National Audit Office

Report
by the Comptroller
and Auditor General

Department for Business, Innovation & Skills

Student loan repayments

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National Audit Office

Department for Business, Innovation & Skills

Student loan repayments

Report by the Comptroller and Auditor General

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This report provides our independent opinion on whether the system for the collection of student loan repayments, as designed by the Department for Business, Innovation & Skills and operated by the Student Loans Company and HM Revenue & Customs, is currently value for money, and whether the departments are ready for future challenges

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Contents

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This report can be found on the National Audit Office website at www.nao.org.uk/2013-student-loans

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Key facts

£46bn	£55bn	35%
total value of outstanding student loans, March 2013	total student loans paid out since scheme introduction in 1990	the proportion of new loans BIS does not expect to be repaid

£200 billion	projected value of outstanding student loans by 2042
£21,000	earnings threshold for new loans above which borrowers begin repaying
£1.4 billion	total repayments collected in 2012-13
£27 million	total spent by the Student Loans Company and HM Revenue & Customs on maintaining and collecting repayments in 2012-13
82 per cent	proportion of repayments collected through the UK tax system in 2012-13 (the rest is collected by the Student Loans Company)
50 per cent	estimated proportion of borrowers with new student loans who will not fully repay
8 per cent	gap between forecast and actual repayments collected, 2011-12

Summary

1 The government introduced student loans in 1990 to support students, initially for living costs but extended to include tuition fees from 2006. The Department for Business, Innovation & Skills (BIS) is responsible for ensuring that there is an effective and efficient system for collecting student loan repayments from English borrowers and from EU borrowers attending English universities. The Student Loans Company (SLC) and HM Revenue & Customs (HMRC) operate the system for collecting loan repayments.

2 In 1998, the government introduced income-contingent repayment loans, where the level of repayments is based on earnings. The loans previously issued between 1990 and 1998 are known as mortgage-style loans, as borrowers repay a fixed monthly amount over a fixed period. For both loan types, borrowers do not repay unless they earn above a specified threshold. Using its tax systems, HMRC collects repayments on income-contingent repayment loans from borrowers who are working in the UK. The SLC collects all mortgage-style loan repayments and repayments on income-contingent repayment loans from borrowers who are working overseas.

3 The value of loans paid out is substantial and the level of outstanding loans is set to rise significantly. Between 1990 and March 2013, the SLC paid out approximately £4 billion of mortgage-style loans and £51 billion of income-contingent repayment loans. By March 2013, the SLC and HMRC had collected £7 billion of income-contingent repayment loans and £3 billion of mortgage-style loans. The government introduced further changes in 2012, including:

- higher tuition fees funded through student loans;
- a higher earnings threshold of £21,000;
- earnings-dependent interest rates; and
- an increase in the repayment period from 25 to 30 years, after which any remaining balance is written off.

BIS forecasts that these changes will increase the total value of outstanding loans from £46 billion in 2013 to approximately £200 billion by 2042, in 2013 prices. The number of borrowers due to repay is projected to increase from 3 million in 2012-13 to 6.5 million by 2042. The loan book is therefore becoming a substantial public asset.

4 In designing its higher education funding policy, the government anticipated that a proportion of the loans would not be repaid. Repayments for income-contingent repayment loans are based on earnings, so will not be repaid in the same way as conventional loans. At March 2013, the total value of outstanding loans was £46 billion (including interest accrued), but BIS only expects £31 billion to be repaid. BIS forecasts that the proportion of new loans issued in 2013 that will not be repaid is 35 per cent. Following the changes that the government introduced in 2012, students can borrow more and repay more slowly due to the higher earnings threshold, so a greater proportion of borrowers will not repay in full before their loans are written off. BIS estimates that up to half of borrowers with post-2012 loans will not earn enough to fully repay their loans.

5 We examined whether the approach for collecting student loans is maximising the value of the loan book for the taxpayer. In Part Two we examine performance and whether the accountability arrangements incentivise the SLC and HMRC to maximise collections. In Part Three we assess whether there is a robust collection strategy to recover the loans. In Part Four we examine whether BIS can accurately forecast future loan repayments. In Appendices One and Two we set out our audit approach and evidence base.

6 Our report focuses primarily on the much larger income-contingent repayment loans but also covers mortgage-style loans. In November 2013, the government announced the sale of its outstanding mortgage-style loans. The report does not assess the SLC's IT systems. It covers only English loans for which BIS is responsible. The administrations of Wales, Scotland and Northern Ireland are responsible for loan repayments from their borrowers, or from EU borrowers attending university in their geographical areas. All four administrations use HMRC's tax systems to collect repayments.

Key findings

The collection targets set by BIS

7 **In 2012-13, the SLC met three out of four targets for collecting income-contingent repayment loans.** BIS has set the SLC targets to ensure that as many borrowers as possible are 'in a repayment channel'. This means that the borrower is either repaying on time or not earning enough to repay. For example, in 2012-13, 99.1 per cent of UK resident borrowers were in repayment channels, compared with a target of 98.5 per cent. Of UK borrowers living overseas, 71.5 per cent were in a repayment channel compared with the 73.5 per cent target (paragraphs 2.2 to 2.4).

8 **However, BIS has not set a target for amounts collected.** BIS considers it would not be meaningful to set the SLC or HMRC an annual target for amounts collected because the level of repayments is affected by graduate earnings and economic factors. While the government publishes an estimate of expected annual repayments and BIS reports actual amounts collected, these figures are reported separately and are not easily understandable. Despite the substantial amounts involved, BIS does not analyse annually whether loan repayments collected differ from its forecasts, or account for any differences (paragraph 2.13).

9 **There are no targets for measuring some important areas of performance.** Over three-quarters of overdue repayments from borrowers living overseas have been overdue for between one and four years. BIS has not set the SLC a target to reduce levels of older debt for income-contingent repayment borrowers who are behind in repayments. For comparison, private debt collection agencies routinely measure and aim to minimise old debts (paragraph 2.13).

Strategy for maximising the value of the loan book

10 **The SLC, BIS and HMRC work together in a joined-up way, and have invested in improving collection processes.** The three organisations communicate frequently, including formally through governance boards that also involve the devolved administrations. Since 2008, the SLC and HMRC spent a total of £7 million in improving processes and there is evidence that some initiatives have led to increased repayments and improved customer service. We found that the SLC's approach to managing its processes compares well with other government departments. The SLC has clearly mapped out its processes, and staff understand them. There are opportunities for staff to suggest improvements, and evidence shows that appropriate suggestions have been implemented (paragraphs 3.2 to 3.4).

11 **However, the SLC, BIS and HMRC have lacked a jointly-owned strategy for improving collection performance.** In 2013, the SLC carried out a strategic review of its repayment collection process, the first review since 2009. The review identified activities to improve performance. However, it does not yet state the level of increased collections the SLC aims to achieve, how individual initiatives are expected to contribute to this improvement, and in what timescale. The SLC has begun to prioritise its initiatives, but has not yet carried out detailed cost–benefit analysis. Although the SLC is developing its strategy, we would have expected BIS, the SLC and HMRC to have had a strategy that they regularly refreshed to reflect the performance improvement they aimed to achieve annually (paragraphs 3.6 to 3.7).

12 **BIS has not done enough to establish whether borrowers with no current employment record are earning enough to repay their loans.** The majority of borrowers are UK PAYE taxpayers, and their repayments are collected without difficulty. There are two groups, however, where performance is less clear. Firstly, those who are recorded as no longer paying tax and, secondly, those who have never had a tax record: and where in both groups the SLC has no other information on their current earnings. There are three issues here:

- While many of these borrowers may not be earning enough to repay, BIS and the SLC have carried out little analysis to confirm the numbers that might be expected in these categories. Analysis of research conducted by other organisations indicates that some of these borrowers may be working overseas or in the hidden economy. Given the current and projected size of the loan book, BIS has not done enough to understand these categories and establish the level of repayments that might be missed (paragraphs 2.9 to 2.10).
- BIS counts the borrowers who have previously paid tax towards the SLC's 'in a repayment channel' target. A past tax record means that HMRC should identify them if they become employed in the UK, which leads the SLC to categorise these borrowers as not earning enough to repay. But the SLC does not have evidence that they are not, for example, working overseas. If these borrowers are not counted as being in a repayment channel, the proportion of borrowers in a repayment channel falls from 99 to 86 per cent (paragraphs 2.8 and 2.11).
- In March 2013, 157,000 borrowers had had no employment record for over a year. The SLC writes to these borrowers at least annually but takes limited further action to pursue them as it judges this would not be cost-effective. By improving information on borrowers, it could make more informed judgements about where to invest to maximise recovery (paragraphs 3.15 to 3.18).

13 **The SLC has faced challenges in collecting mortgage-style loans.** Two tranches of mortgage-style loans were sold in 1998 and 1999, leaving a residual loan book of poorly-performing loans. While the SLC tried to contact all borrowers with overdue repayments, BIS and the SLC decided not to pursue litigation for debts where they judged there would be a low likelihood of recovery. Consequently, some borrowers neither made repayments nor acknowledged their debt within a six-year period. As a result, £127 million may become 'statute-barred' meaning that the borrowers would not legally have to repay the loans. BIS informed us that, to date, £2 million has become uncollectable because of this issue (paragraph 2.5).

14 The SLC is not maximising recovery of overdue repayments on income-contingent repayment loans. For borrowers living overseas, the SLC collects repayments directly rather than through the tax system. At March 2013, 14,000 borrowers living overseas were behind on their loan repayments. While recognising this group is small compared to the total number of borrowers, the SLC could take a more targeted approach to collection of these arrears. For example, it does not prioritise these debts by value or age, or tailor its collection approach by previous repayment behaviour or likely ability to repay. The SLC has successfully used debt collection agencies to improve returns but currently uses agencies to recover only the most difficult to collect debt (paragraphs 3.13 to 3.14).

Forecasting repayments

15 BIS's projections of annual loan repayments have consistently been higher than amounts collected. Reliable forecasts of repayments are required for a robust valuation of the loan book. BIS forecasts repayments by using information about graduate earnings to estimate how much of their loans borrowers will be able to repay and how quickly. BIS has faced difficulties in accurately forecasting repayments of these complex loans, and in 2009-10 forecasts were nearly 20 per cent higher than amounts collected. BIS has since improved its forecasting methods but still consistently over-forecasts how much it expects to collect annually by around 8 per cent. For example, in 2011-12, BIS's forecast was £111 million higher than the amount collected. BIS has not explained differences between actual and forecast repayments (paragraphs 4.6 to 4.7).

16 BIS recognises that it needs to improve its forecasting. BIS aims to improve forecasting by using more detailed information on borrowers' earnings to project future earnings and repayments. Its current modelling does not include factors that can affect how quickly a borrower's salary will rise, such as the subject they studied or the university they attended. Analysis of the data indicates that there is a correlation between these factors and future earnings (paragraphs 4.12 to 4.15).

Conclusion on value for money

17 Using HMRC's existing tax system brings clear benefits for efficient collection from borrowers who work and pay tax in the UK. BIS, the SLC and HMRC also work together in a joined-up way. But BIS needs to make better use of data to drive its collection strategy and better understand where it could invest to maximise the value of the loan book. Differences between actual and forecast loan repayments indicate that the loan book is not performing as BIS expected.

18 Given the expanding size of the loan book, BIS now needs to take a more energetic and thought through approach to maximising its value to the taxpayer, irrespective of whether it chooses to retain the whole loan book or sell tranches to investors at anything like a fair price. Until BIS has a robust strategy for maximising collection, improves its information on borrowers, and can more accurately forecast how much should be collected each year, it is not well placed to secure value for money.

Recommendations

19 BIS urgently needs to understand how the loan book is performing and how it will perform, when the value of outstanding loans is projected to increase substantially. Our recommendations are set out below:

a **BIS should publish a transparent and readily understandable forecast for the amount it expects to be collected each year and report on any variance.** We recognise that the amounts collected may, in part, differ from forecast due to fluctuations in the economic climate and therefore be beyond BIS's direct control. However, it is important for BIS to explain to what degree it is able to track and account for such variances and demonstrate that it has a good understanding of how the loans are operating.

b **BIS does not currently set a collections performance target to incentivise the SLC and HMRC to maximise recovery of repayments.** To improve accountability, BIS should do the following:

- Ensure targets are transparent and that performance is reported accurately against them.
- Develop a collections strategy and identify specific compliance activities with the SLC and HMRC to deliver against this target. This could include pursuing overdue repayments, establishing whether borrowers are due to repay and reducing the level of older debt.

c **BIS lacks sufficient information on whether borrowers with no current employment record are earning enough to repay their loans.** In particular, BIS should do the following:

- Carry out analysis to better understand the circumstances of borrowers in this category, particularly those who remain without a UK employment record for longer periods, and to assess the level of repayments that may be lost.
- Work with other government departments to develop a strategy for sharing data that provides opportunities to gain information on the circumstances of specific borrowers, for example those who have not had an employment record for long periods. Given the projected size of this public asset, other departments should consider how they can support BIS and the SLC.
- Target borrowers where there is a greater risk that they could be avoiding repayment. For example, those whose degree subjects or universities indicate they are more likely to be earning above the threshold or pursuing careers overseas.

d **Around 14,000 borrowers living overseas are currently behind in their loan repayments.** While this group is small compared to the total number of borrowers, the SLC could learn more from other organisations that collect debt. For example, it could explore whether the following actions could improve efficiency:

- prioritising debts by, for example, value of arrears, total value of loans outstanding, age of debt;
- tailoring its approach by analysing borrowers' previous repayment behaviour; and
- using debt collection agencies more, particularly those with experience in pursuing debtors living overseas.

Part One

The student loan repayments system

1.1 The government introduced student loans in 1990 to support students, initially for living costs. In 1998, the government introduced income-contingent repayment loans where the level of repayments is based on earnings. The loans issued between 1990 and 1998 are known as mortgage-style loans, because borrowers repay a fixed monthly amount over a fixed period. Borrowers do not repay either type of loan unless they earn above a specified threshold.

The differences between income-contingent repayment loans and traditional loans

1.2 Repayments and interest charges on income-contingent loans depend on borrowers' earnings. Therefore, income-contingent repayment loans can be seen as a hybrid between a loan and a tax (**Figure 1**). Unlike for traditional loans, the timing and level of repayments are uncertain, and depend on factors such as economic trends. Any unpaid balance is written off after a specified period.

Figure 1
Income-contingent repayment loans compared with traditional loans

	Income-contingent repayment loan	Traditional loan
Borrowers lent to	English students in UK higher education institutions or EU students in English institutions.	Only borrowers who are likely to be able to repay, based on various factors including credit rating.
Repayments	Depends on earnings and pay period.	Fixed monthly amount.
Repayment term	Until balance reaches zero, or after a fixed period when any remaining balance is written off.	Fixed repayment period.
Interest rate	Variable, depends on economic factors (and borrower's earnings for post-2012 loans).	Fixed or variable, depends on economic factors.

Source: National Audit Office analysis

1.3 Borrowers whose earnings rise at different rates will have different repayment patterns. **Figure 2** overleaf shows an example of the variation in total amounts repaid and interest paid between a doctor and a teacher. Because the level of repayments is based on earnings, some borrowers will not earn enough to fully repay before their loans are written off at the end of the repayment period.

The repayment system

1.4 The Department for Business, Innovation & Skills (BIS) is responsible for ensuring that there is an effective and efficient system for paying out student loans and collecting repayments from English borrowers and from EU borrowers attending English universities (the 'English loan book').[1] The Student Loans Company (SLC) processes applications and pays out student loans, and the SLC and HM Revenue & Customs (HMRC) operate the repayment system (**Figure 3** overleaf). In 2012-13, the SLC and HMRC collected a total of £1.4 billion:

- HMRC collects the majority of all repayments (82 per cent in 2012-13) from borrowers in the UK tax system. In 2012-13, HMRC spent approximately £7 million running and improving student loan repayment processes for all four UK administrations. Using existing tax systems minimises collection costs because employers deduct repayments from pay.
- The SLC collects repayments directly from borrowers with mortgage-style loans and from income-contingent repayment borrowers not in the tax system, for example those living overseas. It also keeps records on borrowers, and traces and contacts those who are missing. In 2012-13, the SLC spent around £16 million maintaining and collecting income-contingent repayment loans and a further £4 million on mortgage-style loan collection.

1.5 Between 1990 and March 2013, the SLC paid out £4 billion of mortgage-style loans and £51 billion of income-contingent repayment loans. Loans become due for repayment in the April after the borrower graduates. Of the income-contingent repayment loans paid out since 1998, £37 billion relates to borrowers who graduated before April 2013. By March 2013, the SLC and HMRC had collected £7 billion of income-contingent repayment loans, and the SLC had collected £3 billion of mortgage-style loans.

1 The administrations of Wales, Scotland and Northern Ireland are responsible for collecting loan repayments from borrowers domiciled in those countries or from EU borrowers attending higher education institutions there. The system works in the same way for all UK borrowers attending UK institutions. EU students can take out loans for tuition fees only.

Figure 2
Examples of typical career repayment profiles

	Doctor	**Teacher**
Years studied	Five	Three
Present value of total loan (£)	71,000	40,000
Approximate earnings path in current prices	£25,000 for first 2 years, followed by £50,000 and rising over 30 years to £80,000	Starting salary around £23,000, rising over 30 years to £40,000
Loan repaid after	Around 25 years	Never finish repaying
Present value of total amount repaid (£)	79,000	20,000
Effective interest paid in current prices (£)	8,000, approximately 11 per cent of original loan	None, as remaining balance and all interest is written off after 30 years

Notes

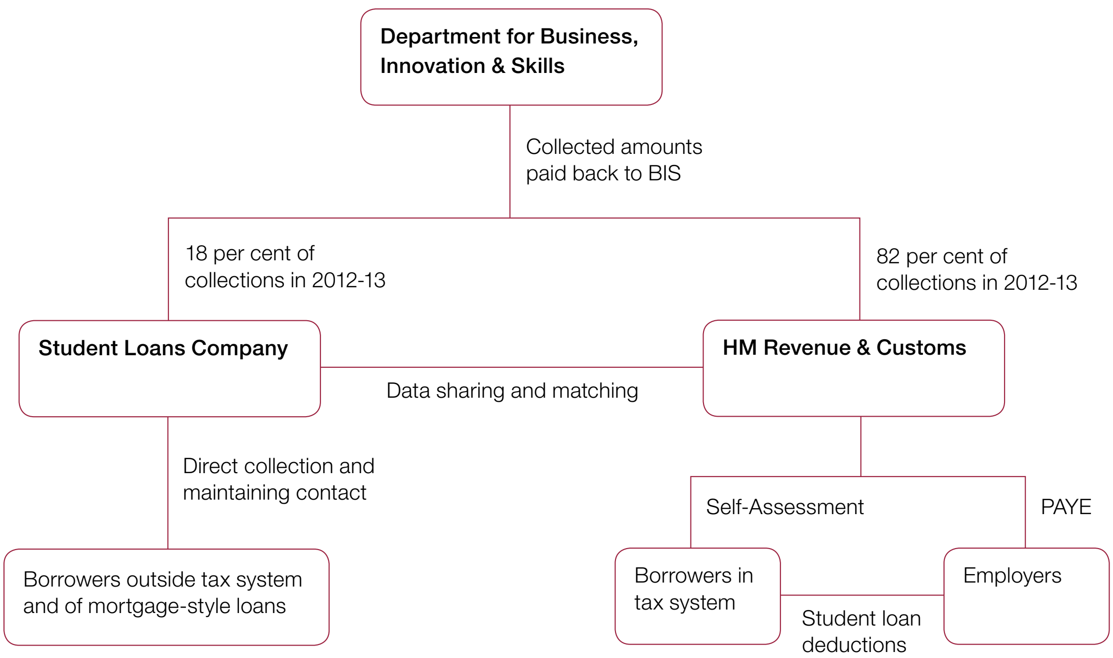
1 These examples and the associated borrowings and earnings are indicative only.

2 Inflation, earnings growth and discount rates are those BIS uses in its forecasting.

3 Student loans do not necessarily cover the full cost of education. For example, the cost of educating a medical student is higher than the tuition fee alone, and is covered by a teaching grant from BIS.

Source: National Audit Office analysis

Figure 3
Overview of the collection system



Source: National Audit Office analysis of Student Loans Company information

Growth in borrowing

1.6 Total amounts borrowed and repaid have grown as new students have taken out loans each year and as the government has made further changes to student funding. Introducing loans for tuition fees in 2006 particularly accelerated the growth of the loan book (**Figure 4** overleaf).

1.7 The level of outstanding loans is projected to increase further, from £46 billion in 2013 to £200 billion by 2042, in 2013 prices. Changes to higher education funding in England and Wales from 2012 included:

- higher tuition fees funded through student loans;
- a new earnings threshold of £21,000. The threshold for pre-2012 loans is currently £16,365;
- earnings-dependent interest rates; and
- an increase in the repayment period from 25 to 30 years, after which any remaining balance is written off.

The government also introduced loans for part-time students and for adult learners on further education courses.

Growth in the amount the government does not expect to be repaid

1.8 Because of the nature of the loans, the government does not expect all loans to be repaid. At March 2013, the total value of outstanding loans was £46 billion (including accrued interest), of which BIS expects £31 billion to be repaid. Following the changes the government introduced in 2012, borrowers are forecast to borrow more and repay more slowly due to the higher earnings threshold, so a smaller proportion of borrowers are expected to fully repay their loans. BIS estimates that up to half of borrowers with post-2012 loans will not finish repaying their loans before they are written off after 30 years.

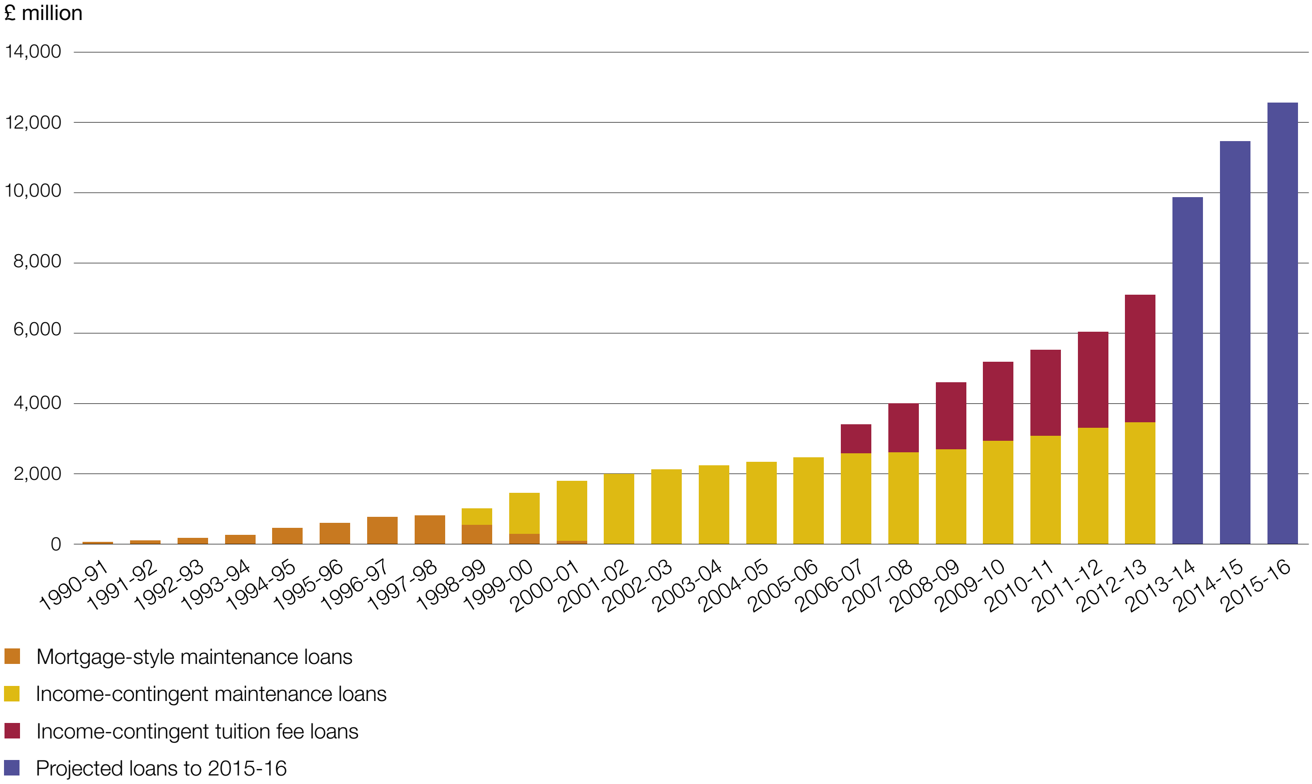
1.9 The proportion of loans BIS does not expect to be repaid is known as the Resource Accounting and Budgeting (RAB) charge, and is increasing.[2] In 2010, the government estimated that the RAB charge on the new loan system would be 28 per cent; in other words, that it expected to write off 28 per cent of the total value of new loans. By 2013, this estimate has increased to 35 per cent, partly because the government decided to increase the earnings threshold annually, and partly owing to changes in economic growth forecasts and average tuition fees. If the RAB charge continues to increase, it may reach a level above which student funding becomes more expensive than it was before the reforms. Commentators estimate this level to be 47 per cent.[3]

2 The RAB charge represents the cost to the government of issuing the loans and is excluded from the valuation of the loan book. It is calculated as the face value of loans made in any one year less the value in today's terms of expected repayments.

3 J Thompson and B Bekhradnia, *The government's proposals for higher education funding and student finance – an analysis,* Higher Education Policy Institute, November 2010.

Figure 4
Growth in student loans paid out by academic year

Student loans have grown each year since 1990



Notes

1 Amounts relate to the English loan book only.

2 Amounts for 2012-13 are provisional.

Source: National Audit Office analysis of Department for Business, Innovation & Skills and Student Loans Company data

Selling part of the loan book

1.10 In November 2013, the government announced the sale of the mortgage-style loan book. BIS is also preparing to sell early cohorts[4] of the income-contingent repayment loan book, and will take a sale decision in due course. Income-contingent loans have features that will affect an investor's valuation, such as the following:

- Future graduate earnings are affected by wider economic factors. Repayments are not made over a fixed term, and could be made earlier or later than expected, creating uncertainty in cash flows and recoverability.
- BIS's current proposal is that the repayment mechanism through HMRC and the SLC will remain the same if the loan book is sold. In this situation, the private buyer would have limited opportunity to use alternative debt-collecting methods to increase expected income and reduce credit risk.
- The market has not encountered income-contingent loans. Investors may initially overestimate the risks.

1.11 In Part Two of this report we examine performance, and whether accountability arrangements incentivise the SLC and HMRC to maximise collections; in Part Three we assess whether there is a robust collection strategy to improve performance; and in Part Four we examine whether BIS can accurately forecast future repayments.

4 Cohort refers to the year the borrower enters the repayment system.

Part Two

Accountability, targets and repayment performance

2.1 This part examines collection performance and whether accountability arrangements designed by the Department for Business, Innovation & Skills (BIS) incentivise the Student Loan Company (SLC) and HM Revenue & Customs (HMRC) to maximise collections. It covers:

- the way that BIS has designed targets, and the SLC's and HMRC's performance against them; and
- our assessment of whether the targets are designed effectively, and whether there are any gaps.

SLC and HMRC's performance against targets

2.2 BIS has designed targets intended to ensure that all borrowers who are earning enough to repay their loans are doing so. BIS aims to incentivise the SLC to get borrowers into a 'repayment channel'. BIS defines this group as:

- borrowers who are repaying their loans on time; and
- borrowers who do not yet need to begin repaying because they are not earning above the threshold.

Borrowers who are not 'in a repayment channel' include borrowers living overseas who are in arrears, or borrowers for whom the SLC judges it does not have sufficient information to determine whether they earn enough to repay.

2.3 In 2012-13, the SLC met three out of four targets for the percentage of borrowers in a repayment channel (**Figure 5**). The SLC failed to meet its target for UK domiciled borrowers living overseas. Against a target of 73.5 per cent, 71.6 per cent of borrowers were in a repayment channel. The targets have become tougher in each of the last three years and 2012-13 was the first year that the target for borrowers living overseas was split between UK and EU borrowers. In 2010-11 and 2011-12, the SLC met all income-contingent repayment collection targets.

2.4 BIS has set adequate targets for HMRC designed to incentivise quick and accurate information processing and repayment collection through the tax system, and HMRC met all of these targets in 2012-13 (Figure 5). These targets have become tougher since 2010-11, and HMRC has consistently met them.

Figure 5
SLC and HMRC's reported performance for all UK student loans

Responsible body	Target description	2012-13 target	2012-13 performance	Achieved
SLC	Borrowers in a repayment channel (UK and EU – incoming cohort)	≥ 96.4%	97.54%	✔
SLC	UK resident borrowers in a repayment channel (past cohorts)	≥ 98.5%	99.10%	✔
SLC	Past cohorts in a repayment channel – UK borrowers who have moved overseas	≥ 73.5%	71.55%	✗
SLC	Past cohorts in a repayment channel – EU borrowers who have moved overseas	≥ 53.5%	56.71%	✔
HMRC	Time for new borrowers to start repayments	< 1.4 months	1.19 months	✔
HMRC	Delay in borrowers restarting repayment after changing job	< 1.3 months	1.14 months	✔
HMRC	Employed borrowers having deductions taken correctly and accurately, from a random sample	≥ 98%	100%	✔
HMRC	Repayment information on employed borrowers issued by HMRC to SLC containing errors	< 5%	2.2%	✔
HMRC	Repayment information on employed borrowers issued by HMRC to SLC by 30 September	≥ 90%	97.7%	✔
HMRC	Self-Assessment returns passed to SLC by March following Self-Assessment return	≥ 75%	86.3%	✔

Notes

1 Repayment targets relate to income-contingent repayment loans only.

2 Performance against these targets, as reported in the SLC's annual report and HMRC's performance reports to BIS, includes the Welsh, Scottish and Northern Irish loan books, which are not reported separately. However, the differences between performance reported here and for the English loan book alone are small.

3 Incoming cohort refers to the group of borrowers who will enter the repayments system the following April, while past cohorts refers to borrowers already in the system.

Source: Information provided by Department for Business, Innovation & Skills, HM Revenue & Customs and the Student Loans Company

2.5 The SLC has faced challenges in collecting mortgage-style loans. Two tranches of mortgage-style loans were sold in 1998 and 1999, and the remaining loans are difficult to collect and aged – all are more than ten years old. While the SLC tried to contact borrowers with overdue repayments, BIS and the SLC decided not to take legal action to pursue debts where they judged there would be a low likelihood of recovery. Consequently, some borrowers neither made repayments nor acknowledged their debt within a six-year period; as a result, £127 million of outstanding loans may become 'statute barred', meaning that legally the borrower would no longer have to repay. BIS informed us that, to date, £2 million has become uncollectable because of this issue.

Adequacy of the SLC's targets

2.6 While the SLC met most of the targets that BIS set in 2012-13 for income-contingent repayment loans, performance against targets does not present a complete picture of repayment performance. At March 2013, BIS and the SLC had recorded 36,400 borrowers as not in a repayment channel due to a lack of earnings information. However, a further 368,000 borrowers also had no current UK employment record (but had paid tax in the past), and had not yet provided other earnings information that would allow the SLC and HMRC to establish whether they were earning enough to repay (**Figure 6** and **Figure 7**).

Figure 6

Repayment status of all English loan book borrowers due for repayment

Repayment status, at March 2013	Borrowers	Borrowers (%)	Remaining debt (£m)	Remaining debt (%)
Fully repaid or cancelled	437,600	14.7	100	0.2
Currently repaying on time	1,157,800	38.9	13,100	39.2
Confirmed not due to repay due to earnings	479,400	16.1	6,400	19.1
Confirmed employed – awaiting next tax return	481,200	16.2	8,200	24.5
Past tax record, but no current UK employment record or other earnings information	368,000	12.4	5,300	15.7
Subtotal: In a repayment channel as defined by BIS	**2,924,000**	**98.3**	**33,100**	**98.7**
Not in a repayment channel – no earnings information	36,400	1.2	300	0.9
Not in a repayment channel – in arrears	13,700	0.5	100	0.4
Total	**2,974,100**	**100.0**	**33,500**	**100.0**

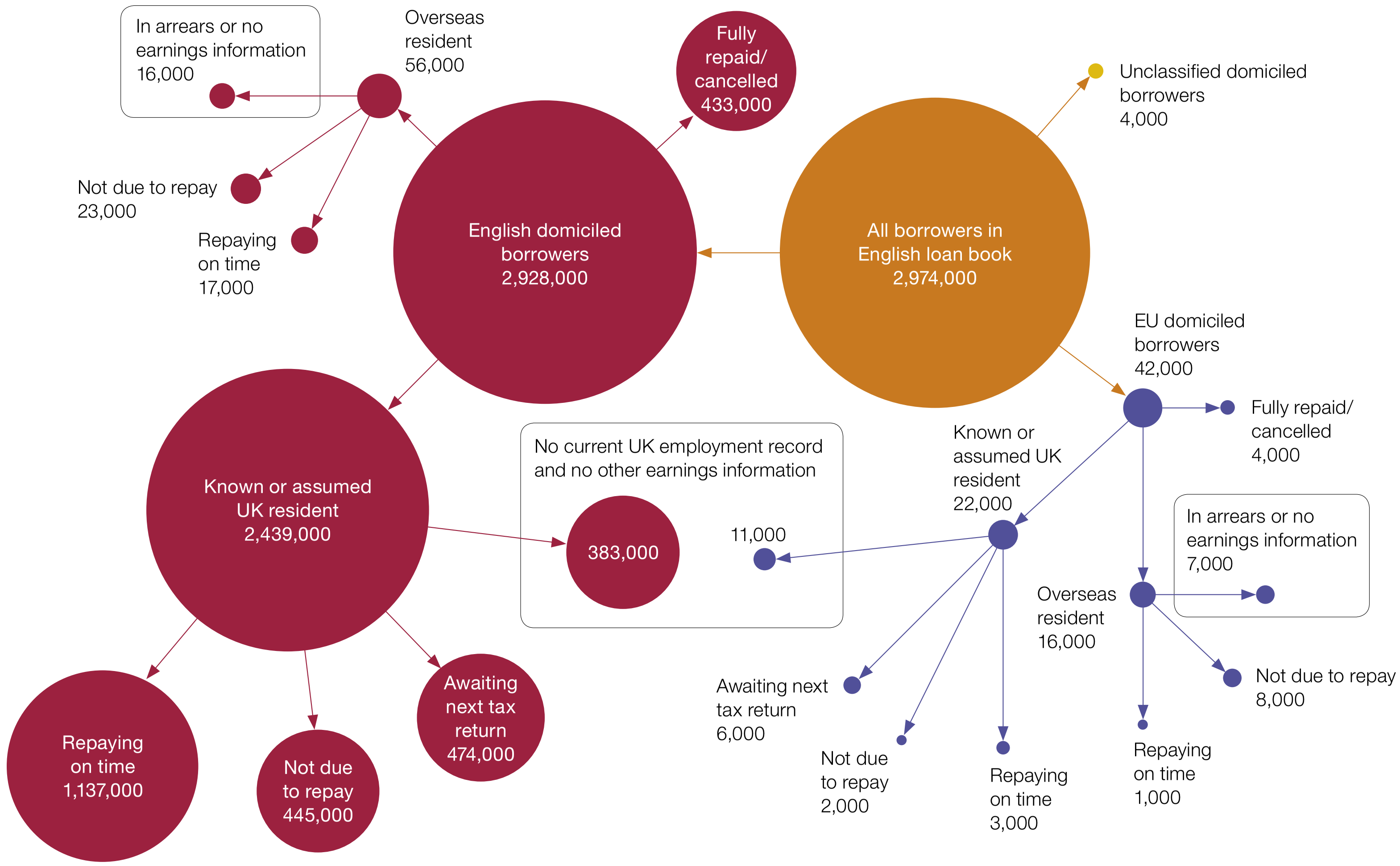
Note

1 Data relates to all English loan book borrowers, including those living overseas, and therefore differs from the presentation in Figure 5.

Source: National Audit Office analysis of Student Loans Company data

Figure 7

Repayment status of all English loan book borrowers due for repayment



Note

1 Data at March 2013.

Source: National Audit Office analysis of Student Loans Company data

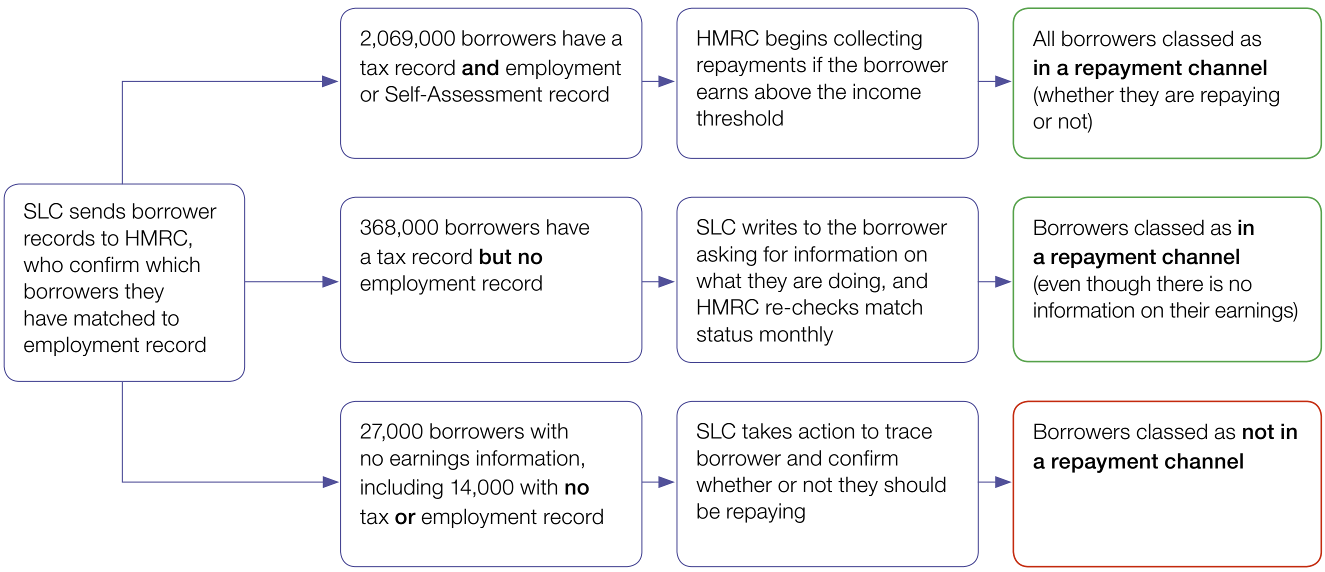
Appropriateness of the targets that BIS has set

2.7 **Figure 8** sets out the process for matching borrowers against HMRC's tax and employment records. HMRC identifies over two million borrowers on its systems as having a current employment record, and collects repayments through the tax system. In March 2013, a small minority, around 14,000, did not match to any HMRC records. A further 368,000 borrowers had previously paid tax in the UK but were not recorded as currently employed. Borrowers move in and out of this group as their working circumstances change, and the SLC and HMRC have processes in place to identify borrowers who begin working in the UK. By September 2013, 149,000 (40 per cent) of the 368,000 borrowers had become employed, while 121,000 borrowers entered this group of borrowers with no current employment record.

2.8 The way BIS has designed the targets means that reported performance is potentially misleading. BIS categorises borrowers with a past tax record but no UK employment record as not earning enough to repay, and counts them towards the 'in a repayment channel' target even though the SLC has not obtained evidence that this is the case. Some of these borrowers could be working overseas or in the hidden economy.

Figure 8

Treatment of borrowers living in the UK with no employment record



Note

1 Data for English loan book borrowers believed to be living in the UK, at March 2013.

Source: National Audit Office analysis of Student Loans Company information

2.9 BIS and the SLC have not done a robust analysis to better understand the circumstances of borrowers with no UK employment record, or estimate how many could be, for example, working overseas. BIS recognises that some borrowers will be working overseas but expects numbers to be small. It also accepts that some may be working in the hidden economy, but relies on HMRC to identify tax evaders who are also avoiding repaying student loans. In Part Three we consider the approach that BIS takes to sharing data with other government departments that may improve analysis of this group.

2.10 Our analysis of research conducted by other organisations suggests that there are borrowers with no UK employment record who may be working in the hidden economy or overseas:

- Around 87 per cent of graduates[5] are estimated to be employed three years after graduation.[6] By March 2013, the SLC and HMRC had confirmed only 82 per cent of borrowers from the 2010 cohort as employed, either in the UK or overseas.
- Up to 6 per cent of graduates are estimated to be living and working overseas in the few years following graduation, but the SLC records only around 2 per cent as living overseas.[7]

2.11 Reclassifying these borrowers would mean that the proportion of borrowers in a repayment channel falls from 99 to 86 per cent (**Figure 9** overleaf). Indicatively, if only 5 per cent of borrowers with a tax record but no employment record (1 per cent of all borrowers) were working overseas and earning above the threshold, the SLC could collect repayments on a total debt of approximately £260 million by pursuing them. The amounts it could actually collect each year would depend on those borrowers' earnings.

2.12 The way that the SLC records borrowers who have finished repaying is also misleading. There are 438,000 borrowers who have finished repaying or had their loan cancelled, but who are also categorised as 'in a repayment channel', despite having no outstanding debt. Performance drops by a further two percentage points if these borrowers are excluded (Figure 9). Their inclusion will have more impact on reported performance in future, as the number of these accounts increases.

5 Note that not all graduates will necessarily be student loan borrowers.
6 Higher Education Statistics Agency, *Destinations of Leavers from Higher Education Institutions Longitudinal Survey 2008/09*, available at: www.hesa.ac.uk/
7 K Purcell, P Elias, G Atfield, H Behle, R Ellison and D Luchinskaya, *Transitions into employment, further study and other outcomes*, Higher Education Careers Service Unit, March 2013.

Figure 9

Design of collection performance targets

Repayment status	As reported by SLC	If no employment record treated as not in repayment	Also removing fully repaid or cancelled accounts
UK resident borrowers in a repayment channel	2,875,259	2,507,225	2,069,643
UK resident borrowers not in a repayment channel	27,124	395,158	395,158
Proportion of borrowers in a repayment channel	**99.1%**	**86.4%**	**84.0%**

Note

1 Data covers English loan book borrowers at March 2013.

Source: National Audit Office analysis of Student Loans Company data

Aspects of performance not covered by targets

2.13 The current targets do not cover some important areas of performance:

- BIS has not set a target for amounts collected. BIS considers it would not be meaningful to set such a target because the level of repayments is affected by graduate earnings and economic factors. Furthermore, it is not able to accurately forecast the repayments it expects each year. This means that, despite the substantial amounts involved, BIS does not analyse whether actual repayments differ from its expectations, or explain any differences. We examine BIS's approach to forecasting repayments, including predictions of graduate earnings and economic conditions, in Part Four.

- Over three-quarters of overdue repayments from income-contingent repayment borrowers living overseas have been overdue for between one and four years. BIS has not set the SLC a target to reduce the age of arrears. Most debt-collecting organisations aim to reduce the proportion of debt that is, for example, over 30 or 90 days old, to prevent old debt from accumulating. This allows them to focus on newer and more collectable debt. BIS has set the SLC a target for the proportion of mortgage-style loan borrowers with arrears less than 24 months old.

- At March 2013, 43 per cent of the 368,000 borrowers with no employment record had had no employment record for over a year, and had not provided information to confirm whether or not they were earning enough to repay. BIS has not set a target to reduce this length of time.

Part Three

Strategy for collecting repayments

3.1 This part examines whether there is a robust collection strategy to improve performance. It covers:

- the Student Loans Company's (SLC's) process management, and how it has worked with HM Revenue & Customs (HMRC) to improve processes;
- our assessment of the SLC's collection strategy, and opportunities to improve processes further; and
- ensuring the collections system can adapt to future changes.

Joint working to improve processes

3.2 Since 2008, the SLC has invested over £5 million in improving the repayment process and HMRC has invested around £2 million. The SLC has made some 30 process changes and judges that half have improved customer service while a third have increased revenue. The SLC has not fully analysed the costs and benefits of all initiatives and has only been able to quantify the benefits in some cases. However, there are some examples of positive results (**Figure 10**).

Figure 10
Examples of SLC and HMRC initiatives

Example	Cost	Comment
In 2009, the SLC introduced direct debit repayment arrangements (Prevent Over-Repayment scheme) for borrowers close to fully repaying, to avoid overpayments through the tax system.	Estimated £400,000	Around 11 per cent of eligible borrowers now use the scheme. Although this is low, SLC records show that the number of borrowers eligible for the scheme who choose to fully repay early is increasing. 13,000 eligible borrowers repaid early in 2011-12, and 16,000 did in 2012-13. The number of borrowers who overpay remains constant at around 50,000.
The SLC has developed its approach for using international debt collection agencies to pursue overseas borrowers.	No additional cost compared with previous arrangements	A new panel of debt collection agencies was appointed in 2012-13, and has increased overseas collections from £119,978 to £658,524.
In June 2009, HMRC introduced a new scheme to ensure repayments were passed to SLC more quickly to update borrower accounts.	£18,000	Processes have become quicker, and HMRC estimates that £480,000 of staff time has been saved to date.

Source: National Audit Office review of Student Loans Company and HM Revenue & Customs documents

3.3 Our work suggested that the SLC, the Department for Business, Innovation & Skills (BIS) and HMRC work together in a joined-up way. BIS manages a series of governance boards that bring the three parties together to monitor and improve the collection system, which also involve the devolved administrations.

SLC's process management

3.4 We examined the SLC's process management practices and found that its approach compares well with other government departments we have examined. The SLC has clearly mapped out its end-to-end processes, and staff understand them. There are opportunities for staff to suggest improvements, and evidence shows that appropriate suggestions are implemented. Staff showed that they understood the strategic objectives their work contributed to, and how their performance was measured.

3.5 However, the SLC could improve its approach to process management. The SLC does not use information to prioritise its workload. For example, the SLC does not use information about the borrower or the value of any arrears to prioritise cases. In particular, we saw staff pursuing very small amounts where the cost of working the case may have exceeded the arrears. We explore these points about prioritising workload in paragraphs 3.14 and 3.17 in relation to specific processes.

Benefits of a robust collection strategy

3.6 In 2013, BIS asked the SLC to carry out a strategic review of its collection process, the first review since 2009. The SLC identified the following strategic objectives:

- Implement measures to maximise collection of repayments due and information about those who are or are not repaying to allow accurate forecasting.
- Improve customer service by making it easier for borrowers to understand repayment arrangements and fulfil repayment obligations.
- Improve the efficiency of the SLC's collections operation.

The SLC proposed initiatives that it judged would improve collection performance and provided estimates of the resources that would be needed.

3.7 The strategic review does not sufficiently demonstrate a robust collection strategy. We would have expected BIS, the SLC and HMRC to have a jointly-owned strategy that is regularly refreshed to reflect the performance improvement they aim to achieve each year. The 2013 review lacks key features that we would expect to see in a strategy:

- The SLC has not yet specified the overall performance improvement it aims to achieve from the strategy, for example the level of increased collections it is aiming for. The previous strategy, developed in 2009, also did not specify a target for performance improvement.

- We would expect a collection strategy to be underpinned by clear evidence and analysis of data. The SLC has begun to prioritise its initiatives, but has not yet carried out detailed cost–benefit analysis. The strategy does not set out how each initiative will contribute to overall performance improvement, or to business as usual.

Opportunities to improve processes and increase repayment performance

3.8 In 2012-13, HMRC collected £1,150 million, 82 per cent of all repayments, through its processes for collecting income tax. Of these repayments, 96 per cent are deducted by employers through the PAYE system and 4 per cent are collected through Self-Assessment (including from self-employed workers). The SLC is responsible for collecting repayments from borrowers who wish to make repayments early, and from overseas borrowers (**Figure 11**).

Figure 11

Bodies responsible for collecting repayments, by type of borrower

Type of borrower	Responsible body	Percentage of borrowers	Outstanding debt (£bn)
Borrowers working and paying tax in the UK	SLC or HMRC identify borrowers in UK tax system; HMRC collects repayments. Some borrowers make voluntary early repayments direct to SLC	38	12.9
Borrowers working overseas	SLC collects repayments directly	2	0.4
Borrowers unconfirmed as earning above the earnings threshold	SLC and HMRC establish whether borrowers are due to repay	14	5.6
Borrowers confirmed as not earning enough to repay	SLC, employers or HMRC to collect repayments when earnings exceed threshold	16	6.4

Note

1 In addition, 15 per cent of borrowers have fully repaid, and 16 per cent are employed but HMRC is awaiting a tax return to confirm if the borrowers are earning above the threshold.

Source: National Audit Office analysis of Student Loans Company information

Repaying through the tax system

3.9 Using the pre-existing tax system is an effective, mostly automated, way of collecting repayments where the SLC can match its borrowers with taxpayers on HMRC's systems. Other countries, such as Australia and New Zealand, collect student loan repayments through tax systems rather than building bespoke systems (Appendix Three).

3.10 HMRC and the SLC are confident that their systems will identify and collect repayments from the majority of taxpayers who are employed or self-employed and earn above the repayment threshold. The SLC sends HMRC a list of borrowers due to repay, which HMRC matches against its tax systems. HMRC identifies borrowers by their National Insurance numbers and, since 2003, all UK borrowers must have a verified National Insurance number before receiving a loan.[8] HMRC instructs employers of 'matched' borrowers to make student loan deductions if they are not already doing so. HMRC runs a monthly matching process to identify any borrowers who have begun working more recently.

3.11 Sometimes repayments may be missed in the short term when a borrower changes employment. Employees are obliged to tell new employers to make deductions but do not always do so, in which case the employer may not know they need to make student loan deductions until instructed by HMRC. HMRC may not learn of the employment until the end of the tax year. Employers will not collect repayments due on earlier earnings, and HMRC cannot retrospectively collect missed repayments.

3.12 Planned changes to the tax system should provide opportunities to reduce delays in collecting repayments, but BIS and the SLC have not yet developed a detailed approach to maximising the benefits. The introduction of real-time information (where employers will provide HMRC with earnings information on individual employees monthly rather than annually) will allow the SLC and HMRC to update their records monthly and notify new employers to make deductions quicker. Although real-time information is not expected to be fully embedded until 2017, the three organisations have begun initial work to secure benefits within a shorter time frame.

Repaying directly to the SLC

3.13 In 2012-13, 18 per cent of repayments were made directly to the SLC (Figure 3). Around 2 per cent of borrowers live overseas so repay directly to the SLC. The SLC also receives voluntary early repayments and collects repayments from borrowers eligible to repay by direct debit because they have nearly finished repaying.

8 Most EU borrowers do not have a National Insurance number until they begin employment, and there is no alternative reference number.

3.14 Although a small proportion of borrowers live overseas, the SLC could do more to pursue overdue repayments. One-third of borrowers living overseas (14,000 owing over £100 million) are in arrears. The SLC tries to contact these borrowers by phone, and proceeds to litigation in a very small number of cases where it considers it cost-effective to do so. We and the Committee of Public Accounts have previously recommended ways that HMRC could improve tax debt recovery.[9] Although the SLC faces different challenges, there are opportunities to learn from HMRC and other organisations that collect debt:

- The SLC does not tailor its collection of arrears by, for example, value of arrears, value of total debt or age of debt. Rather, the timing of action may be based on, for example, the elapsed time since the borrower was last contacted.
- The SLC currently takes a uniform approach to pursuing borrowers with arrears. Other debt-collecting organisations collect and analyse information on debtors, which allow them to tailor their approach according to previous repayment behaviour or likelihood of paying.
- The SLC uses debt collection agencies to recover only the most difficult-to-collect debt (Figure 10). In 2012-13, over 10,000 income-contingent repayment loans worth £30 million were outsourced to a panel of international private agencies. The SLC appointed a new panel during 2012-13, which increased returns from 0.8 to 5 per cent. The SLC could improve returns further by referring more debt to private agencies at an earlier stage.
- The SLC plans to introduce new technology at its call centre to further improve efficiency in handling inbound and outbound phone calls.

Confirming whether borrowers are due to repay

3.15 In March 2013, 404,000 borrowers had no current UK employment record (including 368,000 borrowers who previously paid tax), and had not provided other earnings information that would allow the SLC and HMRC to establish whether they were earning enough to repay (as covered in Part Two). The SLC writes to these borrowers regularly asking them to confirm employment and earnings details, and the SLC and HMRC have processes in place to identify borrowers who begin working in the UK. The SLC also recently contacted 4,500 borrowers by text message to prompt them to provide information and achieved a response rate of 25 per cent.

3.16 Although many borrowers move in and out of employment, the SLC could benefit from regularly analysing those who persistently have no employment record. SLC data shows that many of the 368,000 borrowers had no employment record for long periods of time – 63,000 borrowers for between one and two years, and a further 94,000 borrowers for more than two years.

9 Comptroller and Auditor General, *HM Revenue & Customs: Management of Tax Debt*, Session 2007-08, HC 1152, National Audit Office, November 2008.

3.17 BIS and the SLC could seek better information on borrowers who have lacked an employment record for long periods. They could work with other government departments to develop a strategy to share data and identify borrowers most likely to be able to repay. BIS and the SLC are in the early stages of work with the Department for Work & Pensions to share data that will allow the SLC to establish which borrowers are living in the UK on benefits and therefore not earning enough to repay. BIS has also approached the UK Border Agency[10] (to track borrowers leaving the country) and is considering data sharing with health services (borrowers using UK health services could be assumed to be living in the UK), but has not yet started detailed discussions.

3.18 The SLC could use data it already collects to identify borrowers more likely to be able to repay. Tracing all 404,000 borrowers would require more resources than may be available, and many may not be earning enough to repay. However, the SLC could target those more likely to be earning enough, such as borrowers who have studied subjects or attended institutions that are linked with higher earnings. For example, our analysis indicates that borrowers who studied subjects such as medicine or engineering are more likely to be able to repay (**Figure 12**). Some of these borrowers may be working overseas. The SLC could consider carrying out more intensive tracing activity on these borrowers.

Providing a service to borrowers

3.19 The SLC has improved customer satisfaction but around a fifth of repaying borrowers remain unsatisfied. The SLC is responsible for dealing with all borrowers' queries, including those repaying through the tax system. The SLC has improved customer satisfaction of repaying borrowers from 67 per cent in 2010-11 to 78 per cent in 2012-13. The SLC introduced the Prevent Over-Repayments scheme to prevent borrowers from overpaying when they reach the end of their loan repayment (Figure 10). Take-up has been limited, although evidence indicates that the scheme has prompted more borrowers to fully repay their loans.

3.20 The SLC recognises that improving its online applications could improve services for borrowers:

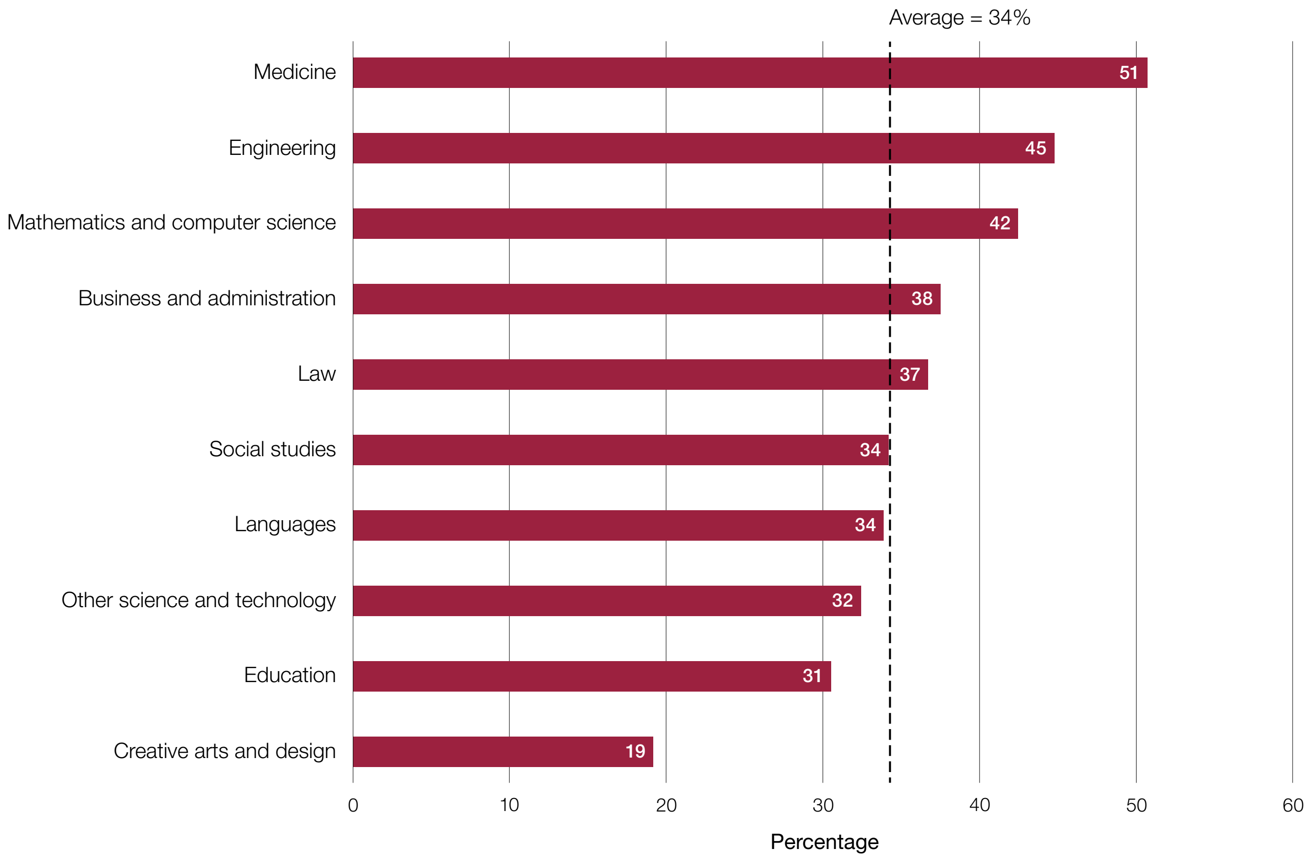
- The SLC has extended the range of ways that borrowers can get in contact and make repayments, but options for overseas borrowers remain limited. Borrowers living overseas can contact the SLC by email, access forms to confirm their employment and earnings, and email completed forms. However, the forms are not online applications, so borrowers need to print, manually complete and scan the forms.

- Borrowers cannot access an up-to-date account statement, either over the phone or online, and the SLC has work under way to address this.

10 From 1 April 2013 the UK Border Agency ceased to exist and now operates as part of the Home Office.

Figure 12
Percentage of loans taken by 2005 cohort repaid by March 2012, by subject

Amounts repaid vary significantly by subject



Notes
1 These borrowers became eligible to repay in 2005.
2 Subject categorisations are based on those recorded by the SLC.
3 Figures do not sum due to rounding.

Source: National Audit Office analysis of Student Loans Company data

Making sure processes can adapt to changes

3.21 The 2012 changes to student funding will lead to increased numbers of borrowers and more complex processes. Repayment will take longer and so the number of borrowers repaying their loans will increase significantly. By 2020, the number of English loan book borrowers with outstanding debt will be 5 million, compared with 3 million borrowers in 2012-13. This will rise to 6.5 million by 2042. The greater complexity of post-2012 loans will also result in new process requirements, such as earnings-dependent interest rate calculations.

3.22 BIS, the SLC and HMRC have work under way to handle such changes:

- The SLC is working with the Government Digital Service on its core systems replacement project. The SLC plans that the project will support increased volumes and process requirements. HMRC has also assessed its IT systems and concluded that they will be sufficient to cope with projected borrower numbers and collection levels. HMRC has work under way to deal with the increased complexity of post-2012 loans. Both the SLC and HMRC expect their IT projects to be complete in time to begin collecting repayments on the new loans in 2016-17.
- BIS and the SLC are also working with the Cabinet Office on its cross-government unresolved debt project. This project, which is in early stages, aims to support departments in tackling unresolved debt and reduce the debt owed to government.

Part Four

Forecasting repayments

4.1 This part examines the Department for Business, Innovation & Skills (BIS's) approach to forecasting student loan repayments. It covers:

- BIS's approach to forecasting repayments;
- analysis comparing forecast to actual repayments; and
- our assessment of BIS's forecasting, and how BIS is changing its approach.

4.2 Forecasting of future repayments is an essential tool for BIS's financial planning. It is important that BIS understands and accurately projects repayments into the future, given the scale and growth of student loans. Forecasting has limitations, however, as projections are based on complex and often uncertain assumptions.

BIS's approach

4.3 BIS uses a model named 'HERO' to forecast repayments of income-contingent repayment loans. The model uses historic wage data to estimate the profile of individual borrowers' lifetime earnings, based on characteristics such as gender and age. This helps BIS estimate how much of the borrower's loan will be repaid and how quickly this will occur. This is used to produce the Resource Accounting and Budgeting (RAB) charge, which is the proportion of loans issued that BIS does not expect to be repaid.

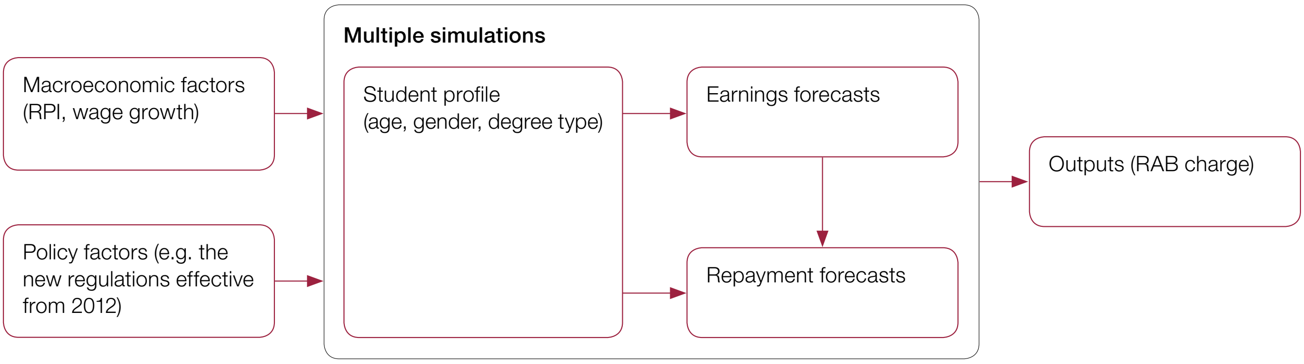
4.4 Since the government introduced student loans in 1990, BIS has refined its forecasting methods for loan repayments. Initially, BIS used the Student Loan Repayment Model (SLRM), developed in the early 1990s. In 2010, BIS concluded that this model was not fit for the purpose of selling the loan book, because it did not have sufficient functionality to support the sale process. BIS commissioned Deloitte, at a cost of approximately £300,000, to build a model that would be suitable for assessing the feasibility of a potential sale, and for comparing model outputs with actual repayments. The HERO model was implemented in June 2011.

4.5 The model uses a number of input assumptions to generate an earnings profile for each borrower and estimate the rate at which debt is repaid. The assumptions that most influence these predictions are forecast macroeconomic factors[11] and historic data on wages and wage growth for graduates (**Figure 13**):

- The HERO model uses forecast earnings growth, inflation and interest rates to determine the macroeconomic inputs. These projections are taken from the Office of Budget Responsibility's (OBR's) quarterly forecasts and assumptions about long-term productivity growth and inflation.

- Forecasting graduate earnings is subject to significant uncertainty. The model uses evidence from the Labour Force Survey (LFS)[12] and British Household Panel Survey (BHPS)[13] as well as Student Loans Company (SLC) data to predict borrowers' future earnings. BIS uses the data to determine what earnings percentiles individuals will be in the next year based on their current percentiles. It takes into account age, gender and degree type (for example, first degree, sub degree or PGCE).

Figure 13
A simplified description of the HERO model



Notes

1 The model performs simulations of earnings and repayment profiles for a sample of borrowers. The results are then aggregated and scaled up for the whole portfolio of income-contingent repayment loans.

2 The RAB charge is the portion of loans that the Department for Business, Innovation & Skills does not expect to be repaid.

Source: National Audit Office analysis of HERO model and supporting information

11 Macroeconomic factors are those that relate to the performance and behaviour of the national and global economies as a whole, rather than individual industries.

12 LFS is the largest household survey in the UK conducted by the Office for National Statistics and contains extensive information about labour market circumstances of individuals.

13 BHPS is a longitudinal annual survey of British households by the Institute for Social & Economic Research, which aims to understand social and economic change.

Comparison of repayments with annual forecasts

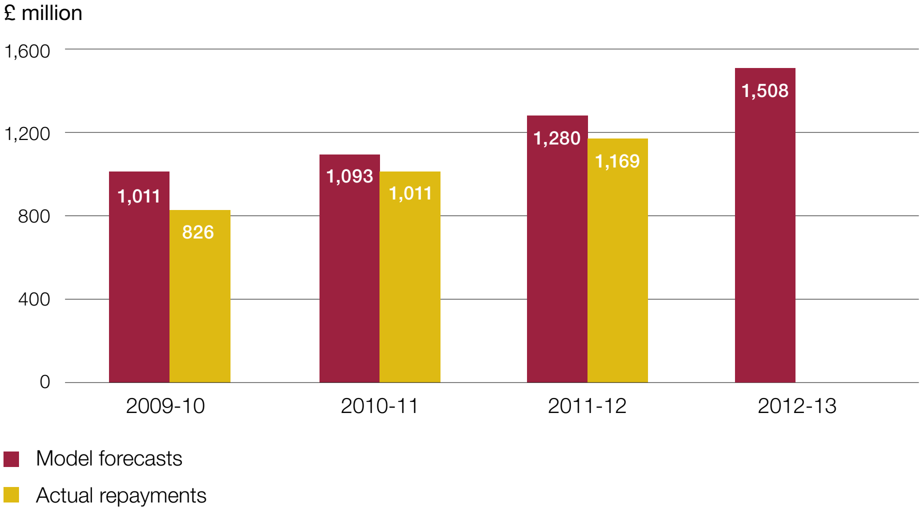
4.6 As student loans have become more complex, BIS has found it increasingly difficult to forecast repayments. In 2011, BIS analysed the difference between forecast repayments and actual amounts collected, and found that by 2009 the gap had grown to 17 per cent, approximately £150 million in 2008-09.

4.7 Forecasting has improved since the HERO model was introduced, but BIS still consistently over-forecasts repayments. BIS does not regularly compare actual repayments to forecasts, and does not analyse the reasons for any variance. We updated the comparison between model projections and actual repayments beyond 2009-10. Actual collections were approximately 7 to 9 per cent lower than forecast in 2010-11 and 2011-12 (**Figure 14**).

Figure 14

Comparison of model forecasts to actual repayments

Forecast repayments remain higher than those collected



Notes

1 Data excludes voluntary early repayments, which are more volatile and difficult to forecast, and only includes repayments based on earnings.

2 Actual repayments are taken from published SLC data from 2012 and 2013. Actual data for 2012-13 is not yet available, as HMRC confirmation takes place later due to processes in the tax systems.

3 Forecasts were made by BIS using the HERO model developed by Deloitte in 2011, excluding 2009-10 which was produced using the Student Loan Repayment Model.

Source: National Audit Office analysis of the Department for Business, Innovation & Skills and Student Loans Company data

Assumptions in the model

4.8 We assessed the assumptions BIS uses to forecast repayments.

Macroeconomic assumptions

4.9 Macroeconomic factors, such as economic growth and inflation, are important in estimating future repayments. To test the reasonableness of the macroeconomic forecasts that BIS uses, which originate from the OBR, we examined the effect of using forecasts provided by other organisations. Re-performing modelling using determinants from the Bank of England and the International Monetary Fund resulted in a slightly lower RAB charge and higher value of loan repayments than BIS's own estimate (**Figure 15**). Although this demonstrates that BIS is using the most prudent determinants available, these will not necessarily fully reflect the economic climate.

Future earnings assumptions

4.10 The assumptions used in the HERO model to forecast graduate earnings and earnings growth may be optimistic. Due to data availability, the model relies on an assumption that wage growth for graduates observed in the last three decades will continue to apply:

- Assumptions about earnings mobility are based on data from an economically benign period, 1991 to 2008. The model assumes that the same trends will apply in future, but research indicates that upwards mobility has decreased.[14]
- The model draws on graduate earnings distributions from an economically benign period, 2001 to 2009, and assumes that the same distributions will apply in future. The proportion of young people attending university in this period was also lower than it is in 2013. There is evidence that average pay for graduate jobs has dropped, as more lower-paid jobs now require graduate qualifications.[15]

4.11 The model assumes that earnings growth is uniform throughout the earnings distribution, but evidence indicates that earnings growth is higher for higher earners,[16] and varies depending on subject studied or university attended. Furthermore, the model overestimates the earnings of older cohorts because it does not exclude high earners who have finished repaying from its earnings projections.

14 P Oreopoulos, T von Wachter and A Heisz, 'The Short- and Long-Term Career Effects of Graduating in a Recession', *American Economic Journal: Applied Economics*, vol. 4 issue 1, January 2012, pp. 1–29.
15 M Brynin, 'Individual Choice and Risk: The Case of Higher Education', *Sociology*, vol. 47 issue 2, April 2013, pp. 284–300.
16 F Green and Y Zhu, 'Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education', *Oxford Economic Papers*, vol. 62 issue 4, 2010, pp. 740–63.

Figure 15

Effect of different macroeconomic assumptions on the RAB charge

	RAB charge						Loan book value
Source	**2005-06 (%)**	**2006-07 (%)**	**2007-08 (%)**	**2008-09 (%)**	**2009-10 (%)**	**2010-11 (%)**	**2012-13 (£bn)**
Office for Budget Responsibility	27.9	31.2	33.1	34.7	35.3	36.4	28.09
Bank of England	28.1	31.2	33.0	34.5	35.0	35.9	28.15
International Monetary Fund	25.9	28.9	30.6	32.1	32.6	33.4	29.17

Notes

1 Simulation of 100,000 student earnings profiles carried out using the 2013 HERO model and medium-term assumptions from each forecasting organisation.

2 The loan book value is the present value of forecast future repayments.

Source: National Audit Office analysis using the HERO model

Other issues with the HERO model

4.12 BIS could consider using more of the SLC's data on borrowers to improve the accuracy of its forecasting. The model accounts for some borrower characteristics, such as age, gender, degree type, but does not use data that the SLC holds on the higher education institutions borrowers attended or the subjects they studied. The technical paper accompanying this report explores the potential benefits of BIS including this data in its modelling.

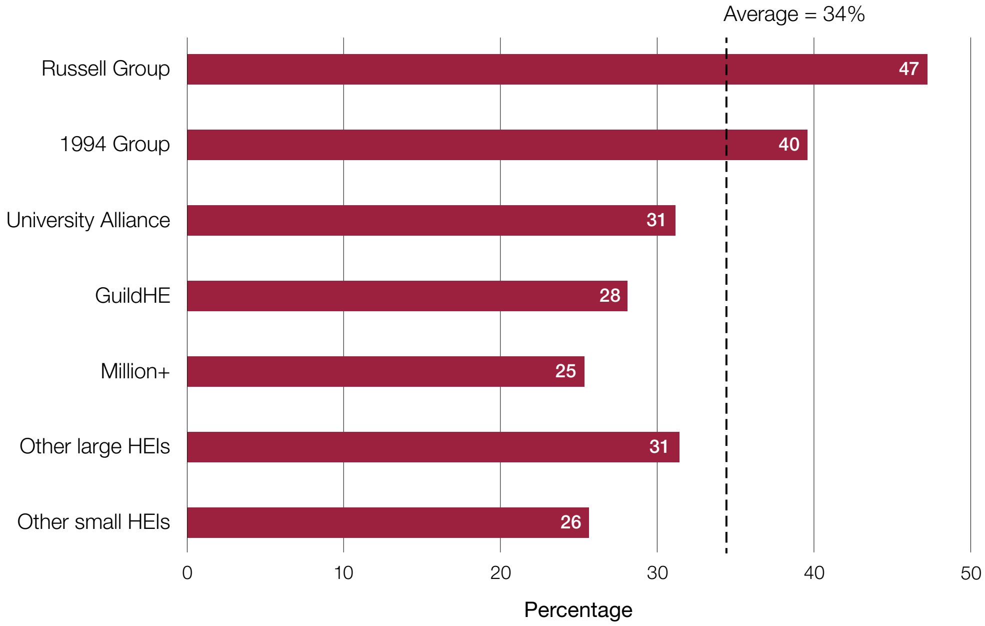
4.13 Our analysis indicates that there is a correlation between institution attended or subject studied and the probability of loan repayment. For example, the proportion of loans repaid by borrowers who attended Russell Group[17] universities is 13 percentage points higher than average (**Figure 16** overleaf). This does not factor in the prior attainment or circumstances of the borrowers, and is therefore not an analysis of the added value of attending certain universities. Similarly, the proportion of loans repaid by borrowers who studied medicine is 17 percentage points higher than average (Figure 12). Our analysis finds that these differences are statistically significant when controlling for age, gender and degree type, and that these factors also affect earnings growth. There may also be a correlation between level of degree achieved and ability to repay, although the SLC does not hold this data.

17 The Russell Group is a group of 24 universities (see Appendix Two) that aims to be at the forefront of British research.

Figure 16

Percentage of loans taken by 2005 cohort repaid by March 2012, by higher education institution group

Amounts repaid vary significantly by institution



Notes

1 We have not explored the causation of these trends, or the prior attainment or circumstances of the borrowers. The figures should therefore not be viewed as an analysis of the added value of attending certain universities.

2 These borrowers became eligible to repay in 2005.

3 More information on the five named groups is seen in Appendix Two. Other institutions are categorised as large if they have more than 2,000 borrowers.

4 Figures do not sum due to rounding.

Source: National Audit Office analysis of Student Loans Company data

Changes to the modelling approach

4.14 To indicate significant uncertainty in valuing student loans, we included an emphasis of matter on our audit opinion on BIS's annual accounts 2012-13. This recognises that, given the long-term nature of recovery of the loans and the number and volatility of the assumptions underpinning their valuation, considerable uncertainty remains over recoverable amounts. BIS recognises this uncertainty, and that there is scope to improve its modelling approach. In particular, the current HERO model is not fit for the purposes of a sale of the income-contingent repayment loan book.

4.15 BIS aims to have developed an improved forecasting model by spring 2014. In 2012, BIS commissioned Deloitte, at a cost of £95,000, to improve the methodology for forecasting future earnings profiles. In January 2013, Deloitte proposed an updated approach, which uses more years of borrowers' earnings histories to inform projections. Having taken advice from internal and external experts, BIS decided not to implement Deloitte's proposal. BIS is instead developing a new model, with a different approach to borrowers' earnings histories, using their own analysts. This upgrade focuses on graduate earnings paths – the changes in earnings from one year to the next – and also updates other assumptions such as the probability of death or disability.

Appendix One

Our audit approach

1 This report provides our independent opinion on whether the system for the collection of student loan repayments, as designed by the Department for Business, Innovation & Skills (BIS) and operated by the Student Loans Company (SLC) and HM Revenue & Customs (HMRC), is currently value for money, and whether the departments are ready for future challenges.

2 We developed our own evaluative framework to assess value for money, which considers what arrangements would be optimal for maximising loan collection in a cost-effective way. By 'optimal' we mean the most desirable possible, while acknowledging expressed or implied restrictions or constraints. A constraint in this context is that repayments for income-contingent repayment loans are based on earnings and do not begin until a borrower is earning above a specified threshold.

3 Our audit approach is summarised in **Figure 17**. Our evidence base is described in Appendix Two.

Figure 17
Our audit approach

The government's objective

The government's main objective is to maximise collection of student loan repayments in a cost-effective way.

How this will be achieved

The SLC, under the direction of BIS, aims to ensure it has accurate information on borrowers, so that repayments can be collected by the SLC and HMRC from those borrowers who are due to repay.

Our study

This study examined whether the system is currently value for money, and whether the departments are ready for future challenges.

Our evaluative criteria

Targets and accountabilities that clearly incentivise strong collection performance from the SLC and HMRC.

A robust, data-driven strategy that supports cost-effective collection processes and prepares BIS, the SLC and HMRC for future challenges.

Robust forecasting of future repayments, based on appropriate data and reasonable assumptions.

Our evidence

(see Appendix Two for details)

We assessed whether targets are effective and incentivise good performance by:

- examining **key documentation**;
- reviewing the SLC and HMRC's **performance against agreed targets**;
- carrying out **our own analysis of performance data** to assess SLC against alternative measures; and
- conducting **interviews** with BIS, SLC and HRMC.

We assessed whether collection strategy and processes are robust by:

- examining **key documentation**;
- examining **how BIS, the SLC and HMRC assess the impact of future changes**;
- conducting **interviews** with BIS, the SLC and HMRC;
- assessing **the SLC's process management**; and
- reviewing **related NAO work**.

We assessed the quality of BIS's repayment forecasts by:

- assessing the **inputs and assumptions** used in BIS's modelling;
- performing **our own analysis of the SLC repayment data**;
- reviewing **academic literature**;
- examining **reviews that BIS has commissioned**, including from its internal analysts; and
- evaluating the **historic accuracy** of BIS's forecasts.

Our conclusions

While using existing tax systems to collect loan payments provides better value for money than creating a bespoke system, value for money could be improved by:

- using detailed borrower data to improve forecasting of future repayments and target collection activities on borrowers most likely to repay;
- sharing data with other government bodies to help identify and locate missing borrowers; and
- setting and defining targets that more robustly incentivise good performance and maximise collection.

Appendix Two

Our evidence base

1 Our independent conclusions on whether the system for the collection of student loan repayments is value for money were reached following our analysis of the information and data we collected. Our fieldwork took place between May and August 2013.

2 We developed and applied our own evaluative framework to consider what arrangements would be optimal for maximising repayment collection in a cost-effective way. Our audit approach is outlined in Appendix One.

3 We examined whether the targets that BIS sets for the SLC and HMRC incentivise good collection performance:

- We examined **key documentation** covering governance arrangements, the Memorandum of Understanding between the three organisations, the SLC's balanced scorecard and annual report, and other accountability documentation. These were used to build an understanding of what targets the SLC and HMRC are set and how they are held to account over them.
- We reviewed the **SLC and HMRC's performance against agreed targets**, and tested underlying data to ensure these are calculated appropriately.
- We carried out **our own analysis of repayment data from the SLC**, to determine how the SLC and HMRC perform against alternative measures. This included summary data of the number of borrowers and outstanding balance by cohort across 41 different repayments statuses. The majority of our analysis was based on data as at March 2013, but we also used data as at April 2011 and May 2012.
- We conducted **semi-structured interviews** with BIS, the SLC and HMRC to understand the targets, how they are set, and how they are monitored. We triangulated this with evidence from our document review and data analysis to form a view on whether the targets in place are effective, and whether there are any gaps.

4 We examined whether the SLC's collection strategy is data-driven, supports cost-effective collection processes, and understands future challenges:

- We examined **key documentation** covering the SLC's strategic review, process improvements made in the last five years, and other strategic papers and communications between BIS, the SLC and HMRC.

- We examined **how BIS, the SLC and HMRC assess the impact of future changes**, such as increasing borrower numbers and variable interest rates, and to what extent these affect the ongoing collection strategy.
- We conducted **semi-structured interviews** with BIS, the SLC and HMRC to understand the strategic approach that they take and what issues are likely to arise in the coming years.
- We performed **an assessment of the SLC's process management practices**, benchmarking against assessments that we have done of over 100 other government organisations. This centred on a one-day visit to the Income-Contingent Repayment and Collections teams at the SLC offices, and utilised expertise from within the NAO. The assessment was performed against a framework developed by the NAO.
- We reviewed **other relevant NAO work** that included information that would provide insights into collection strategy and processes, including a report into debt collection in HMRC.[18]

5 **We examined the way that BIS forecasts future repayments, and whether it uses appropriate data and reasonable assumptions:**

- We assessed **the inputs and assumptions in BIS's modelling** of repayment projections, focusing on the extent that the assumptions take account of actual repayment performance, trends within different categories of borrower, and trends in reasons for non-repayment.
- We performed **our own multivariate analysis of loan repayment data from the SLC**, focusing on repayment trends for different categories of borrowers to establish whether there is a case to use this information to more accurately inform forecasts of future repayments. In particular, we conducted logistic regression analysis to examine whether the probability of loan repayments differed by age, gender, degree type, higher education institution attended and subject studied. Universities were grouped into seven groups: Russell Group, 1994 Group, University Alliance, Million+, Guild HE, other large institutions (over 2,000 borrowers), and other small institutions (under 2,000 borrowers). **Figure 18** overleaf includes more information on the five named groups of universities. Subjects were grouped into ten categories: mathematics and computer science, engineering, other science and technology, business and administration, languages, social studies, education, creative arts and design, law, and medicine.
- We reviewed **academic literature** related to the student loans model.

18 Comptroller and Auditor General, *HM Revenue & Customs: Management of Tax Debt*, Session 2007-08, HC 1152, National Audit Office, November 2008.

- We examined **reviews that BIS has commissioned** of the repayment model, including work that internal analysts are currently working on. This was important in understanding what aspects of the repayment model BIS is already working on to improve and refine.
- We evaluated the **historic accuracy of BIS's forecasting of repayments**, using existing gap analysis from BIS and Deloitte as a base and performing our own analysis for the most recent years. This compared publicly available information on actual collections published by the SLC with forecast information provided by BIS.

Figure 18
University groups used in our analysis

Group	Description	Website for more information, including member universities
Russell Group	A group of 24 universities that aims to be at the forefront of British research.	www.russellgroup.ac.uk/our-universities.aspx
1994 Group	A former group of 11 research-intensive universities that was formed in 1994.	1994group.co.uk/universities.php
University Alliance	A group of 23 universities that aims to promote innovation and entrepreneurial leadership.	www.unialliance.ac.uk/member/
Million+	A university think tank consisting of 22 member universities that aims to promote diversity and collaboration in the higher education sector.	www.millionplus.ac.uk/who-we-are/our-affiliates/
Guild HE	An organisation representing over 25 universities that aims to create a sustainable higher education sector that contributes to social inclusivity.	guildhe.ac.uk/members

Notes

1 The size and membership of the groups change over time, and so may now differ from their composition when many of the loans were taken out.

2 From 8 November 2013, the 1994 Group ceased to exist as an organisation.

Source: Information from the groups' websites

Appendix Three

Comparison with similar student loan systems in other countries

1 **Figure 19** compares features of the English student loan repayment system with those in Australia and New Zealand.

Figure 19

Comparison between English and overseas systems

	England	Australia	New Zealand
Repayments based on	Earnings	Earnings	Earnings
Repayment term	Thirty years, then remainder written off	Not written off until death or bankruptcy	Not written off until death or bankruptcy
Repayments: borrowers in country	Collected through tax system	Collected through tax system	Collected through tax system
Repayments: borrowers overseas	Repaid directly to Student Loans Company	None owed	None owed for first three years, then repaid directly to Inland Revenue Department (IRD)
Interest rate	Based on inflation and borrower earnings	Based on inflation	None while living in New Zealand, set annually by IRD for overseas borrowers

Source: National Audit Office analysis

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