nominal balance has slowed in the last two years as the growth in remaining participants has slowed and repayments have increased.

Figure 25 shows the average and median values since 2006. The range of loan balances is shown in Table 15

Figure 25 Average and median Ioan balances at 30 June


Source: Inland Revenue administration data
Notes:

1. The data for 2012 to 2015 includes loan information transferred on a daily basis from the Ministry of Social Development to Inland Revenue. In previous years there was a time lag of one year before loan data for an academic year was transferred.
2. Data for 2011 and earlier excludes data held by the Ministry of Social Development.

[^4] system in 2012.

Table 15 Range of loan balances at 30 June 2015

| Balance range | Borrowers | $\%$ | Cumulative $\%$ |
| :--- | ---: | ---: | ---: |
| $\$ 1-1,999$ | 51,249 | $7.04 \%$ | $7.04 \%$ |
| $\$ 2,000-3,999$ | 53,036 | $7.28 \%$ | $14.32 \%$ |
| $\$ 4,000-5,999$ | 53,462 | $7.34 \%$ | $21.66 \%$ |
| $\$ 6,000-7,999$ | 61,449 | $8.44 \%$ | $30.09 \%$ |
| $\$ 8,000-9,999$ | 51,462 | $7.07 \%$ | $37.16 \%$ |
| $\$ 10,000-14,999$ | 103,921 | $14.27 \%$ | $51.43 \%$ |
| $\$ 15,000-19,999$ | 77,890 | $10.69 \%$ | $62.12 \%$ |
| $\$ 20,000-24,999$ | 64,331 | $8.83 \%$ | $70.96 \%$ |
| $\$ 25,000-29,999$ | 49,166 | $6.75 \%$ | $77.71 \%$ |
| $\$ 30,000-34,999$ | 37,255 | $5.11 \%$ | $82.82 \%$ |
| $\$ 35,000-39,999$ | 30,335 | $4.16 \%$ | $86.99 \%$ |
| $\$ 40,000-44,999$ | 22,439 | $3.08 \%$ | $90.07 \%$ |
| $\$ 45,000-49,999$ | 16,832 | $2.31 \%$ | $92.38 \%$ |
| $\$ 50,000-54,999$ | 13,368 | $1.84 \%$ | $94.21 \%$ |
| $\$ 55,000-59,999$ | 9,720 | $1.33 \%$ | $95.55 \%$ |
| $\$ 60,000-79,999$ | 19,602 | $2.69 \%$ | $98.24 \%$ |
| $\$ 80,000-99,999$ | 7,096 | $0.97 \%$ | $99.21 \%$ |
| $\$ 100,000-119,999$ | 3,005 | $0.41 \%$ | $99.63 \%$ |
| $\$ 120,000-139,999$ | 1,394 | $0.19 \%$ | $99.82 \%$ |
| $>\$ 139,999$ | 1,336 | $0.18 \%$ | $100.00 \%$ |
| Total | 728,348 | $100.00 \%$ |  |

Source: Inland Revenue administration data.
Figure 26 Borrowers at 30 June 2015 by age group


Source: Inland Revenue administration data
Note: The graph gives data by single year of age from age 19 to age 65. Those aged greater than 65 are consolidated to a single bar. This accounts for the apparent 'spike' in the graph.

## Summary of student loans at

 30 JuneTable 16 Borrower accounts and total nominal balances

|  | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: |
| Borrowers based: <br> - in New Zealand <br> - overseas <br> Total | Number of borrowers |  |  |
|  | 603,965 | 611,960 | 617,754 |
|  | 107,003 | 109,477 | 110,594 |
|  | 710,968 | 721,437 | 728,354 |
| Borrowers based: | Nominal balances \$ million |  |  |
| - in New Zealand | \$10,678 | \$11,199 | \$11,680 |
| - overseas | \$2,884 | \$3,036 | \$3,157 |
| Total | \$13,562 | \$14,235 | \$14,837 |
| Source: Inland Revenue administration data. |  |  |  |
| Table 17 Average and median value of loans |  |  |  |
|  | 2013 | 2014 | 2015 |
| All borrowers | Average loan |  |  |
|  | \$19,076 | \$19,731 | \$20,371 |
| All borrowers | Median loan |  |  |
|  | \$13,307 | \$13,882 | \$14,421 |
| Borrowers based: |  |  |  |
| - in New Zealand | \$12,440 | \$13,000 | \$13,538 |
| - overseas | \$19,370 | \$19,820 | \$20,454 |

Source: Inland Revenue administration data.

## Borrower segments

This section provides an analysis of the status of scheme participants by activity segments and the links to scheme aggregates. The purpose of the analysis is to provide insight into how the relative size of the activity segments is related to loan parameters and financial data, and to highlight any disproportionate relationships (see Table 18).

Table 18 Summary of borrower segments at 30 June 2015

|  | Number of Borrowers ('000) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | NZB | $\%$ | OBB | $\%$ | Total | $\%$ |  |
| Borrowing | 110.4 | $17.9 \%$ | - | - | 110.4 | $15.2 \%$ |  |
| Borrowing and <br> repaying | 88.3 | $14.3 \%$ | - | - | 88.3 | $12.1 \%$ |  |
| Repaying | 253.2 | $41.0 \%$ | 41.6 | $37.6 \%$ | 294.7 | $40.5 \%$ |  |
| Inactive | 166.0 | $26.9 \%$ | 69.0 | $62.4 \%$ | 235.0 | $32.3 \%$ |  |
| Total | 617.8 | $100.0 \%$ | 110.6 | $100.0 \%$ | 728.3 | $100.0 \%$ |  |


|  | Nominal balances (\$ million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NZB | \% | OBB | \% | Total | \% |
| Borrowing | \$2,258 | 19.3\% | - |  | \$2,258 | 15.2\% |
| Borrowing and repaying | \$2,421 | 20.7\% | - | - | \$2,421 | 16.3\% |
| Repaying | \$4,503 | 38.6\% | \$1,117 | 35.4\% | \$5,620 | 37.9\% |
| Inactive | \$2,498 | 21.4\% | \$2,040 | 64.6\% | \$4,538 | 30.6\% |
| Total | \$11,680 | 100.0\% | \$3,157 | 100.0\% | \$14,837 | 100.0\% |

Source: Inland Revenue administration data
NZB $=$ New Zealand-based borrowers
OBB = Overseas-based borrowers
Note: data has been rounded and some column totals are affected.
The analysis is focused on the following activity segments:

- active borrowers-the group described in Chapter 3.1 who are currently borrowing from the scheme.
- those both borrowing and repaying-the group overlapping active borrowers and active repayers; they are borrowing, but their income is above the threshold and they are repaying previous loans, or making voluntary repayments.
- active repayers-the largest borrower segment, which is described in Chapter 3.2, consisting of borrowers who have completed their study and are repaying their loans.
- inactive scheme participants:
- New Zealand-based borrowers with a positive outstanding loan balance, but not having any interaction with the scheme in the 2014/15 year; most of these borrowers have an income below the repayment threshold and some have overdue repayments (see Table 13).
- Overseas-based borrowers with a positive outstanding loan balance-their repayments are overdue or have a repayment holiday (Chapter 3.2 provides more details on this group).

The total number of borrowers in each segment generally equates to the overall share of the segment in total nominal balance. The important observation from this analysis however, is the size of the group both borrowing and repaying. Of the 199,000 active borrowers, 44.3 percent are also repaying. The average nominal loan balance of this group is $\$ 27,400$, compared with $\$ 23,600$ for the borrowing group overall. This is a reflection of the longer period that they have been borrowingthey are most likely have completed a first qualification, have an income over the threshold and are now studying part time.

Compared with the previous year, there has been a 3.0 percent increase in the borrowing and repaying group, but the group only borrowing declined by 6.0 percent. This is consistent with the overall decline in enrolments and loan uptake since 2010 (see Chapters 1.1 and 3.1).
About two-thirds of overseas-based borrowers are inactive, mainly because their payments are overdue (see Table 13). Although a disproportionate number of overseas-based borrowers are inactive, their number has declined by 3.0 percent in 2015. As observed earlier, payments from overseasbased borrowers increased significantly in 2015 (see Table 11).

### 3.4 Repayment times

This section looks at the repayment phase of loans. It gives information on how long it has taken and how long we expect it will take borrowers to repay their loan in full. This is a key measure of the affordability of tertiary education for students. It is also a critical part of the calculation of the value of the loan portfolio

Repayment times are influenced by factors such as:

- government policy on tertiary education and on loans in particular
- the strength of the labour market
- the type of study undertaken
- whether a borrower stays in New Zealand or spends long periods overseas
- the size of loan on leaving study.

Observations of the time taken for former students to repay are made from the Integrated Data Infrastructure. The Student Loans Integrated Model is used for projections of repayment times. Although there are always limitations on the power of models to predict future behaviour, this model has proved reliable in its forecasting to date.

## Forecast repayment times

This section looks at the expected repayment times of recent tertiary leavers-those who last studied in 2011. Forecast repayment times are calculated using actual repayment data to the end of April 2014.
Projections after then are from the Ministry of Education's Student Loan Integrated Model.

Table 19 Forecast repayment times for borrowers who left study in 2011

|  | \% of leavers | 25th percentile | Median | 75th percentile |
| :---: | :---: | :---: | :---: | :---: |
| All | 100.0\% | 3.6 | 7.0 | 12.1 |
| By gender |  |  |  |  |
| Male | 42.0\% | 3.3 | 6.7 | 11.8 |
| Female | 58.0\% | 3.8 | 7.2 | 12.3 |
| By level of study |  |  |  |  |
| Certificates | - | 3.6 | 6.9 | 12.6 |
| Diplomas | - | 3.7 | 7.2 | 12.5 |
| Bachelors | - | 3.8 | 7.1 | 11.6 |
| PostGrad | - | 2.0 | 6.7 | 13.8 |
| By ethnicity |  |  |  |  |
| European | - | 3.3 | 6.6 | 11.0 |
| Mäori | - | 4.4 | 8.0 | 13.3 |
| Pasifika | - | 4.3 | 7.8 | 13.2 |
| Asian | - | 3.4 | 7.3 | 14.7 |
| By leaving balance (\$000) |  |  |  |  |
| <5 | 18.4\% | 0.9 | 2.5 | 5.2 |
| 5-10 | 20.0\% | 3.0 | 5.4 | 8.9 |
| 10-15 | 14.3\% | 4.2 | 7.0 | 11.1 |
| 15-20 | 10.8\% | 4.7 | 7.8 | 12.8 |
| 20-25 | 8.6\% | 5.4 | 8.6 | 14.0 |
| 25-30 | 6.7\% | 5.9 | 9.0 | 14.3 |
| 30-35 | 5.0\% | 6.6 | 9.4 | 15.1 |
| 35-40 | 4.2\% | 7.2 | 9.9 | 15.3 |
| 40-45 | 2.9\% | 7.7 | 10.5 | 16.5 |
| 45-50 | 2.5\% | 8.3 | 11.1 | 16.7 |
| 50-55 | 1.8\% | 9.0 | 11.7 | 17.6 |
| 55-60 | 1.2\% | 9.4 | 12.4 | 19.7 |
| 60-65 | 0.9\% | 9.7 | 12.1 | 19.3 |
| 65-70 | 0.6\% | 10.2 | 13.3 | 19.5 |
| >70 | 2.0\% | 11.4 | 16.2 | 26.8 |
| By location |  |  |  |  |
| Always NZ based | 76.7\% | 3.0 | 5.8 | 9.3 |
| Not always NZ based | 23.3\% | 8.8 | 15.2 | - |

Source: Ministry of Education, Student Loan Integrated Model 2014.

## Notes:

1. Repayment times are in years
2. A dash indicates that the repayment projection is not seen to occur in the model within 30 years.
3. Repayment times have not been updated since the last report because of data analysis issues. Repayment times will be updated and published in 2016.

Overall the median repayment time (the time taken for half of the borrowers to have fully repaid) is 7.0 years. Female borrowers make up 58 percent of the leavers and have a forecast median repayment time of 7.2 years, compared to 6.7 years for males. This six month gender difference is also seen in the 25th percentile and 75th percentile of repayment times.

By level of study we see similar repayment times for Certificate and Diploma levels. Bachelor level leavers are comparable with these lower levels of study, except in the 75th percentile where the time taken for three-quarters to fully repay is 11.6 years-around one year faster than those who studied at the lower levels. Postgraduate level repayment times stand out, with the majority repaying faster, but with some taking longer than other groups to fully repay.

The European ethnic group shows shorter forecast repayment times compared with other ethnic groups, with a median repayment time of 6.6 years. Māori borrowers have the longest median repayment time, at 8.0 years, and are also longest at the 25th percentile. Pasifika borrowers are forecast to have slightly faster repayment times than Māori, with a median of 7.8 years. The median repayment time among Asian borrowers is 7.3 years; however, the 75th percentile is 14.7 years-longer than for other ethnicities.

The size of the loan on leaving study has a large bearing on the time taken to repay, as may be expected. The projections show that three quarters of loans initially between $\$ 15,000$ and $\$ 20,000$ will be repaid within 12.8 years. However for loans initially between $\$ 45,000$ and $\$ 50,000$ it is projected that it will take 16.5 years for three quarters to be repaid.

Borrowers who remain in New Zealand on average repay their loan much faster than those who are not always New Zealand based. One quarter of those always New Zealand based repay within three years, while it is projected to take 8.8 years for the same proportion to repay if some time is spent overseas. The median repayment times show the same relationship -5.8 years for always New Zealand based and 15.2 years for those with some time overseas. The modelling predicts that 77 percent of leavers are expected to be always New Zealand based while they still have a loan.

## CHAPTER 4

## Costs of the scheme

## CHAPTER 4 Costs of the scheme

This chapter explains the way the loan scheme is valued in the government's accounts. It also describes the costs of the scheme and presents forecasts of future costs. Finally, it shows the estimated costs incurred by the agencies that administer the scheme.

## Cost and valuation measures

Initial write-down on new borrowing: the estimated long-term economic cost of lending. In the 2014/15 year, borrowers took up \$1,529 million in loans and $\$ 602$ million was written off, an average of 39.35 cents for each dollar lent.

Impairment: occurs when the scheme is re-valued because of changes in factors such as interest rates or the estimated future earnings of borrowers. In 2014/15, the impairment charge was $\$ 269$ million.

Cash cost: looks at the scheme in terms of the cash out, less the cash received in repayments. In the 2014/15 year, $\$ 1,518$ million was lent out and borrowers repaid $\$ 1,114$ million, leaving a net of $\$ 404$ million cash out. The amount of net cash out has been falling since 2012/13.

## Accounting measures of value:

Carrying value: the value of the loan asset in the government's accounts. At 30 June 2015, this was $\$ 8,864$ million.

Fair value: the value at which the asset could be exchanged in an arm-length transaction. At 30 June 2015, this was $\$ 9,267$ million.

Nominal value: the face value of all amounts outstanding. At 30 June 2015 this was \$14,837 million.

## Administration costs

The estimated cost of running the scheme in 2014/15, was $\$ 48.7$ million. This was 1.85 percent of the turnover (borrowing plus repayments) of the scheme.


### 4.1 Cost of lending

The key measure of the loan scheme's cost is the initial write-down on new borrowing that estimates the long-term economic cost of lending (ie the government's implicit subsidy) and enables full recognition of cost at the time funds are lent to the borrower. The write-down value is the difference between the estimated value of future repayments from students and the original value of the amount lent. It is recognised as a cost in the year of lending. This 'full cost' is an estimate limited by the accuracy of the projected repayments. Changes to the projections will change the value of the scheme. The amount of this change contributes to the impairment, which is discussed later.

The accounts in Chapter 5 show that in 2014/15 lending was $\$ 1,529$ million ${ }^{10}$ and an initial write-down on new borrowing expense of $\$ 602$ million was directly associated with the lending. This means that our best estimate at the time of the life-time cost of this lending was $\$ 602$ million-or on average 39.35 cents of each dollar lent.

There are several reasons why the cost of lending is large:

- There is no interest on the loan for New Zealandbased borrowers, which means that the longer it takes to repay, the less value the government receives from the repayments.
- Borrowers in New Zealand are only required to make repayments when income exceeds the threshold level (currently $\$ 367$ per week), so time spent out of the workforce (for example while undertaking full-time study) delays repayments.
- Loans are written off by the government when a borrower dies or becomes bankrupt.
- Borrowers who are overseas are required to make repayments based on the size of their loan. A large proportion of borrowers overseas do not meet their repayment obligation, and while interest is being charged on these loans, and while most are expected to commence repaying again, a number are expected not to fully repay their loan.

Figure 27 Lending and initial write-down on this lending, actual and forecast


Source: Ministry of Education

## Definition: initial write-down on new borrowing ${ }^{11}$

When a student draws money from the Student Loan Scheme, part of the money is treated as an operating expense and part as capital. The capital part is the value of repayments that are expected from this lending. The operating expense is the balance of the lending and is known as the 'initial fair value write-down'. The initial fair value write-down is normally treated as the cost of lending.

[^5]11 The initial write-down is called 'fair value write-down on new borrowings' in the financial schedules (Chapter 5). In this chapter we use the term 'initial write-down' to avoid confusion with 'fair value', which is a different concept.

### 4.2 Impairment

The student loan asset is valued every year. ${ }^{12}$ If this value is lower than the current carrying value, the carrying value is reduced or 'written down' through what is known as an impairment or reduction in value.

Impairment is treated in the government's accounts as an expense. The valuation can also result in an increase in value-called a negative impairment. A negative impairment is shown in the accounts as a gain. The impairment occurs when the scheme is re-valued, and the new valuation differs from what is recorded in the carrying value.
At 30 June 2015, before the valuation, the carrying value of student loans was $\$ 9,133$ million. The valuation this year assessed the value of all loans at this date to be $\$ 269$ million lower, at $\$ 8,864$ million.

Factors that contributed to the impairment of the student loan portfolio during the 2014/15 financial year include:

- Macroeconomic effects: a lower forecast of earnings growth and lower forecasts of interest rates for those overseas reduced the valuation by $\$ 117$ million.
- Updated modelling decreased the value by $\$ 262$ million-caused mainly by changes in the modelling of low income earners.
- Experience variation: this represents the difference between what had been predicted for 2013/14 at last year's valuation and the actual results. This amounted to a reduction in value of $\$ 40$ million.

Adjustments for improvements added $\$ 150$ million to the valuation. This was done to reflect expected improvements in job markets and overseas repayment compliance-factors that, because of timing, had not been assimilated in model development.
Together these factors amount to a decrease of $\$ 269$ million. Figure 28 shows the impairment over the last 10 years.

Figure 28 The loan scheme's impairment and the ratio of carrying value to nominal value at 30 June


Source: Ministry of Education
Figure 28 shows how the impairment has moved over time. It also shows the ratio of the carrying value to the nominal value-a key measure of the financial health of the loan scheme asset. The movements over time reflect changes in loan policy as well as the macroeconomic factors (such as interest rate changes) that affect the value of the scheme. The financial health of the scheme improved between 2010 and 2012, but there was a downturn between 2013 and 2015 as a consequence of an adverse shift in the valuation in those years.

[^6]
### 4.3 Cash cost

An alternative measure of the cost of the scheme is the annual net cash cost-the excess of lending in the year over the repayment receipts. Figure 29 shows lending and repayments in fiscal years from 2005/06 to 2014/15 together with four years of forecast. ${ }^{13}$

Figure 29 Lending and repayments, actual and forecast


Source: Ministry of Education
We see that in 2005/06, for every dollar the government received in repayments, it lent $\$ 2.02$ to current students. This pattern of receiving one dollar in repayments and lending a further two dollars remained fairly static from 2005/06 to 2011/12-an average of $\$ 2.07$. However, in 2012/13 the pattern was broken. In that year the government lent $\$ 1.39$ for every dollar received.
As discussed in Chapter 3.2, the sharp rise in receipts was caused by the increase in the repayment rate from 10 cents in the dollar to 12 cents in the dollar, combined with a surge of repayments associated with the removal of the voluntary repayment bonus. In 2013/14, this number increased a little to $\$ 1.46$, but in 2014/15 the ratio fell to \$1.36.

Over these last 10 years, repayments have more than doubled from $\$ 486$ million per year to $\$ 1,114$ million this year. Over the same period, lending has increased too, but at a far slower pace (from \$981 million to $\$ 1,518$ million). The excess of lending over repayments (the line in Figure 29) was $\$ 495$ million in 2005/06 and rose to a maximum of $\$ 771$ million in 2009/10. This fell gradually over the following two years and in 2012/13 fell to $\$ 416$ million. Last year it was $\$ 479$ million and this year (2014/15) was the lowest over the last ten years at $\$ 404$ million.

The forecasts suggest that the net cash out in 2015/16 will rise slightly to $\$ 422$ million, but falls over the following three years to $\$ 266$ million in 2018/19.

This fall in cash cost is partly due to the increase in the repayment rate. However, the fall in the numbers borrowing is also a driver of this result. The number of people borrowing in a year has fallen by 12 percent from a peak of 212,000 in 2010 to 186,000 in 2014. Had this not happened, the net cash out in 2014/15 would have been around $\$ 600$ million.

### 4.4 Impact on the operating balance

The net expenses of the scheme can be viewed in cash terms-lending less repayments. A different way of looking at net expenses is the operating balance. In the operating balance the initial writedown on new borrowing is offset by income known as interest unwind. Any revaluation gain or loss (the impairment discussed above) also changes the operating balance. The establishment fees charged to students every year they borrow also add to the operating balance.
Over the year ending 30 June 2015, there was interest unwind of $\$ 604$ million. Subtracting the initial write-down on new borrowing of $\$ 602$ million and the impairment of $\$ 269$ million and adding the establishment fee of $\$ 11$ million, gives the operating balance movement for the year-a net expense of \$256 million.

Figure 30 Operating balance.


Source: Ministry of Education
Note: the initial write-down in 2006 relates to the introduction of interest-free loans.

This 'cost view' treats the scheme as if it were an entity. The loan portfolio generates an accounting return through the interest unwind, which helps to offset the cost of new lending. Viewed this way, the net expense for the Crown over the last eight years has been $\$ 1,900$ million, of which $\$ 604$ million came from the last four years. The overall Ioan portfolio is growing, so we would expect this cost to decrease in future-as the interest unwind increases and the level of new lending remains relatively flat.

## Definition: interest unwind

The schedule of revenue and expenditure includes revenue from what is called an 'interest unwind'. As time moves on, loans on the balance sheet come closer to being repaid and are therefore worth more to the owner. This increase in value is called the interest unwind; in effect, this is a partial reversal, or unwinding, of the reduction in value brought about by the initial discounting process.

### 4.5 Measures of value in the accounts

## Carrying value

The carrying value is the value of the Student Loan Scheme asset as maintained in the scheme accounts. The net cash over the year plus the change in the operating balance over the year gives the movement in the carrying value.

Over the year the carrying value is:

- increased by new lending (including establishment fees applied at the time each loan is first drawn)
- decreased by the initial write-down of that new lending
- decreased by repayments that are made during the year
- increased by the 'interest unwind', which is income that accrues to the asset as future repayments become due sooner
- increased or decreased for any impairment resulting from a revaluation.

New lending over the year was $\$ 1,518$ million and repayments were $\$ 1,114$ million so the net cash paid out was $\$ 404$ million. Over the year, the nominal loan balances increased by $\$ 602$ million from $\$ 14,235$ million to $\$ 14,837$ million, and over this period the carrying value has risen by $\$ 148$ million to \$8,864 million.

The ratio of carrying value to nominal value was 61.2 percent in 2014 and has decreased to 59.7 percent this year.

## Definition: carrying value

The carrying value is the value of the Student Loan Scheme asset which is maintained in the scheme's accounts. It increases during the year as new loans are issued and decreases as repayments are made. Adjustments are made each year following an annual valuation of the asset. The 2014/15 year was the first year that the valuation has been made in accordance with the Public Benefit Entity International Public Sector Accounting Standards (PBE IPSAS) Since 1 July 2005, valuations had been made in accordance with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS).
Under PBE IPSAS, the cost to the government of new lending is recognised at the time it is lent, so that, all things being equal, there is no further cost associated with that lending. An annual, PBE IPSAS-compliant valuation is undertaken and any adverse difference between the carrying value and the result of this valuation is recorded as an expense. ${ }^{14}$

The carrying value as at 30 June 2015 was $\$ 8,864$ million (2014: $\$ 8,716$ million).

## Fair value

As part of the annual valuation, the valuers undertake a measurement of the fair value, which is disclosed in a note to the financial schedules in chapter 5. The fair value has decreased from 62.7 to 62.5 percent of the nominal value (refer to Table 21).

The outcome of the fair value calculations depends on current assessments of the level of future discount rates, as well as other factors such as policy changes and macroeconomic conditions which affect the carrying value. Last year the representative discount rate was 6.62 percent and this year it is 6.20 percent. This change has increased the fair value by $\$ 222$ million. Offsetting this are the same factors which lead to this year's impairment-in fair value terms this is $\$ 255$ million.

Figure 31 graphs three forecasts of loan repayments generated by current loans. The three lines are taken from the scheme valuations in 2013, 2014 and 2015. The lines show the expected number of cents repaid annually for each dollar currently on loan. The 2015 valuation compared with 2014 has lower repayments over the first nine years (lower by a total of 4.6 cents), with higher repayments thereafter.

Figure 31 Comparison of projected repayments


Source: Student Loans Integrated Model.
Note: Annual repayments in cents per nominal dollar of loan are shown, as used in the valuations. The tracks show the average repayment expected from each dollar on loan at valuation time for the following 25 years.

Over the 25-year horizon, repayments occurred on average after 7 years and 9 months in the 2013 valuation, 7 years and 6 months in the 2014 valuation and 7 years and 11 months in the 2015 valuation. Over these 25 years, we recover 93 percent of nominal value in the 2013 valuation, and 91 percent in the 2014 valuation and 89 percent in the 2015 valuation.

## Definition: fair value

The fair value is defined as the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.

The fair value calculation discounts expected repayments using a contemporary view of future discount rates. This differs from the carrying value calculation, which uses discount rates at the time of borrowing. ${ }^{15}$ The fair value has been reported in the accounts since 2003.

The fair value as at 30 June 2015 was $\$ 9,267$ million (2014: \$8,924 million).

## Nominal value

Figure 32 shows the trends in the nominal value of the scheme, the carrying value and the fair value over the last 11 years and four years of forecasts.

Figure 32 Nominal value, carrying value and fair value over the last 11 years and 4 years of forecasts


Source: Ministry of Education

## Definition: nominal value

The nominal value of student loans is the balance of borrowings with Inland Revenue and the Ministry of Social Development. It is the total amount owed by borrowers at a point in time, including loan principal, interest and late payment interest. The change in the value from year to year reflects changes in the amount owed by borrowers.

The nominal value as at 30 June 2015 was $\$ 14,837$ million (2014: $\$ 14,235$ million).

[^7]
### 4.6 Historical and forecast costs

From 1 January 2013, discount rates have been set according to the year of lending, so that a student who borrowed over several years would have a different discount rate for each year's borrowings. This change, from the 'borrower approach' to the 'year of lending approach', was made to increase the accuracy of the cost of lending and was agreed to by the Government and the loan scheme auditors. Previously, the discount rate used in the valuation of each borrower's loan was set according to the prevailing interest rate in the year they first borrowed. The rate was fixed until the loan was repaid, even if the person borrowed in subsequent years when interest rates had changed.

One consequence of the change is that the effective interest rate-one of the factors that contribute to the cost of lending-changes on 1 January each year. But all the other factors that contribute to the 'fair value write-down' change at balance date (30 June) when the valuation takes place. This means that we now have two rates for the cost of lending each year. One, covering July to December, uses the effective interest rate set on 1 January, plus the results of the valuation. The other, covering January to June, uses the valuation information from the previous year and the current effective interest rate.

The cost of lending between January and June 2015 was 37.43 cents for each dollar lent, down from 41.83 cents per dollar a year earlier.

Table 20 Average cost of lending a dollar, actual and forecast

| Actual |  |  |  |  |  |  |  |  |  |  |  |  | Forecast |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012 | 2013 |  | 2014 |  | 2015 |  |  | 2016 |  | 2017 |  |
| July-Jun | July-Jun | July-Jun | July-Jun | July-Jun | July-Dec | Jan-Jun | July-Dec | Jan-Jun | July-Dec | Jan-Jun | July-Dec |  | an-Jun | July-Dec | Jan-Jun | July-Dec |
| Average cost of lending in cents per dollar-as applied |  |  |  |  |  |  |  |  |  |  |  | , |  |  |  |  |
| 40.25 | 39.15 | 47.39 | 45.25 | 44.62 | 39.09 | 35.19 | 40.02 | 41.83 | 44.99 | 37.43 | 43.29 | 1 | 41.8 | 43.5 | 41.8 | 43.5 |
| Average cost of lending in cents per dollar-fiscal years |  |  |  |  |  |  |  |  |  |  |  | ! |  |  |  |  |
| 40.25 | 39.15 | 47.39 | 45.25 | 44.62 | 36.19 |  | 41.35 |  | 39.35 |  |  | 42.2 |  | 42.2 |  |  |
| Average cost of lending in cents per dollar-calendar years |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
|  |  |  |  |  |  | 36.49 |  | 42.69 |  | 38.94 |  | ! | 42.2 |  | 42.2 |  |

Source: Ministry of Education
Note: Forecasts are in italics
Table 20 shows the main financial parameters of the scheme over the last 10 years and forecasts for a further four years. Adding up figures in this table shows that over the last 10 years the scheme has:

- lent out $\$ 13,321$ million to students
- received $\$ 7,452$ million in repayments
- written down new lending over the period by $\$ 5,745$ million (and also incurred an initial writedown of $\$ 1,415$ million in 2006)
- experienced an aggregate impairment of $\$ 1,347$ million
- booked $\$ 4,934$ million in interest unwind income.

The net result of the movements over the period show that the asset was worth $\$ 6,465$ million in 2005 and is now worth $\$ 8,864$ million.

Table 21 Nominal and carrying value movements

|  | 2005/06 |  | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Notes |  |  |  |  | \$million-actual |  |  |  |  |  | \$ million-forecast |  |  |  |
| Nominal value |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening balance | 1 | 7,499 | 8,370 | 8,920 | 9,573 | 10,259 | 11,145 | 12,070 | 12,969 | 13,562 | 14,235 | 14,837 | 15,458 | 16,011 | 16,518 |
| New lending | 8 | 981 | 1,107 | 1,122 | 1,259 | 1,423 | 1,453 | 1,477 | 1,470 | 1,511 | 1,518 | 1,583 | 1,615 | 1,655 | 1,702 |
| Establishment fee | 4 | 8 | 9 | 9 | 10 | 11 | 12 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Administration fee | 5 |  |  |  |  |  |  | 20 | 21 | 22 | 22 | 23 | 23 | 24 | 24 |
| Repayment | 8 | -486 | -486 | -550 | -619 | -652 | -691 | -767 | -1,054 | -1,032 | -1,114 | -1,161 | -1,251 | -1,334 | -1,436 |
|  | 2,7, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest | 10 |  |  |  | 14 | 119 | 142 | 133 | 156 | 151 | 141 | 198 | 188 | 187 | 194 |
| Penalties | 2,10 |  |  |  | 42 | 16 | 45 | 50 | 43 | 49 | 58 |  |  |  |  |
| Voluntary Repayment Bonus |  |  |  |  | 0 | -5 | -17 | -16 | -32 | -14 | 0 |  |  |  |  |
| Death write-off | 11 | -4 | -2 | -10 | -9 | -11 | -9 | -10 | -13 | -9 | -19 | -32 | -34 | -35 | -36 |
| Bankruptcy write-off | 11 | -11 | -9 | -16 | -11 | -15 | -10 | -12 | -9 | -15 | -16 |  |  |  |  |
| Balancing item | 6 | 384 | -68 | 98 |  |  |  | 12 |  |  |  |  |  |  |  |
| Closing balance |  | 8,370 | 8,920 | 9,573 | 10,259 | 11,145 | 12,070 | 12,969 | 13,562 | 14,235 | 14,837 | 15,458 | 16,011 | 16,518 | 16,977 |
| Carrying value |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Open balance |  | 6,465 | 5,569 | 6,011 | 6,741 | 6,553 | 6,790 | 7,459 | 8,291 | 8,288 | 8,716 | 8,864 | 9,235 | 9,550 | 9,818 |
| New lending | 8 | 981 | 1,107 | 1,122 | 1,259 | 1,423 | 1,453 | 1,477 | 1,470 | 1,511 | 1,518 | 1,583 | 1,615 | 1,655 | 1,702 |
| Initial write-down on new borrowing | 9 | -328 | -488 | -487 | -532 | -728 | -713 | -702 | -536 | -629 | -602 | -672 | -686 | -703 | -723 |
| Initial write-down |  | -1,415 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishment fee |  | 8 | 9 | 9 | 10 | 11 | 12 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Repayment |  | -486 | -486 | -550 | -619 | -652 | -691 | -767 | -1,054 | -1,032 | -1,114 | -1,161 | -1,251 | -1,334 | -1,436 |
| Interest unwind |  | 358 | 451 | 406 | 473 | 463 | 484 | 526 | 590 | 579 | 604 | 610 | 627 | 640 | 650 |
| Impairment |  | -13 | -151 | 231 | -779 | -280 | 124 | 286 | -484 | -12 | -269 | 0 | 0 | 0 | 0 |
| Closing carrying value |  | 5,569 | 6,011 | 6,741 | 6,553 | 6,790 | 7,459 | 8,291 | 8,288 | 8,716 | 8,864 | 9,235 | 9,550 | 9,818 | 10,022 |
| Average cost of lending in cents per dollar (headline) |  | 31.17 | 41.15 | 40.25 | 39.15 | 47.39 | 45.25 | 44.62 | 36.19 | 41.35 | 39.35 | 42.17 | 42.22 | 42.22 | 42.22 |

Source: Ministry of Education, Ministry of Social Development and Inland Revenue

## Notes:

1. The balance at 30 June 2007 has been restated as per table 15 of the 2008 annual report to exclude accrued interest that would be subsequently written off. All other nominal balance figures are as per the accounts as published in annual reports.
2. Interest and penalty amounts are only available for the 2008/09 and later fiscal years. Prior to this, these amounts are implicit in the balancing item.
3. The no interest for New Zealand-based borrowers policy came into effect on 1 April 2006.
4. The establishment fee is the amount charged by MSD to borrowers each time he or she takes out a loan. Before 2012, this was known as the administration fee.
5. The administration fee is an annual fee added to loans on 31 March. This fee is only charged if an MSD establishment fee has not been charged in the same tax year. This was first charged in 2011/12.
6. Prior to 2008/09, the balancing item includes penalties and loan interest charged. In 2011/12, the balancing item reflects adjustments over the period.
7. The interest in 2008/09 is low because in that year $\$ 96$ million was reversed due to over-charging interest on borrower accounts in prior years.
8. In all years new lending is net of repayments made to MSD (which were mostly refunded course fees) and the repayments are those made to IRD only. In the 2011 and earlier annual reports, refunded course fees were counted both in the lending and the repayment lines.
9. From 1 April 2012, the initial write-down is applied to new borrowing net of refunded course fees. Prior to this, gross lending was written-down.
10. In the forecast period, interest and penalties are considered together.
11. In the forecast period, death write-offs and bankruptcy write-offs are considered together.

### 4.7 Cost of Crown ownership

The assets on the Crown's balance sheet, such as the Student Loan Scheme, have a cost associated with them which is the cost of capital. If the Crown did not own as many assets, for example, debt would be lower than it would otherwise be, annual interest payments would be lower and the risks associated with ownership would be reduced

Measuring the Crown's cost of capital is not straightforward. The Crown faces a direct and obvious cost of borrowing when it raises debt. This cost is almost always lower than that faced by the private sector, because sovereign borrowers normally have a higher credit rating than private companies.

The fact that the Crown has a lower cost of borrowing than the private sector leads some to conclude that the Crown is best placed to finance investment. However, the direct cost of borrowing is not the whole picture. Investments come with risks borne by taxpayers when Crown projects fail to meet expectations.

The Crown's cost of capital therefore reflects both the direct cost of borrowing and the risks associated with each of the Crown's investments.

The appropriate proxy that represents the associated capital costs of the Student Loan Scheme to the Crown is given by the discount rate of 6.20 percent, which is also the rate used to derive the fair value of the asset. This discount rate consists of the Representative Risk Free Rate ( 3.60 percent), the Risk Premium (2.07 percent), and the costs of collection and administration of the scheme ( 0.53 percent).

The proxy of the Crown's cost of holding the asset on 30 June 2015 is set out in Table 22 below.

Table 22 Government's cost of ownership of the Student Loan Scheme

| Fair value of the asset | $\$ 9,267$ million |
| :--- | ---: |
| Discount rate for the asset | $6.20 \%$ |
| Cost of capital associated with the | $\$ 575$ million for the financial year of |
| Student Loan Scheme | $2015 / 16$ |

Source: Ministry of Education

### 4.8 Agency costs

The cost of administering the loan scheme varies from year to year, depending on the number of borrowers, the number of transactions, and any system changes required for the implementation of new policies.

Table 23 Student Loan Scheme administration costs

|  | 2010/11 | $2011 / 12$ | 2012/13 | 2013/14 | 2014/15 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | \$ million |  |  |  |  |
| Ministry of Social <br> Development | 17.0 | 16.4 | 15.8 | 16.2 | 13.4 |
| Inland Revenue | 39.3 | 31.5 | 30.2 | 33.5 | 33.9 |
| Ministry of <br> Education | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 |
| Statistics New <br> Zealand | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Total | 57.8 | 49.4 | 47.6 | 51.1 | 48.7 |

Source: Ministry of Social Development, Inland Revenue, Ministry of Education and Statistics New Zealand.
Note: All amounts exclude GST.
Table 23 shows the total cost for the agencies over the last five years. The figures are a mixture of estimates and actual costs. These differ by agency, depending on how their appropriations are structured.

In addition to costs incurred by the Ministry of Social Development and Inland Revenue in managing the lending and repayment process, both the Ministry of Education and Statistics New Zealand have costs resulting from the scheme. The Ministry of Education provides policy advice to government on student support in the tertiary education sector, arranges the valuation of the scheme, and produces this report. Statistics New Zealand manages the Integrated Data Infrastructure-their costs associated with the scheme cover the collation and management of data. The costs above include those that can be directly attributed to these activities plus overhead costs where appropriate.

Borrowers contribute to the cost of administering the loan scheme through a $\$ 60$ establishment fee that is charged to the borrower's account by MSD when the loan is first made. From the 2011/12 tax year, borrowers were also charged an annual administration fee of $\$ 40$. Borrowers are not charged the administration fee if the establishment fee has been charged in the same tax year. This new policy improves value for money of student support expenditure by recovering more of the costs of administering the Student Loan Scheme.

Table 24 Estimated cost ratios

|  | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cents per dollar |  |  |  |  |  |
| Ministry of Social <br> Development <br> cost for each <br> dollar advanced | 1.17 | 1.11 | 1.07 | 1.06 | 0.88 |  |
| Inland Revenue <br> cost for each <br> dollar collected | 5.69 | 4.11 | 2.87 | 3.25 | 3.04 |  |

Source: Ministry of Social Development, Inland Revenue, Ministry of Education and Statistics New Zealand
Note: All amounts exclude GST.
Table 24 shows the administrative costs from Table 23 in light of the scale of the scheme. The cost ratios for the scheme have remained relatively stable over the last three years. The relatively high cost in 2010/11 was due to project expenditure for system improvements.

## CHAPTER 5

Financial schedules

### 5.1 Financial schedules for the year ended 30 June 2015

The financial schedules for the Student Loan Scheme comprise schedules of revenue and expenditure, assets and cash flows.
The Ministry of Social Development and Inland Revenue administer student loans on an agency basis within policy parameters set by the Ministry of Education, on behalf of the Crown.

The financial information represents extracts from the non-departmental financial schedules of Vote Revenue and Vote Social Development to provide a consolidated view of the Student Loan Scheme.

The schedule of assets shows a total asset value (carrying value) as at 30 June 2015 of $\$ 8,864$ million ( $\$ 8,716$ million at 30 June 2014).

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## 5．2 Schedule of revenue and expenditure

Table 25 Schedule of revenue and expenditure for the year ended 30 June 2015

|  | 2013／14 | 2014／15 | 2014／15 | 2014／15 | 2015／16 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Actual } \\ \$ \mathrm{~m} \end{gathered}$ | Budget <br> \＄m | Estimated Actual＊ \＄m | $\begin{gathered} \text { Actual } \\ \$ \mathrm{~m} \end{gathered}$ | Forecast \＄m |
| Revenue |  |  |  |  |  |
| Interest unwind | 579.3 | 601.0 | 596.0 | 604.2 | 605.0 |
| Establishment fees | 11.0 | 11.4 | 11.0 | 10.9 | 10.9 |
| Total revenue | 590.3 | 612.4 | 607.0 | 615.1 | 615.9 |
| Expenditure |  |  |  |  |  |
| Impairment | 12.0 | 100.0 | 253.0 | 269.0 | 100.0 |
| Fair value write－down on new borrowings | 629.5 | 668.0 | 606.0 | 601.6 | 646.0 |
| Total expenditure | 641.5 | 768.0 | 859.0 | 870.6 | 746.0 |
| Net surplus／（deficit） | （51．2） | （155．6） | （252．0） | （255．5） | （130．1） |

＊The statement of accounting policies provides explanations of these figures which are not subject to audit．
－The accompanying accounting policies and notes form part of these financial schedules．
－The figures in this schedule represent the combined total for the applicable agencies．
－For a full understanding of the Crown＇s financial position and the results of its operations for the year，refer to the Financial Statements of the Government of New Zealand for the Year Ended 30 June 2015.
－Details of the consolidated movements are shown in Note 1.

### 5.3 Schedule of assets

Table 26 Schedule of assets as at 30 June 2015

|  | 2013/14 | 2014/15 | 2014/15 | 2014/15 | 2015/16 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Actual } \\ \$ \mathrm{~m} \end{gathered}$ | $\begin{gathered} \text { Budget } \\ \$ \mathrm{~m} \end{gathered}$ | Estimated Actual" \$m | $\begin{gathered} \text { Actual } \\ \text { \$m } \end{gathered}$ | Forecast ${ }^{*}$ \$m |
| Current assets |  |  |  |  |  |
| Student loans | 1,193.0 | 1,219.0 | 1,161.0 | 1,122.0 | 1,251.0 |
| Total current assets | 1,193.0 | 1,219.0 | 1,161.0 | 1,122.0 | 1,251.0 |
| Non-current assets |  |  |  |  |  |
| Student loans | 7,522.8 | 7,805.0 | 7,717.5 | 7,742.4 | 7,919.5 |
| Total non-current assets | 7,522.8 | 7,805.0 | 7,717.5 | 7,742.4 | 7,919.5 |
| Total assets | 8,715.8 | 9,024.0 | 8,878.5 | 8,864.4 | 9,170.5 |

*The statement of accounting policies provides explanations of these figures which are not subject to audit.

- The accompanying accounting policies and notes form part of these financial schedules.
- The figures in this schedule represent the combined total for the applicable agencies.
- For a full understanding of the Crown's financial position and the results of its operations for the year, refer to the Financial Statements of the Government of New Zealand for the Year Ended 30 June 2015.
- Details of the consolidated movements are shown in Note 1.


### 5.4 Schedule of cash flows

Table 27 Schedule of cash flows for the year ended 30 June 2015

|  | 2013/14 | 2014/15 | 2014/15 | 2014/15 | 2015/16 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual \$m | Budget* \$m | Estimated Actual* \$m | Actual \$m | Forecast ${ }^{*}$ \$m |
| Cash flows from - investing activities |  |  |  |  |  |
| Repayments received | 1,031.7 | 1,158.0 | 1,114.0 | 1,113.8 | 1,161.0 |
| Refunded course fees | 90.5 | 98.6 | 98.5 | 99.0 | 97.3 |
| Cash disbursed for: |  |  |  |  |  |
| New borrowings | $(1,601.0)$ | $(1,684.4)$ | $(1,672.2)$ | $(1,616.9)$ | $(1,680.5)$ |
| Net cash outflow from investing activities | (478.8) | (427.8) | (459.7) | (404.1) | (422.2) |
| Net student loan cash outflow | (478.8) | (427.8) | (459.7) | (404.1) | (422.2) |

*The statement of accounting policies provides explanations of these figures which are not subject to audit.

- The accompanying accounting policies and notes form part of these financial schedules.
- The figures in this schedule represent the combined total for the applicable agencies.
- For a full understanding of the Crown's financial position and the results of its operations for the year, refer to the Financial Statements of the Government of New Zealand for the Year Ended 30 June 2015.
- Details of the consolidated movements are shown in Note 1.


### 5.5 Statement of accounting policies

These financial schedules are for the year ended 30 June 2015 and include forecast financial schedules for the year ended 30 June 2016. They have been combined to provide a single view of actual and forecast information.

References to the financial schedules incorporate the forecast financial schedules, unless otherwise stated.

## Reporting entity

The Student Loan Scheme is a Crown activity which is reported as part of the consolidated Financial Statements of the Government. The scheme has the elements of revenue, expenditure, assets and cash flows within the Financial Statements of the Government of New Zealand.

The financial schedules have been prepared in accordance with the requirements of the Public Finance Act 1989, which includes the requirement to comply with New Zealand generally accepted accounting practice (NZ GAAP) as defined in the Financial Reporting Act 2013, and Treasury Instructions.

The financial schedules, including the comparatives, have been prepared in accordance with Tier 1 Public Benefit Entity International Public Sector Accounting Standards (PBE IPSAS). Previously published financial schedules have been prepared in accordance with NZ equivalents to International Financial Reporting Standards as appropriate for public benefit entities (NZ IFRS (PBE)). The impact of moving from NZ IFRS (PBE) to the new PBE accounting standards was not significant. This is due to a strong degree of convergence between the two suites of standards.

The financial schedules are presented in New Zealand dollars rounded to the nearest hundred thousand.

## Statutory authority

The scheme is administered jointly by the Ministry of Education, Inland Revenue and the Ministry of Social Development, under the Student Loan Scheme Act 2011. Also relevant to the administration of the scheme is the Education Act 1989.

## Budget and forecast figures

The budget figures for 2014/15 are those included in The Estimates of Appropriations for the Year Ending 30 June 2015.

The estimated actual figures for 2014/15 and the forecast figures for 2015/16 are those included in The Estimates of Appropriations for the Year Ending 30 June 2016. The estimated actual figures represent forecasts submitted to the Treasury based on all Government decisions and assumptions as at 28 April 2015.

The budget, estimated actual and forecast figures have been prepared in accordance with NZ GAAP, using accounting policies that are consistent with those adopted in preparing these financial schedules.

The figures combine budgets and forecasts for Vote Revenue and Vote Social Development, as applicable.

## Forecast financial schedules

The forecast financial schedules have been prepared in accordance with the Public Finance Act 1989. The purpose of the forecast financial schedules is to facilitate Parliament's consideration of appropriations for, and planned performance of, the scheme. These forecasts may not be appropriate for other purposes.

The forecast financial schedules have been prepared in accordance with the accounting policies detailed above. Additional accounting policies relating to the forecasts are set out below.

The forecast financial schedules comply with New Zealand GAAP and have been prepared in accordance with PBE IPSAS 42 Prospective Financial Statements.

## Forecast policies

The forecasts have been compiled on the basis of existing government policies and ministerial expectations at the time the schedules were finalised and reflect all government decisions and circumstances as at 28 April 2015.

The key assumption in the preparation of the forecasts is that the carrying value of student loans is based on a valuation model adapted to reflect current student loans policy. As such, the carrying value over the forecast period is sensitive to changes in a number of underlying assumptions, including future income levels, repayment behaviour and macroeconomic factors such as inflation and discount rates used to determine the effective interest rate for new borrowers. Any change in these assumptions would affect the present fiscal forecast.

For other key fiscal forecasts assumptions, refer to the Budget Economic and Fiscal Update 2015.

## Variations to forecast

The actual financial results for the forecast period covered are likely to vary from the information presented in these forecasts. Factors that may lead to a material difference between information in these forecast financial schedules and the actual reported results include:

- changes to the budget through initiatives or legislation approved by Cabinet
- macroeconomic factors affecting capital lending, borrower incomes, borrower repayments, inflation, discount rates and interest rates.

Any changes to budgets during 2015-16 will be incorporated into The Supplementary Estimates of Appropriations for the Year Ending 30 June 2016.

## Financial instruments

Student loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are recognised initially at fair value plus transaction costs and subsequently measured at amortised cost using the effective interest rate method and adjusted for any impairment movements. Fair value on initial recognition is determined by projecting forward the expected repayments required under the scheme and discounting them back at an appropriate discount rate. The difference between the amount lent and the fair value is expensed on initial recognition.

The subsequent measurement at amortised cost is determined using the effective interest rate calculated at initial recognition.

The effective interest rate discounts estimated future cash flows through the expected life of the loan to the net carrying amount of the loan, excluding future credit losses. Interest is recognised on the loan evenly in proportion to the amount outstanding over the period to repayment.

Allowances for impairment are recognised when there is objective evidence that the Ioan is impaired. Impairment movements are recognised if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the loan, and that the event (or events) has an impact on the estimated future cash flows of the student loan carrying value that can be reliably measured.

The measurement of impaired value can result in an increase or decrease to the carrying value of the student loan debt.

## Interest

Interest is calculated on the nominal student Ioan account balances on a daily basis at a rate determined by the government and was 5.5 percent per annum in the period 1 April 2014 to 31 March 2015. Interest is charged to New Zealand-based borrowers and overseas-based borrowers; however, there is a concurrent write-off for New Zealandbased borrowers under the interest-free policy.

## Credit risk

Credit risk is the risk that borrowers will default on their obligation to repay their loans or die before their loan is repaid, causing the scheme to incur a loss.

The Student Loan Scheme policy does not require borrowers to provide any collateral or security to support advances made. As the total sum advanced is widely dispersed over a large number of borrowers, the Student Loan Scheme does not have any material individual concentrations of credit risk.

The credit risk is reduced by the collection of compulsory repayments from New Zealand-based borrowers through the tax system.

## Interest rate risk

Interest rate risk is the risk that the value of financial instruments will fluctuate due to changes in interest rates. Changes could impact on the Government's return on loans advanced. The interest rate and the interest write-off provisions attached to student loans are set by the Government.

## Changes in accounting policies

The adoption of the new PBE accounting standards has had no impact on the presentation of the financial schedules as student loan accounting policies applicable to the preparation of these financial schedules are the same under both sets of standards. The new accounting standards have been applied on a basis consistent with the previous year.

## Comparatives

When presentation or classification of items in the financial schedules is amended or accounting policies are changed, comparative figures have been restated to ensure consistency with the current period, unless it is impracticable to do so.

### 5.6 Notes to the financial schedules

## Note 1: Consolidated movements schedule

Table 28 Consolidated movements schedule for the year ended 30 June 2015

|  | 2013/14 | 2014/15 | 2014/15 | 2014/15 |
| :---: | :---: | :---: | :---: | :---: |
|  | Consolidated Actual \$m | Consolidated Actual \$m | Inland Revenue \$m | Ministry of Social Development \$m |
| Opening nominal balance | 13,562.3 | 14,235.0 | 14,235.0 | 0.0 |
| New borrowings | 1,601.0 | 1,616.9 | 0.0 | 1,616.9 |
| Borrowings transferred | 0.0 | 0.0 | 1,528.8 | $(1,528.8)$ |
| Repayments | $(1,031.7)$ | $(1,113.8)$ | $(1,113.8)$ | 0.0 |
| Refunded course fees | (90.5) | (99.0) | 0.0 | (99.0) |
| Interest | 150.9 | 141.4 | 141.4 | 0.0 |
| Administration and establishment fees | 32.8 | 33.3 | 22.4 | 10.9 |
| Penalties | 48.9 | 58.4 | 58.4 | 0.0 |
| Deaths and bankruptcies | (24.5) | (34.9) | (34.9) | 0.0 |
| Voluntary repayment bonus | (14.2) | (0.3) | (0.3) | 0.0 |
| Closing nominal balance | 14,235.0 | 14,837.0 | 14,837.0 | 0.0 |
| Adjustment due to initial fair value recognition and impairment | (5,519.2) | $(5,972.6)$ | $(5,972.6)$ | 0.0 |
| Total carrying value | 8,715.8 | 8,864.4 | 8,864.4 | 0.0 |
| Opening carrying value | 8,288.2 | 8,715.8 | 8,715.8 | 0.0 |
| Repayments | $(1,031.7)$ | $(1,113.8)$ | $(1,113.8)$ | 0.0 |
| Refunded course fees | (90.5) | (99.0) | 0.0 | (99.0) |
| Establishment fees | 11.0 | 10.9 | 0.0 | 10.9 |
| New borrowings | 1,601.0 | 1,616.9 | 0.0 | 1,616.9 |
| Fair value write-down on new borrowings | (629.5) | (601.6) | (601.6) | 0.0 |
| Borrowings transferred | 0.0 | 0.0 | 1,528.8 | $(1,528.8)$ |
| Impairment | (12.0) | (269.0) | (269.0) | 0.0 |
| Interest unwind | 579.3 | 604.2 | 604.2 | 0.0 |
|  | 427.6 | 148.6 | 148.6 | 0.0 |
| Student loans closing carrying value | 8,715.8 | 8,864.4 | 8,864.4 | 0.0 |

## Note 2: Recognition

## Nominal value

The nominal balance is the sum of all obligations that borrowers have including Ioan principal, interest and penalties. The change in nominal value from year to year reflects the net growth of the portfolio through new lending less repayments and other adjustments, such as write-offs due to deaths and bankruptcies. The nominal balance is the basis for other values such as the carrying value and fair value.

## Carrying value

Student loans are initially recognised at fair value plus transaction costs and subsequently measured annually at amortised cost using the effective interest rate method and including the annua impairment figure.

Impairment of student loans in 2014/15 was $\$ 269$ million. This impairment is mainly due to data and modelling changes. Extensive modelling enhancements were made to the income sub-models. The changes focussed on better reflecting the poorer employment prospects after the Global Financial Crisis for those with lower qualifications. Macroeconomic changes contributed to the impairment expense as well. All of the economic assumptions have fallen significantly since the previous valuation. Actual repayments were lower than forecast. To reflect expected improvements in employment rates and repayment compliance, an adjustment was made to reverse some of the modelling impairment loss.

In 2013/14, the impairment of student loans was $\$ 12$ million. This was driven by lower than expected incomes and repayments as well as changes to macroeconomic assumptions for income recovery and earnings inflation.

Fair value on initial recognition of student loans is determined by projecting forward expected repayments required under the scheme and discounting them back at an appropriate discount rate. The subsequent measurement at amortised cost is determined using the effective interest rate calculated at initial recognition. This rate is used to spread the interest income across the life of the Ioan and determines the loan's carrying value at each reporting date.

The student loan valuation model reflects current student Ioan policy and macroeconomic assumptions. As such, the book value is sensitive to changes in a number of underlying assumptions, including future income levels. repayment behaviour and macroeconomic factors such as inflation and the discount rate used to determine the effective interest rate on new borrowers. For these reasons, the valuation has a high degree of inherent uncertainty, and there is a significant risk of material adjustment to the carrying value in future accounting periods. The significant assumptions behind the carrying value and fair value are shown below.

Table 29 Significant assumptions

|  | $2013 / 14$ | $2014 / 15$ |
| :--- | :---: | :---: |
| Carrying value |  |  |
| Effective interest rate |  |  |
| Interest rate applied to loans for <br> overseas borrowers <br> Consumer Price Index | $5.1 \%-6.2 \%$ | $4.5 \%-6.2 \%$ |
| Future salary inflation | $1.8 \%-2.5 \%$ | $0.3 \%-2.5 \%$ |
| Fair value | $2.8 \%-3.5 \%$ | $2.3 \%-3.5 \%$ |
| Fair value (\$m) | $8,924.0$ | $9,267.0$ |
| Discount rate |  |  |
| Impact on fair value of a 1\% increase in <br> discount rate (\$m) | $6.62 \%$ | $6.20 \%$ |
| Impact on fair value of a 1\% decrease in <br> discount rate (\$m) | $548.0)$ | $(492.0)$ |

Source: Inland Revenue.
Notes:

1. The effective interest rate is a weighted average rate across all cohorts.
2. The discount rate is the single discount rate that is equivalent to a set of year-specific discount rates used to compute the fair value.

Most of the data upon which the modelling depends is collated by Statistics New Zealand from Inland Revenue, Ministry of Education and the Ministry of Social Development. That data covers borrowings, repayments, income, educational factors and socioeconomic factors. It is current up to 31 March 2014.
Some supplementary data from Inland Revenue and Customs, about loan transactions and borrowers' cross-border movements for the period up to 31 March 2015 is also factored into the modelling.

## Fair value

Fair value is the amount for which the loan book could be exchanged between knowledgeable, willing parties in an arm's length transaction as at 30 June 2015. It is determined by discounting the future cash flows at an appropriate discount rate. The estimated fair value of the student loan debt at 30 June 2015 has been determined to be $\$ 9,267$ million ( $\$ 8,924$ million at 30 June 2014).

Fair values will differ from carrying values due to changes in market interest rates, as the carrying value is not adjusted for such changes whereas the fair value was calculated on a discount rate that was current at 30 June 2015. At that date, the fair value was calculated on a discount rate of 5.66 percent which excludes expenses, whereas a weighted average discount rate of 7.00 percent including expenses was used for the carrying value. For reference, the representative discount rate for fair value including an allowance for expenses is 6.20 percent. The difference between fair value and carrying value does not represent an impairment of the asset.

## Note 3: Reconciliation of impairment allowance account

Table 60 Reconciliation of impairment allowance account

| Impairment allowance account | 30 June 2014 <br> \$m | 30 June 2015 <br> \$m |
| :--- | ---: | ---: |
| Balance at beginning of year | 1,436 | 1,448 |
| Impairment expense recognised on <br> receivables | 12 | 269 |
| Balance at end of year | 1,448 | 1,717 |

Source: Inland Revenue.

## Independent Auditor's Report

## To the readers of Student Loan Scheme's financial schedules for the year ended 30 June 2015

We have audited the of financial schedules of the Student Loan Scheme (the Scheme) on pages 55 to 62 that comprise the schedule of assets as at 30 June 2015, the schedule of revenue and expenditure, and schedule of cash flows for the year ended on that date and the notes to the financial schedules that include accounting policies and other explanatory information.

## Opinion

In our opinion the financial schedules of the Scheme:

- present fairly, in all material respects, the Scheme's financial position as at 30 June 2015 and its financial performance and cash flows for the year ended on that date; and
- are consistent with the audited schedules of non-departmental activities from which they have been extracted.
The basis of our opinion is explained below. In addition, we outline the responsibilities of the Secretary for Education and our responsibilities, and we explain our independence.


## Basis of opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the International Standards on Auditing (New Zealand) and in particular with the International Standard on Auditing (New Zealand) 805: Special Considerations - Audits of Single Financial Statements and Specific Elements, Accounts or Items of a Financial Statement.

The financial schedules of the Scheme represent extracts from the audited schedules of nondepartmental activities that are managed on behalf of the Crown by the Inland Revenue Department and the Ministry for Social Development. The financial schedules of the Scheme and the schedules of non-departmental activities from which they are derived do not reflect the effects of events that occurred subsequent to the date of our reports on the audited schedules of non-departmental activities of the Inland Revenue Department and the Ministry for Social Development. We expressed unmodified audit opinions on the non-departmental schedules of the Inland Revenue Department and the Ministry for Social Development in our reports, dated 29 September 2015 and 30 September 2015 respectively.
An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial schedules. The procedures selected depend on the auditor's judgement, including the assessment of risks of material misstatement of the financial schedules, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the preparation and fair presentation of the financial schedules in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Student Loan Scheme's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, as well as evaluating the overall presentation of the financial schedules.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Responsibilities of the Secretary for Education

The Secretary for Education is responsible for preparing the financial schedules so that they present fairly, in all material respects, the activities of the Student Loan Scheme.
The Secretary for Education is also responsible for the publication of the Student Loan Scheme annual report, whether in printed or electronic form.

## Responsibilities of the Auditor

We are responsible for expressing an independent opinion on the information we are required to audit, and reporting that opinion to you based on our audit. Our responsibility arises from the Public Audit Act 2001.

## Independence

When carrying out the audit, we followed the independence requirements of the Auditor-General, which incorporate the independence requirements of the External Reporting Board.

Other than the audit, we have no relationship with or interests in the Student Loan Scheme.


Chrissie Murray
Audit New Zealand
On behalf of the Auditor General
Wellington, New Zealand
17 December 2015
APPENDICES
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## Appendix 1: Management and design of the scheme

## Roles and responsibilities

## Ministers and officials

The Minister responsible for tertiary education is responsible for student loan policy and the Minister of Revenue is responsible for all student loan operational matters. The Secretary for Education is appointed as the Lead Official and this role is delegated to the Deputy Secretary Graduate Achievement, Vocations and Careers.

The Lead Official is responsible and answerable to Ministers for the Student Loan Scheme, with responsibilities including: leading a scheme work programme, working with the Ministry of Social Development and Inland Revenue on processes to improve operation of the Student Loan Scheme, scheme performance management, scheme communications, and supporting Ministers to undertake their roles.

## Agencies with an interest in the scheme

The Ministry of Education is the lead agency on student loans, responsible for providing strategic policy advice on student loans, forecasting borrower costs, preparing the annual report and managing the valuation process.

The Ministry of Social Development, through its StudyLink service, is responsible for the administration and payment of loans, processing around 230,000 applications per year and making loan payments to students and tertiary education organisations. The Ministry of Social Development provides operational policy advice regarding student loan eligibility and entitlement.

Inland Revenue is responsible for collecting student loan repayments and ensuring repayment obligations are met by borrowers. Inland Revenue provides operational policy advice on matters concerning the collection of loans and is responsible for the Student Loan Scheme Act.

The Treasury is the Government's lead advisor on economic, financial and regulatory policy. Its role is to bring a fiscal and economic focus to student loans policy advice, including the valuation of the Student Loan Scheme and its fiscal sustainability.

## Statistics NZ disclaimer

This report uses data from the Integrated Data Infrastructure, or IDI. Statistics NZ makes the following disclaimer about use of the data.

> Access to the anonymised data from the IDI used in this report was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975 and secrecy provisions of the Tax Administration Act 1994 . The results in this report have been confidentialised to protect individual persons, households, businesses and organisations from identification. The results presented in this report are the work of the author, not Statistics NZ.

## Legal structure and authority

Student Loan eligibility rules are set out in the decisions of Cabinet recorded in Cabinet Minutes. Access to a student loan is provided through a contract between the Crown and the student. The collection rules for student loans are set out in the Student Loan Scheme Act 2011.

The purpose of the Act is to:

- provide for the effective administration of student loans
- provide for the collection of student loan repayments
- provide transparency about student loans so that borrowers understand their obligations for those loans
- encourage borrowers to repay their student loans at the earliest possible time.


## Parameters of the scheme

## Eligibility

To be eligible a student must be:

- a New Zealand citizen or a refugee or protected person (under the Immigration Act 2009). Permanent residents (including Australians) are subject to a three-year stand-down before they can receive a student loan
- enrolled in an approved qualification offered by a recognised tertiary education provider
- studying:
- full-time, or
- part-time for a full year (32 weeks or longer), or
- part-time for part of the year (less than 32 weeks) with a course load of 0.25 equivalent full-time student units or more.

In addition:

- students under 18 years need parental consent before they can borrow
- undischarged bankrupts are not eligible for a student loan
- students must not have exceeded the 7 EFTS limit (which includes all study for which a student has had a student loan, from 1 January 2010). Students may be eligible for additional entitlement beyond the 7 EFTS limit to:
- finish a paper or course of study if it takes the student over the 7 EFTS limit
- complete postgraduate study (up to an additional 1 EFTS)
- undertake doctoral study (up to an additional 3 EFTS)
- they need to pass at least half of their course load (EFTS) over a five-year period to retain their student Ioan eligibility
- the amount of study for which a student can borrow in a year is capped at 2 EFTS
- the amount that a student can borrow for pilot training is capped at $\$ 35,000$ per EFTS
- students aged 55 years and over are restricted to the compulsory fees element of the scheme
- borrowers in default of their loans by $\$ 500$ or more are ineligible for a further loan
- borrowers are required to provide details of a contact person before they receive a loan
- students under 18 and enrolled in a 'fees-free' Youth Guarantee and SAC levels 1 and 2 qualification are ineligible for student Ioans
- 18 to 24 year olds enrolled in a Youth Guarantee or SAC levels 1 and 2 qualification will not be able to access the course fees part of student loans, as all Level 1 and 2 qualifications will be fees-free


## Loan components

Loans have four components:

## Compulsory fees

Students can borrow the full amount of their compulsory fees (except for pilot training-see above). These are paid to the borrower's chosen tertiary education provider

Where compulsory, students' association fees can be borrowed as part of the compulsory fees Ioan entitlement. Otherwise, students' association fees can be borrowed as part of a student's courserelated costs entitlement.

## Course-related costs

Full-time students can borrow up to \$1,000 each year to help cover expenses related to their studies, such as equipment, textbooks and field trips. Students may have to provide justification of their expenses. Students studying part-time are not able to access this component of the loan scheme

## Living costs

Only full-time students are eligible for the living costs component for each week of their course, less the net amount of any student allowance paid. The living costs component is paid in weekly instalments in arrears. From 1 April 2014, students could borrow up to $\$ 175.96$ per week. From 1 April 2015 this was \$176.86.

Students nominate the amount they wish to draw each week up to the maximum entitlement. If they nominate less than their full entitlement, the remainder cannot be claimed at a later date.

## Establishment and administration fees

When a new loan account is set up, MSD charges an establishment fee of $\$ 60$. This is added to the student's Ioan balance at the first draw down. The establishment fee is charged for each Ioan account established. If a student borrows for three academic years, this requires three loans to be established and therefore three establishment fees are charged, one for each academic year.

If a student cancels their loan within seven days of the account being established, and repays any money that has been drawn down, the $\$ 60$ establishment fee (and any interest charged on it) will be waived. Otherwise, the establishment fee is always included in the loan balance.

An annual administration fee of $\$ 40$ is charged to the borrower's account by Inland Revenue if the Ioan balance is $\$ 20$ or more at 31 March each year. This fee is not payable if an establishment fee has been charged in the same tax year.

## Loan repayments

Inland Revenue handles the collection of Ioan repayments. Borrowers have obligations depending on whether they are defined as being New Zealandbased or overseas-based. Repayments from New Zealand-based borrowers are generally made through the tax system.

Interest is charged on the loans of overseas-based borrowers, but not of those who are defined as being based in New Zealand.

On 1 April 2013, the student loan repayment rate for New Zealand-based borrowers was increased from 10 to 12 cents per dollar in excess of the threshold.

## In New Zealand-earning salary or wages

New Zealand-based borrowers are required to declare to their employer that they have a student Ioan as part of the PAYE (pay as you earn) deductions system. From 1 April 2012, deductions are made when a borrower earns over the pay-period threshold (for example, if a borrower is paid weekly, the annual repayment threshold is divided by 52 weeks). These deductions are generally considered as meeting a borrower's repayment obligation for that pay period, unless there has been a significant over- or underdeduction. This means there are no end-of-year repayment obligations for borrowers earning solely salary or wages.

Borrowers can apply for an exemption from having repayment deductions if they are in full-time study and expect to earn under the annual repayment threshold. Those who have two or more jobs can apply for a reduced student loan deduction rate on their secondary income, if they earn less than the pay period repayment threshold from their main job.

## In New Zealand-adjusted net income

Borrowers have adjusted net income if they have income other than salary or wages, for example if they are self-employed. These borrowers generally make repayments in three instalments during the tax year in the same way that businesses pay provisional tax.

Borrowers with adjusted net income of $\$ 1,500$ or more and whose total income is $\$ 20,584$ or more (annual repayment threshold $+\$ 1,500$ ) have the following obligations:

- 12 percent of their total income over the threshold if their salary and wages are below the annual repayment threshold
- 12 percent of their adjusted net income above the repayment threshold if they have no salary and wages, or
- 12 percent of the adjusted net income if their salary and wages are above the annual repayment threshold.


## Overseas

Overseas-based borrowers are those defined as being overseas for 184 days or more. However, some borrowers overseas for 184 days or more may be treated as New Zealand-based in limited circumstances.

Interest applies to loans from the day after the borrower leaves New Zealand. The interest rate applying from April 2014 to March 2015 was 5.5 percent per annum, and is 5.3 percent for the tax year to March 2016.

The repayment obligation for overseas borrowers is set as a minimum amount payable based on the balance of the Ioan at 31 March, plus the annual administration fee. From 1 April 2014, if the Ioan balance was:

- under \$1,000-the whole Ioan balance is due
- \$1,000 and up to \$15,000-\$1,000 is due
- over \$15,000 and up to \$30,000-\$2,000 is due
- over \$30,000 and up to \$45,000-\$3,000 is due
- over \$45,000 and up to \$60,000-\$4,000 is due
- over \$60,000-\$5,000 is due.

Repayment obligations do not decrease if the Ioan balance decreases (though they do increase if the balance increases). The obligation set at the time a borrower moves overseas, or at 1 April 2014 for borrowers who were already overseas at that time, remains the minimum repayment until the borrower returns to New Zealand or repays the loan fully.

## Repayment holiday

Since 1 April 2012, borrowers who go overseas for 184 days (six months) or more can apply to Inland Revenue for a one-year 'holiday' from their repayment obligations and must do so before they are considered to be overseas-based. Interest accumulates on the loan during this period. Borrowers must provide contact details for an alternative New Zealand contact person when applying for the repayment holiday.

## Voluntary repayments

By making voluntary repayments towards their student loan, borrowers can repay their loan faster. All borrowers are able to make voluntary repayments towards their student loan at any time. They can be made in a number of ways, including through additional deductions from salary or wages by using a special repayment code, by automatic payment, through online banking, or with credit or debit cards. Borrowers who are overseas can make an international money transfer, including fee-free repayments.

## Overdue repayments and late payment interest

Collection of overdue loan repayments is achieved in the same way as for overdue taxes. If repayment obligations are not met by the due date, late payment interest may be added to the unpaid amount from the day after the due date, and then monthly until the overdue amount is paid in full. From 1 April 2014 to March 2015, the late payment interest rate was 0.759 percent monthly. From 1 April 2015, it has been 0.743 percent. This is the loan interest rate plus 4 percent, calculated as a monthly rate.

Borrowers having difficulty paying overdue repayment obligations can make repayment arrangements．If they meet the terms of the arrangement their late payment interest will be reduced．A borrower may also negotiate a lower repayment amount if the compulsory repayment obligation would cause serious financial hardship．In certain circumstances，a borrower suffering hardship may have any overdue amount added back to the loan principal．

Inland Revenue may refrain from collecting all or part of an overdue repayment obligation that is less than \＄334，with the overdue portion being added back to the Ioan principal．

## Write－offs

Student loans are written off：
－in the event of the death or bankruptcy of the borrower
－if a borrower has a loan balance of less than $\$ 20$ at the end of a tax year．

## Interest

New Zealand－based borrowers are not charged interest on their student loans．To be eligible， student Ioan borrowers must be living in New Zealand for 183 consecutive days or more，though some borrowers based overseas may be treated as New Zealand－based in limited circumstances．${ }^{16}$ interest－free student loan and continue to be charged Ioan interest．

The interest rate for the tax year from April 2014 to March 2015 was 5.5 percent per annum．The interest rate is 5.3 percent per annum for the tax year from April 2015 to March 2016.

[^8]
## Appendix 2: Student Loans Integrated Model (SLIM)

SLIM is built on the integrated dataset on student loans and allowances. It was constructed by actuaries engaged by the Ministry of Education. Each year the integrated dataset is rebuilt to incorporate an extra year's data. Following this, the model is revised and updated and is used by the consulting actuaries in preparing their valuation of the scheme. The experience of past borrowers forms the core of the model and is used to predict what present and future borrowers will do in the future.

Changes in the economic environment and policy changes also affect borrowing and repayment behaviour and, depending on timing, these impacts are not necessarily reflected in the data on which the model is built.

This year's model was built on administrative data to the end of March 2014 supplemented with transactional data to April 2015. Adjustments are made to allow for changes that are not captured or only partially captured in the data, such as the change to pay period assessments.

SLIM benefits from a longitudinal dataset that becomes increasingly rich as further years of data are integrated each year. It gives agencies, researchers and the public a clearer understanding of the loan scheme's probable future status and outcomes. It enables more accurate assessments of, for example, the likely effects of the loan scheme or of policy changes on different groups (such as ethnic groups or gender) and the borrowing and repayment behaviour of borrowers in different fields or levels of study. In this year's model up to five years' worth of data has been used to produce the predictive models.

SLIM is based on a large number of categorical and regression tree models and generalised linear models developed from the integrated dataset. The 2015 version of SLIM has 22 such sub-models. Together, these sub-models encapsulate former borrowers' characteristics. These include borrowing and repayment behaviours, income growth, propensity to travel overseas, and other characteristics. A number of borrower features, including residency, income, study duration, amounts borrowed and voluntary repayments are modelled and projected into the future.

Each sub-model uses several predictive variables (for example, study-related fields such as the level of study undertaken and the completion status, or demographic fields such as age and gender, or loan-related data such as the Ioan balance, amount borrowed and so on). SLIM calculates the probabilities of an individual being enrolled or not enrolled, earning or not earning, or travelling overseas. It then proceeds to model the income of the individual and their repayment obligations. From there, the expected repayments in each year for each individual are calculated again using sub-models.

| Area | Assumption |
| :---: | :---: |
| Economic assumptions | The Treasury publishes a central table of CPI inflation assumptions which are to be used in major accounting valuations for reporting to the Crown. These figures have been adopted for the valuation. <br> The remaining economic assumptions are set by the consulting actuaries in consultation with the Treasury, Inland Revenue, the Ministry of Social Development and the Ministry of Education. For example, the Average Weekly Earnings growth is expected to range between 2.3 percent and 3.1 percent over the next four years, 2.9 percent for the following decade, then rising gradually to the long-term rate of 3.5 percent by 2045. |
| Discount rates | The carrying value of student loans is based on discount rates that are set at the time of lending. These incorporate a risk-free component and a risk premium. Prior to 1 January 2013, the discount rate was calculated each year for each new cohort of borrowers. After this date, the discount rate is calculated for each year of new lending as a more accurate reflection of the accounting standards. <br> As with the CPI, the risk-free rates are as prescribed by the Treasury. The risk margin was determined by the consulting actuaries as 2.07 percent. <br> The discounting used to compute the fair value, which is based on current risk-free rates and margins (risk margin and expenses), is equivalent to a single annual discount rate, which for this year's valuation is estimated to be 6.20 percent. |
| Income of borrowers | Personal income growth from 'career advancement' is modelled from the experience of the loan scheme and from Census data for longer durations. Salary inflation is imposed on top of this 'career advancement' analysis as an economic assumption. |
| Transitions between being a student, employment and overseas | Modelled from the recent experience of the loan scheme's participants. |
| Voluntary repayments | The probability and amount of voluntary repayments are modelled from the experience of the loan scheme since the introduction of the interest-free policy but before the introduction of the (discontinued) voluntary repayment bonus scheme. The output from the sub-models is then adjusted to allow for the impact of moving to pay period assessments. |
| Repayment threshold | \$19,084 until 31 March 2017 and increasing by annual CPI thereafter. <br> From April 2012, repayment obligations are based on pay periods rather than total annual earnings (see Pay Period Repayment Threshold in the glossary). <br> This means that some borrowers earning below the annual threshold of $\$ 19,084$ may still end up having repayment obligations. The consulting actuaries allow for this by adjusting the $\$ 19,084$ threshold according to the borrower's income. |
| Resident underpayments | The probability and amount of underpayment by New Zealand-based borrowers have been modelled from recent data and adjusted for the expected impact due to moving to pay period assessments, and changes to the underpayments collection process. |
| Bankruptcy | Age-specific, graduated rates were constructed based on the experience of the loan scheme. For example, the rate of bankruptcy at age 40 is 2.54 per 1,000 borrowers each year. |
| Mortality | Based on the experience of the loan scheme: male mortality is assumed to be 95 percent of the New Zealand Life Tables 2005 and female mortality is assumed to be 100 percent of the New Zealand Life Tables 2005. |

## Appendix 3: Glossary

## Academic year

The academic year is from 1 January to
31 December.

## Active borrower

Someone who is currently borrowing from the scheme. Active borrowers will be either studying for the first time, or continuing with their study.

## Active repayer

Borrowers who have made at least one repayment in the financial year, as distinguished from those borrowers who have not made payments.

## Administration fee

A $\$ 40$ fee charged by Inland Revenue for each year a borrower has a loan balance with Inland Revenue (except in those tax years that the borrower is charged an establishment fee by MSD). The fee is charged at the end of each tax year on 31 March.

## Amortised cost

The amount that represents the initial fair value write-down plus interest unwind. The interest unwind rate effective at the initial fair value writedown is used to spread the interest over the life of the loan.

## Annual maximum fee movement

The way that the government sets limits on the amount tertiary education providers may charge for tuition fees for programmes funded by the government.

The annual maximum fee movement replaced the previous fee and course costs maxima (FCCM) policy from 2011.

## Approved qualification

A formally assessed qualification approved by the New Zealand Vice-Chancellors' Committee or the New Zealand Qualifications Authority (NZQA) or bodies delegated by NZQA.

## Borrower

Any person who has drawn from the Student Loan Scheme and not yet repaid in full.

## Borrowers overseas

Until 31 March 2007, a borrower living overseas was called a non-resident borrower and defined as a borrower not living in New Zealand in terms of section OE 1 of the Income Tax Act 1994.

From 1 April 2007, borrowers living overseas are referred to as 'overseas-based borrowers' An overseas-based borrower now includes anyone not eligible for an interest-free student Ioan.

## Carrying value

The carrying value is the value of the Student Loan Scheme asset which is maintained in the scheme's accounts. It increases during the year as new loans are issued and decreases as repayments are made. Adjustments are made each year following an annual valuation of the asset. Since 1 July 2005, valuations have been made in accordance with New Zealand equivalents to International Financial Reporting Standards (NZ PBE IPSAS)

## Cohort

A group of people with a common statistical factor. For example, a cohort could be a group of students for whom 2013 is their first year of tertiary education

## Compulsory fees or tuition fees

Compulsory fees charged for tuition by public and private tertiary education providers.

## Compulsory repayments

Repayments a borrower must make on their loan.
For New Zealand-based borrowers, compulsory repayments generally commence when their earnings cross the income threshold. When this happens, loan repayments must be made to Inland Revenue, even if the borrower is still studying

For overseas-based borrowers, compulsory repayments must be made to Inland Revenue twice a year. One instalment is due on 30 September, the other on 31 March. The amount to be repaid is based on the size of the borrower's loan. For those who have successfully applied for a repayment holiday, repayment will begin after they have been away for one year. For more details about repayment rates for Department website, ird.govt.nz/studentloans

## Course

A component of education encompassing teaching, learning, research and assessment. Papers, modules and unit standards are all terms that are sometimes applied to courses. A course or collection of courses forms a programme of study which, if completed successfully, results in the award of a qualification.

## Course-related costs

These are the additional expenses associated with tertiary study that are not compulsory for all students. These can include such costs as equipment, textbooks, field trips, and transport to and from classes.

## Equivalent full-time student (EFTS)

A measure used to count tertiary student numbers. A student taking a normal year's full-time study generates one 'equivalent full-time student' unit Part-time or part-year students are fractions of a unit.

## Establishment fee

A $\$ 60$ fee charged by MSD each year when a borrower establishes a new loan account.

## Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

## Fee stabilisation policy

The fee stabilisation policy was introduced in 2001 to prevent increases in tuition fees before the FCCM policy was developed. The policy involved institutions agreeing not to increase their fees and the government increasing tuition fee subsidies.

## Fiscal year

Government's accounting year-starting on 1 July and ending on 30 June.

## Formal education/study

Learning opportunities within the New Zealand tertiary education system can be categorised as formal and non-formal. Formal study contributes towards a recognised qualification, while non-formal study does not contribute towards a recognised qualification.

## Full-time

Any programme of study undertaken by a student that is either:

- 32 weeks or more and at least 0.8 equivalent full-time student units (this is designated full-time, full-year), or
- 12 weeks or more and at least 0.3 equivalent fulltime student units or the equivalent on a pro rata basis (for example, 24 weeks and 0.6 equivalent full-time student units is designated full-time, part-year).

This definition is used to determine eligibility for the living costs component of the student loan and for student allowances. It was used in applying the student loan full interest write-off for full-time students, which has now been replaced by a full interest write-off for New Zealand-resident borrowers (interest-free student loans).

## Governance

The process of steering or directing the activities and priorities of an organisation, group or process. With respect to student loans governance, the Student Loan Scheme Governance Group was set up in 2010 to provide collective oversight and ownership of the scheme. The group is made up of representatives from the Ministry of Education, the Ministry of Social Development, the Treasury and Inland Revenue. See Appendix 1 for a description of the various roles and responsibilities, including governance, of the Student Loan Scheme.

## Impairment

A change in the value of a long-term asset.

## Income year or tax year

From 1 April to 31 March the following year. For example, in this report the 2014/15 tax year is referred to as the 2015 tax year, ending on 31 March 2015.

## Industry training organisations (ITOs)

These are organisations that develop high-quality, systematic training arrangements (through tertiary institutions, private training establishments and the workplace) for employees in their industry.

## Institutes of technology

An alternative name for polytechnics.

## Institutes of technology and polytechnics (ITPs)

Institutes of technology and polytechnics are public tertiary education institutions characterised by diverse vocational and professional programmes.

## Integrated data infrastructure (IDI)

The IDI is managed by Statistics New Zealand. It combines:

- information collected by tertiary education providers on students, enrolments and courses
- information collected by MSD on borrowing under the Ioan scheme and student allowances payments
- data on student loan balances, repayments, income and tax status from Inland Revenue
- data on student loan borrowing from the nowdefunct student Ioan account manager provided by Inland Revenue and the Ministry of Education.


## Interest

Refer to Total interest rate.

## Interest-free student loans

From 1 April 2006, student loans for borrowers living in New Zealand for 183 consecutive days or more (about six months), and for borrowers who are exempt, are interest-free. This is the 183-day requirement.

## Interest unwind

An item of revenue to the Student Loan Scheme. As time moves on, loans on the balance sheet come closer to being repaid and are therefore worth more to the owner. In effect this increase in value is a partial reversal, or unwinding, of the initial reduction in value brought about by the discounting process.

## Interest write-offs

In some previous years, interest has been charged on student loans. There were a number of provisions under which this interest was written off or cancelled. From 1 April 2007, interest write-offs ceased to exist due to the introduction of interestfree student loans. For more detail refer to previous years' reports and the web document at www.educationcounts.govt.nz

## Late payment interest

Charges on unpaid amounts if repayment obligations are not met by the due date (previously late payment penalties).

## Lead official

An appointed or authorised member of a government agency that directs or governs a project.

## Loan balance

In this report, the term 'loan balance' means the total amount borrowed by an individual under the Student Loan Scheme, including any fees or interest, less any repayments they have made. This amount may also be referred to as 'debt'.

## Negative impairment

When a valuation results in an increase in the value of an asset, the resulting change in value is called a reversal of an impairment or a negative impairment.

## New borrowers

Borrowers who entered the loan scheme for the first time in a given year.

## New Zealand-based borrowers

Borrowers who have lived in New Zealand for 183 days (six months) or more. Since 1 April 2006, New Zealand-based borrowers qualify for an interest-free student loan.

## Nominal value

The total amount owed by borrowers at a point in time, including loan principal, interest, fees and penalties.

## Non-degree

Non-degree level applies to programmes of study and qualifications that are not at degree or postgraduate level.

## Non-formal education/study

Learning opportunities in the New Zealand tertiary education system can be categorised as formal and non-formal. Non-formal study does not contribute towards a recognised qualification.

## Other tertiary education providers (OTEPs)

Providers recognised by the Minister of Education under section 321 of the Education Act 1989 as bodies that provide an educational or developmental service or facility.

## Overseas-based borrowers

Borrowers who have been overseas for 184 days (six months) or more, or for more than 31 days during the 183 day qualifying period for New Zealandbased borrowers. Overseas-based borrowers are not eligible for an interest-free student loan unless they qualify for an exemption. ${ }^{17}$

## Part-time

A programme of study that is less than full-time.

## Pasifika

This is a collective term for people of Samoan, Cook Islands, Tongan, Niuean, Tokelauan, Fijian and other mixed Pasifika heritage. It includes a variety of combinations of ethnicities, recent migrants and third, fourth and fifth generation New Zealanders.

## Pay period repayment threshold

The amount which can be earned in a pay period before student loan repayments need to be made from salary or wages. Since 1 April 2012, borrowers who earn over the pay period repayment threshold must pay 12 cents towards their loan for every dollar above the threshold. The pay period repayment threshold is based on the annual repayment threshold (for example, if a borrower is paid weekly, the annual repayment threshold is divided by 52). The pay period repayment threshold applies to New Zealand-based borrowers.

## PAYE

If income is from salary, wages, benefits or taxable pensions, tax is deducted automatically under the pay as you earn (PAYE) system. Employees who are taxed under the PAYE system and have a student loan, must indicate this by selecting the relevant tax code. This ensures that borrowers make the correct repayments on their student loan, according to their level of income.

## Private training establishments (PTEs)

These are private providers of tertiary education registered with the New Zealand Qualifications Authority.

## Programme of study

A programme of study is a collection of courses, classes or work that leads to a qualification.

## Qualification

An official award given in recognition of successful completion of a recognised programme of study. All recognised qualifications must be registered on the New Zealand Qualifications Authority's Register of Quality Assured Qualifications.

## Repayment deductions

Amounts deducted by employers from a borrower's salary or wages when a borrower's income exceeds the repayment threshold and where the borrower has notified their employer of their student Ioan repayment obligation by using the appropriate tax code.

## Repayment holiday

Since 1 April 2012, borrowers who go overseas for 184 days (six months) or more can apply to Inland Revenue for a one-year 'holiday' from their repayment obligations. Interest will accumulate on the loan during this period. Borrowers must provide contact details for an alternative New Zealand contact person when applying for the repayment holiday. While a repayment holiday means that borrowers don't have to make any repayments on their loan, interest is still charged during this period.

## Repayment obligation

The amount a borrower must repay towards their Ioan in any given income year. For New Zealandbased borrowers, this is calculated as the amount by which the borrower's net income exceeds the repayment threshold, at the rate of 12 cents in the dollar. The amount of repayment for overseas-based borrowers is based on the size of their loan.

## Repayment threshold

The amount a New Zealand-based borrower can earn in a year before having to make repayments on their loan. Once a person earns more than the threshold, they must pay 12 cents for every dollar earned over the threshold. The repayment threshold was set at \$19,084 in the 2011/12 income year and will be held at that level until 31 March 2017. (See also Pay period repayment threshold.)

## Student Achievement Component (SAC)

The Student Achievement Component is the government's contribution to Tertiary Education Organisations (TEOs) for the direct costs of teaching, learning, and other costs driven by learner numbers. It is calculated in Equivalent Full Time Student (EFTS) units and provides funding to reflect the volume and mix of provision agreed in a TEO's investment plan.

## Student allowances

Income-tested grants provided to support living expenses while studying.

## Student Loans Integrated Model (SLIM)

The stochastic model used to provide an annual valuation of the Ioan scheme and price policy options. Refer to Appendix 1 for more details.

## Study status

This refers to whether a person is studying full-time or part-time.

## StudyLink

The organisation responsible for the delivery and administration of student loan payments, student allowances and Jobseeker Support Student Hardship (a payment for eligible students who are unable to find full-time employment during a study break of more than three weeks). StudyLink is part of the Ministry of Social Development.

## Tax year

From 1 April to 31 March the following year.

## Tertiary education

Tertiary education comprises all involvement in postschool learning activities, including industry training and community education. It also includes in-school programmes such as Gateway and the SecondaryTertiary Alignment Resource (STAR).

## Tertiary education institutions (TEIs)

Public providers of tertiary education. TEIs are universities, institutes of technology and polytechnics, and wānanga. On 1 January 2007, the last two remaining colleges of education merged with their local universities.

## Tertiary education organisations (TEOs)

These are all institutions and organisations that provide or facilitate tertiary education. They include tertiary education providers and industry training organisations.

## Tertiary education providers (TEPs)

All institutions and organisations that provide tertiary education. These include public tertiary education institutions, private training establishments, other tertiary education providers and government training establishments.

## Tertiary Education Strategy (TES)

Document that sets the Government's goals and priorities for New Zealand's tertiary education system so that it contributes to New Zealand's national goals and is closely connected to enterprise and local communities.

## Total interest rate

The interest charged on loans. Interest is adjusted annually from 1 April. The total interest rate:

- was 5.9 percent for 2013/14
- was $5.5 \%$ percent for $2014 / 15$
- will be 5.3 percent for 2015/16.

From 1 April 2006, only overseas-based borrowers were liable for interest.

## Tuition fees or compulsory fees

Compulsory fees charged for tuition by public and private tertiary education providers.

## Voluntary repayments

Any student loan repayment that is made over and above a borrower's compulsory repayment obligation. It excludes overpayments.

## Wānanga

A public tertiary institution that provides programmes with an emphasis on the application of knowledge regarding ahuatanga Māori (Māori traditions) according to tikanga Māori (Māori custom).
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[^0]:    1 The differences between student numbers and equivalent full-time student numbers relate to the proportion of part-time students enrolled and the study load they enrol for.

[^1]:    2 This figure is based on earnings for young domestic graduates in the 2011 and 2012 tax years relative to national median earnings for those aged between 15-64 years in the 2012 tax year. Earnings in the 2011 tax year are converted to 2012 dollars using the wages and salary component of the Labour cost Index.

[^2]:    4 The government's contribution includes tuition subsidies (such as the Student Achievement Component and Youth Guarantee) and the Performance-Based Research Fund.

[^3]:    6 Those entering the loan scheme for the first time in 2014.
    7 The percentages of ethnicity are based on the new data from MSD. It has different definition of ethnicity from the previous reports based on IDI data. It no longer includes the Middle Eastern/Latin American/African category.

[^4]:    9 In April 2012, Inland Revenue received two intakes of information about loans. The first was a bulk transfer from MSD of all information for the 2011 academic year for borrowers who had drawn loans. This was the usual process for the period to April 2012. From April 2012, loan information was transferred to Inland Revenue on a daily basis. This resulted in Inland Revenue receiving records of borrowing for two academic years (2011 and 2012) in its

[^5]:    $10 \$ 1,518$ million of cash lending plus $\$ 11$ million of establishment fee lending.

[^6]:    12 The 2014/15 year was the first time the student loan asset was valued in accordance with the Public Benefit Entity International Public Sector Accounting Standards (PBE IPSAS), instead of the New Zealand equivalents to International Financial Reporting Standards (NZ IFRS).

[^7]:    15 For lending to December 2012, the discount rates for the carrying
    value were fixed based on the time of a borrower's first borrowing from the scheme.

[^8]:    16 Some borrowers may qualify for exemption from interest charges
    if they are overseas and，for example，they are studying，or working as a volunteer．Full details are available on ird．govt．nz

