

The background of the cover features a complex graphic. It includes a large, dark teal curved shape on the left side. Overlaid on this and the rest of the page are various mathematical and statistical elements: a line graph with a solid curve labeled $f(x)$ and a dashed line; a bar chart with three bars labeled 31.8, 39.8, and 37.1; a scatter plot with points labeled 0.1, 0.2, and 0.3; and several mathematical symbols and formulas such as $\alpha_1 + \alpha_2 \theta$, t_{u2} , and $\frac{1}{2}$. Faint silhouettes of human figures are also visible in the upper portion of the background.

Manageable Student Debt Threshold Research: Final Report

Submitted to Alberta Enterprise and Advanced Education

The Social Research and Demonstration

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Table of contents

1. Introduction	1
1.1. Scope of the analysis	2
1.2. Organization of the report	3
2. Literature review	4
2.1. Balancing access to postsecondary education with student loan delinquency and default	4
2.2. Manageable debt thresholds	5
2.3. Institutional factors affecting student debt manageability	6
2.4. Idiosyncratic factors affecting student debt manageability	8
3. Policies pertaining to repayment of student debt in Canada	12
3.1. Federal and provincial policies	12
3.2. Practices in the private sector	16
3.3. Summary	17
4. Policies in select OECD countries	19
4.1. Australia	19
4.2. United Kingdom	21
4.3. Norway	22
4.4. United States	23
4.5. Summary	26
5. Consultations with key informants	28
5.1. Methodology	28
5.2. Findings from the key informant interviews	30
5.3. Discussion	38
6. Quantitative analysis of Canadian data	40
6.1. Methodology and data	40
6.2. Results	40
7. Conclusions	50
References	51
Appendix A: Program Web sites	54
Appendix B: Key Informant Interview Questions	55

1. Introduction

The aim of the Manageable Student Debt Threshold Research is to assess and summarize existing literature on manageable debt concepts, collect information on applied practices, and develop an inventory of debt benchmark measures. This is the second deliverable, the draft final report, which incorporates the results of a literature review, environmental scan, key informant interviews and an analysis of various manageable threshold concepts using Canadian data.

With increasing costs of postsecondary education (PSE) since the early 1990s, recent cohorts of students have been borrowing more to finance their education. Furthermore, not only are students more likely to borrow to finance their PSE, the average amount of their debt has more than doubled between 1990 and 2009 (Berger, Motte, & Parkin, 2009). In this context, it is not surprising that a substantial proportion of recent student loan borrowers found their student loan repayment unmanageable. Specifically, among those who graduated in 2005 and carried student debt two years after graduation, 26 per cent of university graduates and 29 per cent of college graduates reported difficulty repaying their government student debt (Bayard & Greenlee, 2009). In addition, the three-year default rate of the 2006-07 consolidation cohort was 10 per cent among university graduates and 17 per cent among college graduates (Human Resources and Skills Development Canada HRSDC, 2011a). As a comparison, the credit card delinquency rate is usually less than 1.4 per cent (Canadian Bankers Association, 2012).

The student loan program would not be an effective vehicle to maintain accessible postsecondary education if its repayment is found unaffordable. Indeed, having effective strategies and mechanisms that ensure students have the ability to repay their loans improves the performance of loan portfolios, reduces risks to government, and reduces concerns individuals may have about their future ability to repay. Ensuring manageable debt repayment is therefore a key outcome for any student loan program, and understanding the threshold of manageable student debt is crucial in formulating policies aiming to prevent and reduce student borrowers' hardship.

The repayment terms of the Canada Student Loan Program (CSLP) share similarities with those of mortgages or personal loans: borrowers repay an equal amount every month for a fixed number of years after completion or termination of their study, regardless of their actual income. It follows that a student loan borrower may not be able to cope with the standard repayment amount if the loan amount is high while his/her income is low. CSLP borrowers experiencing difficulties in repaying their student loans can apply for the Repayment Assistance Plan (RAP) which reduces repayment to an "affordable" level and limits the period of repayment to 15 years. However, the RAP was designed based on the concept that manageable student loan repayment should be under 20 per cent of gross income. It was implemented only in 2009 and there is only limited data available to study whether the RAP reduced repayments to a level that borrowers find manageable.

In addition, some Canadian students also borrow from non-government sources, including from banks' student lines of credit and from family, to finance their study. For these students, managing repayments of student loans involves prioritizing and negotiation with non-government creditors. Even though the conditions applying to these borrowers may affect their ability to repay debt owed to government sources, they are not well understood.

The discussions of manageable student debt suffer from the difficulties in defining debt repayment manageability. Baum and Schwartz (2006) provided a critical assessment on these various definitions and measurements. They found that the most commonly used indicators are (arbitrarily derived) percentages of gross income required to repay loans.¹ These thresholds are conservative cut-offs used to manage default risk rather than agreed-upon levels under which borrowers can manage their repayment.

Hence, besides a few Canadian research studies that examined manageable debt concepts (e.g., Baum & Schwartz, 2006), student loan default (e.g., Kapsalis, 2006) and student debt load of recent graduates (e.g., Bayard & Greenlee, 2009), not much evidence exists on the manageability of Canadian student loans. This research project intends to fill this gap in knowledge.

1.1. Scope of the analysis

Understanding the threshold of manageable student debt is crucial in evaluating and formulating the policies in reducing hardship experienced by student loan borrowers and preventing student loan delinquency and default.

The project intends to achieve the following objectives:

- To gain knowledge and understanding of debt manageability including definitions and concepts, including measuring affordable payments and benchmarks for debt to income ratios.
- To provide an overview of the different ways the public and private financial sectors measure and calculate manageable debt.
- To gain required knowledge to support future evaluation of RAP which includes identifying potential gaps in repayment mechanisms or developing new debt management tools.

The research team is investigating the theoretical and empirical literature on manageable debt concepts, such as debt to income ratios, and is collecting and assessing private and public sector practices on definitions, calculations and measurements of manageable debt. A brief environmental scan of the current practices of the federal government, provincial governments and the private sector (such as banks and credit unions) in Canada, as well as practices in selected OECD countries in defining and measuring manageable student debt will complement the literature review.² In selecting OECD countries, particular attention has been given to income-contingent repayment schemes (Australia and the United Kingdom), schemes that convert loans into grants (Norway) and flexible repayment schemes (United States). The literature review and environmental scan were both used to guide the second component of the research – the collection of new, primary data from interviews with consumer and industry representatives. The key informant interviews provided an overview of the different ways the

¹ Examples of these arbitrary thresholds include the 8 per cent threshold of unmanageable student debt burdens and the 32 per cent “back-end” ratio of total credit commitments used in the private sector. Both indicators and others are discussed in the literature review (section 2) below.

² The examination of policies in selected OECD countries is performed at a high jurisdictional level only: for example State level policies in the United States are not analyzed. This section will just be an overview of the national policies pertaining to repayment practices of these countries.

non-profit and private financial sectors measure and calculate manageable debt, and the potential issues the interviewees identified with the current practices. The third component of the research project has been to estimate the various manageable student debt thresholds using Canadian data. The actual thresholds selected were based on the results of all three earlier components: literature review, environmental scan, and the key informant interviews. Specifically, the thresholds as established by Baum and Schwartz (2006) were examined where data permitted.³

1.2. Organization of the report

The results of a systematic review of theoretical and empirical literature related to manageable student debt are presented in the next section. The results from the environmental scan of practices in Canada (at the federal, provincial level and in the private sector) are depicted in section 3, whereas policies in Australia, the United Kingdom, Norway and the United States are discussed in section 4. Section 5 contains the methodology and results from the interviews with key informants. The quantitative analysis of several benchmark thresholds using Canadian data is included in section 6. The last section concludes the report with a summary of the lessons learned from this research project and policy considerations.

³ Some potential thresholds include the rule of thumb 8 per cent cut-off; the 25 per cent of gross income on credit commitment cut-off; the after-tax Low Income cut-off; and a financial aid needs assessment definition. The last threshold definition estimates a maximum “discretionary income” available for debt repayment from the difference of disposable income and the Moderate Standard of Living (MSOL).

2. Literature review

The discussions of manageable student debt suffer from the difficulties in defining debt repayment manageability. The purpose of this section is to provide guidance and support to the other components of the project, by providing direction on what to look for (in the environmental scan component), what to ask (in the key informant interviews component) and which benchmark indicators to be estimated using Canadian data (in the quantitative component).

2.1. Balancing access to postsecondary education with student loan delinquency and default

Comments and discussions of rising student debt usually focus on the affordability of postsecondary education and the role of the government in subsidising education. Less discussed is the role of debt financing in easing the liquidity constraint of human capital investment. Under the life cycle theory, a student may not have the resources that are required to pursue postsecondary education, but if the future return to education is higher than the cost and credit is available, the student may borrow to finance the education and repay the loan in the future.

However, students face an uncertain rate of return on investments in human capital since it is possible that they do not have enough income to repay their debt. This uncertainty about future outcome may lead to credit market imperfections such that credit is not made available to students. Furthermore, the same uncertainty may also generate reluctance among students to borrow – even when funds are available to them – since, from their perspective, it is a non-insurable risk.⁴ To fill the gap, governments have established student loan programs to help students access postsecondary education.⁵ Whether government student loan programs actually help students who would not have participated in postsecondary education otherwise depends on multiple factors, one of which is whether the repayment terms are manageable.

A main theoretical model used in analysing student loan manageability is based on the ability-to-pay concept within the life-cycle model. The life-cycle model, as pioneered by Modigliani and Brumberg (1954) and subsequently Friedman (1957), suggests that individuals base their consumption on their expected future income, not on their current income. Consequently, students may borrow to finance their postsecondary study and expect to repay the student loan in the future. Baum and Schwartz (2006) described postsecondary education investments as risky: students may not be able to graduate, not all graduates will be able to find remunerative jobs, and unanticipated changes (such as health, economy, and family situations) may derail a life plan. These risky events result in lowered income for

⁴ A recent survey shows that 25 percent of senior high-school students cited “fear of going into debt” as a major barrier to further education (Prairie Research Associates, 2005).

⁵ For example, in its empirical review HRSDC (2011b) reports that, overall, estimates of each additional \$1,000 of loans increases the enrollment of students from low-income families in a range of 0.4 to 1.0 percentage points. Furthermore, the same study reports that being denied a loan reduced the probability of attending university by 4.1 percentage points (from 28.5 per cent to 24.4 per cent) and attending another type of postsecondary education by 5.5 percentage points (from 65.1 per cent to 59.6 per cent).

the borrower. Consequently, the borrower may not be able to maintain a living with the scheduled repayment of loans. The student debt under such conditions is said to be unmanageable.

Any discussion of the ability-to-pay theory of student loan repayment suffers from two issues. First, any definition of financial distress or hardship is subjective and so there is no consensus definition of manageable student debt (Hansen, 1991). Second, most studies only consider the student debt and do not analyze the ability-to-pay for *all* debts (Schwartz & Finnie, 2002). Nevertheless, the ability-to-pay theory provides the theoretical basis for relative comparison and it is the main model used in the literature studying manageable debts, loan delinquency and default.

The ability-to-pay theory of student debt repayment implicitly assumes that certain expenses, such as the essential expenditures to maintain a minimum standard of living, are of a higher priority than repaying the student loan. Even though the borrower may not have complete control on the sequence of events that transpires, he or she may have some control on whether to pay the scheduled payments or to default the loan. It follows that delinquency and default can be rational decisions on the part of the borrower (Cohen-Cole & Morse, 2010). If there is a list of competing options (including non-repayment of debt), a borrower can choose to ease the situation in periods of financial distress, a rational borrower will choose the options with the least net “harm.” Consistent with the strategic default theory, Lochner, Stinebrickner, and Suleymanoglu (2012) found that CSLP borrowers who regard student loans as the least important type of debt to repay were 13 per cent more likely to have a repayment difficulty.

2.2. Manageable debt thresholds

Baum and Schwartz (2006) provided a critical assessment on the various definitions and measurements of manageable student debt. The most commonly used indicator is the percentage of gross income required to repay loans. However, Baum and Schwartz found that the usually used 8 per cent threshold for unmanageable student debt burdens and the 32 per cent “back-end” ratio of total credit commitments in the private sector are arbitrarily derived. Indeed, Baum and Schwartz cited the comment by Guttentag (1992) as evidence to support the notion that the loan underwriting standards were not empirically based. These thresholds are conservative cut-offs to manage default or delinquency risk rather than the level of which borrowers can manage their repayment. For instance, they do not take into account the feelings of burden or the sacrifices necessary to meet payment obligations. In other words such thresholds determine what *can* be borrowed rather than what *should* be borrowed. Baum and Schwartz then discussed a few alternative manageable debt concepts:

- The over-indebtedness definition in European literatures suggests that a borrower with credit commitments over certain debt-service ratios is likely to be insolvent within a range of likely future income. Two ratios are often considered: 25 per cent of gross income on credit commitments or 50 per cent of gross income in credit commitments and household commitments.⁶

⁶ In relationship with these thresholds, Allen and Vaillancourt (2004) calculate debt-service ratios for former Canadian students who graduated in 2000 from two- and four-year postsecondary programs. They report median debt-ratio (for their student debt only) of 6 and 8 percent respectively.

- The consumption expenditure definition is based on the concept that a manageable student loan repayment must not reduce the standard of living below the essential level. It compares student loan repayment to “discretionary income” above essential expenditures.
- The earnings and consumption premium definition postulates that graduates should be willing to make student loan repayments in the amount of the earnings premiums they receive because of the education. Using United States data for the year 2003, the authors found earning premiums for males (females) of 17 (19) per cent for Associate degrees and 35 (37) per cent relative to high-school graduates.
- The financial aid needs assessment definition estimates the deemed reasonable contribution from graduates as the comparison for manageable debt repayment. The concept of reasonable contribution assumes a moderate standard of living and calculates “discretionary income” above the moderate standard of living.
- Income-contingent repayment systems, which avoid the problem of excessive debt burden by imposing repayment only when income passes a certain threshold.
- The subjective indicator of self-reported difficulties in repaying student loans.

Baum and Schwartz found that because of the vagueness of the manageability definition, there is no single indicator and threshold that can answer the question of how much students can borrow without risking repayment difficulties. However, all subjective indicators they reviewed were based on gross income. A common feature of their analysis is the fact that they could not find evidence nor theory to support the use of thresholds commonly adopted in the industry. For example, in the case of the consumption expenditure definition, Baum and Schwartz, report how different authors set thresholds of student debt manageability by setting arbitrary thresholds of consumption expenditures, other expenditures and income for emergencies. Therefore, the literature does not provide evidence showing that at different threshold levels of default or delinquency, subjective reports of financial difficulty markedly diminish.

The set of indicators Baum and Schwartz (2006) examined helps establish a set of benchmarks for maximum ratios of student loan repayments to gross income. Finally, Baum and O’Malley (2003) underline that benchmarks are particularly important for borrowers who incur high levels of student debt relative to their incomes, but not for more typical borrowers.

2.3. Institutional factors affecting student debt manageability

An important category of factors for student debt manageability is the institutional framework in which the student borrower is located. In particular, the following matter to the manageability of debt: the type of repayment scheme; the availability of assistance programs; the availability of grants; and the possibility to convert loans.

Income-contingent repayment plans

Despite a variety of country-specific repayment plans, most can be categorized into two types: “mortgage-style” – where borrowers repay an equal amount every month for a fixed number of years,

regardless of actual income as in Canada – and income-contingent repayment (ICR) plans – in place in Australia, the United Kingdom and New Zealand.

With respect to student debt manageability, ICR plans have the advantage of linking the required repayments to student borrowers' income and ability to pay. Hence, if post-schooling incomes are below a certain income threshold, borrowers do not have to make any repayment. Repayments are determined according to rates that range from 8 to 20 per cent of earnings.⁷ Therefore, there is little need for debt management programs under ICR plans since repayments are fairly small and affordable and borrowers with the lowest incomes avoid student loan burden.

In line with Baum and Schwartz (2006)'s analysis, the recommended repayment rates for ICR plans seem to follow those of Australia. The income thresholds, however, often represent a substantial proportion of the country's median or average household income: close to 75 per cent of median household income in Australia and close to 80 per cent of the average household income in the United Kingdom. These reflect the degree of insurance each society is willing to offer its students for their "risky" investment.

Contemplating the adoption of an ICR scheme in Canada, Guillemette (2006) depicts the role it can play in postsecondary enrolment since it decreases the non-insurable risk that students face making a "very bad investment where the benefits do not materialize but the costs – repaying student loans – nonetheless have to be borne." Such a system could therefore encourage risk-averse students to pursue postsecondary education and could help increase the attendance of underrepresented categories of students. It could also bring changes in the relative attractiveness of disciplines.

Nevertheless, the implementation of ICR schemes can be problematic. Because ICR plans are a kind of insurance whereby students with higher income *subsidize* others who experience unemployment, underemployment or income dipping to a low level, designers of ICR plans need to alleviate two problems inherent in insurance mechanisms: moral hazard – insurance can change the behaviour of the insured – and adverse selection – only students with bad risks would have an incentive to join the program. Another problem relates to the fact that ICR plans need to be managed in full cooperation with the tax system if only to (1) determine the borrower's income and (2) enforce (correct) payments. This situation may generate costly coordination problems between agencies (e.g., student loan and tax revenue agencies) and with the borrower (e.g., incorrect payments). In addition, in a global economy where students tend to work overseas, tracking borrowers and enforcing payment is difficult. Thus, for ex-patriate borrowers, the system may have to rely on good-will or simply write-off their debt.⁸

⁷ Depending on the country, thresholds are applied on gross earnings or gross adjusted earnings. For details, see the environmental scan (section 4) below.

⁸ For instance, it has been revealed that 45 per cent of the loans of borrowers living outside the United Kingdom are in arrears with respect to repayment or actually written-off at a cost of £20 million to the United Kingdom Treasury (source: <http://www.telegraph.co.uk/education/universityeducation/9030043/Thousands-of-EU-students-fail-to-repay-loans.html>).

However, a full discussion of these interesting implementation problems is beyond the scope of this project.⁹

Availability of assistance programs

Recently, the average CSLP debt per borrower (in nominal terms) has significantly risen from \$9,348 in 1998-1999 to \$12,881 in 2007-2008, with more than 20 per cent of borrowers possessing a debt higher than \$20,000 (HRSDC, 2011b). It is therefore likely that both the fraction of borrowers who report difficulties repaying their student loans – estimated at 7-8 per cent by Schwartz and Finnie (2002) – and their reliance on assistance programs will increase in Canada.

Assistance programs, such as the Repayment Assistance Plan (RAP), may help mediate aversion to both risk and debt, which may lead to increased participation in postsecondary education and uptake of student loans – just like the ICR plans depicted above. In effect, the RAP introduces ICR features to the Canadian mortgage-style scheme. Under RAP, the payments are set to a maximum of 20 per cent of the borrower's gross family income; the program also allows deferring or sometimes cancellation of payments.

The literature provides evidence that assistance programs have had positive effects on loan repayment and default rates in the United States. For instance, Woo (2002) and Choy (2006) found that those who use deferment or forbearance were less likely to default in the short- or mid-term. The determination of thresholds or rules is, however, arbitrarily set and rescheduled payments (or cancellations) are often set on a case-by case basis. The factors that are likely to affect the terms of a borrower's assistance plan are discussed in the next subsection.

Other features

The availability of grants or the possibility to convert loans into grants – a feature observed in Newfoundland and Labrador and in Norway – reduce default or delinquency since, effectively, students have to repay lower amounts of debt. Similarly, the availability of loan forgiveness programs for persons with permanent disabilities or serious illness improves the manageability of the debt.

In addition, Seifert (2004) provides evidence of the positive effects that early intervention programs (i.e., before the consolidation date) can have on the default behaviour of student borrowers in the United States: well-informed borrowers are likely to manage their debt better. In Canada, SRDC research (2008) also underlines the importance to the take up of assistance programs of awareness of the different programs.

2.4. Idiosyncratic factors affecting student debt manageability

Besides institutional factors, other factors related to the characteristics of borrowers may affect their ability to manage debt. These factors are likely to influence the determination of repayment thresholds or assistance practices.

⁹ For a discussion of how moral hazard and adverse selection affect ICR plans and for ways to address these issues, see Guillaumette (2006).

Since economic theories predict that loan delinquency and default are mainly the results of financial distress, the most direct factors are the income and financial resources of the borrower, such as unemployment and earnings in the repayment period. Indirectly, many of the factors predicting the event of delinquency and default are also predictors of borrowers' employment and financial performance, such as degree completion, grade point average, field of study, type of school, and so on. Since the manageability of a debt decreases with the amount of scheduled repayment, the level of indebtedness may also be a factor. Finally, beliefs about the cost of not repaying, such as borrower's financial literacy and the information they receive regarding their debts, could be crucial in determining whether they default on their student loans. Studies related to these potential factors will be reviewed in this subsection. Notice that many studies focus on loan default rather than delinquency. However, given that delinquency is a necessary condition to default, factors associated with default are also likely to be determinants of delinquency. Both concepts are pertinent to definitions of "manageable debt."

Factors during the repayment period

Income. It is not surprisingly that many US studies have found lower income levels or earnings to be associated with elevated risk of default (Wilms, Moore, & Bolus, 1987; Knapp & Seaks, 1992; Dynarski, 1994; Volkwein, Cabrera, Szelest, & Napierski, 1995; Boyd, 1997; Woo, 2002; Steiner & Tym, 2005; Moffat, 2005; Choy & Li, 2006; Lochner & Monge-Naranjo, 2008). In Canada, Schwartz and Finnie (2002) used Canadian data from the National Graduates Survey (1990 class) to find that the probability of having difficulties in repayment increased with lower earnings. Similarly, Kapsalis (2006) working with CSLP's administrative data showed that the three-year student loan default rate also decreased with higher average three-year income. However, the strength of the income variable in predicting risk of default was only half as strong as that of the variable for unemployment (Woo, 2002). Flint (1997) found that some US student loan borrowers who had an apparent ability to repay choose not to, so strategic defaulting could reduce the discriminatory power of income or earnings in predicting student loan default.

Unemployment. Possibly due to the lack of unemployment status in data, only a few US studies and no Canadian studies have examined the relationship between student loan default and unemployment. Woo (2002) showed that the probability of defaulting on student loans in California increased by 83 per cent among those who experienced unemployment. Volkwein et al. (1998) and Dynarski (1994) used the US National Postsecondary Student Aid Study – Student Loan Recipient Survey to show that borrowers believed unemployment was the most important contributing factor of student loan default.

Family Characteristics. Several studies have found that greater family obligations (e.g., dependent children) increase the risk of default (e.g., Dynarski, 1994; Volkwein & Szelest, 1995; Woo, 2002). The risk has also been related to being a single-parent (Volkwein et al., 1998) and being separated, widowed, or divorced (Volkwein & Szelest, 1995). Since borrowers with any of these family characteristics might be subject to stricter liquidity constraints, they may prefer maintaining liquidity over making student loan repayments.

Credit Score. Using a proprietary dataset of private, non-federally guaranteed loans extended to law school students, Monteverde (2000) showed that credit bureau scoring of student borrowers had

excellent statistical power predicting student loan default. However, it is unknown whether credit score has a similar predictive power when it is applied to government-operated student loans since the penalties for delinquency and default are very different from that of private loans.

Debt Burden. In Canada, Kapsalis (2006) found that CSLP borrowers with a student debt of \$20,000 or more were about 20 per cent more likely to default than those with less debt, unless annual income was \$40,000 or over. Similarly, Schwartz and Finnie (2002) found that each extra \$1,000 in loans increased the probability of reported difficulties in repayment by 5 per cent for women and 7 per cent for men in Canada.

Students who are on the trajectory of earning more may borrow more. Bivariate statistics of default rates by debt levels in Woo (2002) and Steiner and Teszler (2003) showed that default rates were higher among those with less debt. Volkwein et al. (1998) and Woo (2002) both showed that those attending graduate school had high levels of debt but they were also less likely on average to default. Other US studies, such as Choy and Li (2006) and Meyer (1998), found that the rate of default increased with the amount of debt while keeping other things constant. Dynarski (1994) found that the probability of default increased with the monthly loan payment.

Factors before the repayment period

Factors before the repayment period do not affect the manageability of student debts directly. Instead, these factors are often good predictors of the earnings paths of student borrowers which in turn determine how they repay their student loans. For example, academic performance such as program completion (Volkwein et al., 1998; Woo, 2002; Steiner & Teszler, 2003) and school grades (Flint, 1997; Volkwein et al., 1998; Podgursky et al., 2002; Woo, 2002; Steiner & Teszler, 2003), are good predictors.

Types of programs and field of study. Some studies have found that student default rates vary with the type of programs or the fields of study of the borrower. This can be related to the fact that there was a substantial variation in employment outcomes among graduates in different fields of study and by type of institution (see Bayard & Greenlee, 2009). Hence, Kapsalis (2006) found that the three-year default rates of Canadian graduates in the 1994-95 cohort were lower for programs generating higher-income graduates. Graduates from university programs had the highest income, and the average default rate was 20 per cent. College program graduates had lower income and 30 per cent of them defaulted. Borrowers from private institution programs had the lowest levels of income and their default rate was 43 per cent. Kapsalis showed that most variation by types of program could be explained by variation in income. Similarly, Schwartz, and Finnie (2002) found that only 7-8 per cent of Canadian bachelor's degree graduates reported problems in repaying their loans, whereas the overall averages for all student borrowers were 19-26 per cent. Graduates in fields associated with low earnings reported significantly greater problems with repayment.

Evidence from the US displays a similar pattern to the Canadian experience. Steiner and Teszler (2003) found that college major played a moderate role in predicting default, with General Studies majors having a higher default rate than other majors. Volkwein and Szelest (1995) showed that a major in a scientific, engineering, or agricultural discipline was associated with a lower default risk. The descriptive analyses by Woo (2002) and Podgursky et al. (2002) showed that students who attended

community colleges, proprietary colleges, and less-than-two-year programs had higher default rates than those who attended four-year colleges.

Other characteristics of borrowers

Several student loan borrower characteristics that do not have apparent theoretical linkage to the ability to repay student debt were found to exhibit correlations with the default rate in some studies. Exactly how these characteristics affect debt manageability are not well understood.

Age. Several studies have found that the probability of default increases with the age of the borrower, even after controlling for other factors such as income (e.g., Flint, 1997; Woo, 2002; Steiner & Tym, 2005). However, Steiner and Teslzer (2005) did not find a significant relationship in their multivariate analysis. Herr and Burt (2005) suggest that older students have more family obligations that compete with loan repayment. Schwartz and Finnie (2002) found that older Canadian borrowers were more likely to have difficulties in repaying their student loans.

Gender. The role of gender is less clear. Many studies find no difference in default rates (e.g., Harrast, 2004), while more recent works suggest that women take longer to repay (Choy & Li, 2006) and women are more likely to report difficulties in repayment (Schwartz & Finnie, 2002). However, some other evidence suggests that men are more likely to default (e.g., Flint, 1997; Woo, 2002; Podgursky et al., 2002; Steiner & Tym, 2005; Steiner & Teslzer, 2005).

Socioeconomic Background. Students from lower-income families have been found more likely to default even after accounting for the fact that their monthly loan payments are greater (Dynarski, 1994). Knapp and Seaks (1992) showed that the risk of default decreased with parents' income among dependent students. Some studies find that parental education matters, with the risk of default declining with parental attainment (e.g., Choy & Li, 2006). US studies also found ethnicity to be a factor (e.g., Volkwein et al., 1998).

Others. There are a host of other factors that may determine the risk of default, despite the literature on loan default not being as instructive in these cases. First, there is the consideration of time preferences. Students who discount the future heavily may choose to spend more today, and thus, run the risk of defaulting later. Second, some students may simply be averse to loans. If so, they may choose to repay their obligations at a faster rate than required. Third, some students may not fully understand the terms of their loans. Lack of financial literacy may account for ignorance of the loan terms, although low numeracy cannot be ruled out. However, Volkwein et al. (1998) found that knowledge of repayment obligations did not reduce the risk of default.

3. Policies pertaining to repayment of student debt in Canada

This section provides a description of the programs and supports pertaining to student loan debt that are available to students in Canada. Federal and provincial policies are briefly reviewed as well as practices in the private sector. This section of the report will support the interviews with key informants.

3.1. Federal and provincial policies

Overview of the repayment schemes

The repayment of student loans in Canada depends on whether the Province issuing the loan has an integrated-loan program with CSLP.¹⁰ In the provinces with integrated-loan programs, the repayment of the federal and provincial portions of the loans occurs through the National Student Loans Service Centre (NSLC). In the provinces with non-integrated loan programs, the borrower has to make payments on two loans: the federal loan through the NSLC and the provincial loan through the provincial student assistance office. In non-CSLP jurisdictions, repayments are made through the jurisdictions' student assistance offices.

The general features of repayment for student loans in Canada are:

- Students are not required to make loan payments and no interest accumulates while studying;
- Full- or part-time students begin repaying student loan six months after leaving their study;
- Interest accumulates during this six-month period;
- Loans for full-time studies enter repayment status if the student switches from full-time to part-time studies;
- A “mortgage-style” of repayment with fixed monthly instalments. Borrowers select their interest rate between:
 - a floating interest rate of prime +2.5 per cent; or
 - a fixed interest rate of prime (at consolidation) +5 per cent.
- The standard amortization period is 114 months (9.5 years) after the consolidation of the loan, though it can be extended to 174 months.

In 2009, the average amount of undergraduate student debt at graduation was \$26,680 (Berger, Motte, & Parkin, 2009). At 5.5 per cent annual interest rate, the standard monthly payment of a typical

¹⁰ The provinces with integrated loans programs are: New Brunswick, Newfoundland and Labrador, Ontario and Saskatchewan. The provinces with non-integrated loan programs are: Alberta, Manitoba, PEI, and Nova Scotia. The Northwest Territories, Nunavut, and Quebec are not in the CSLP. Finally, the Yukon Territory is in the CSLP but does not offer a Territorial student loan program.

university graduate was about \$309 in 2009 dollars. Compared to the monthly earnings of a typical university graduate (about \$3,860), the typical loan repayment amount appears a relatively small cost.¹¹ However, students who have difficulties repaying their student loans are not likely to earn typical earnings. Default rates on student loans are not negligible (16 per cent of borrowers defaulted in 2007-2008 – HRSDC, 2011b) and vary across provinces: in 2008 they were as high as 28 per cent in Prince Edward Island, 20 per cent in Nova Scotia and as low as 11 per cent in Alberta.¹²

The *punishment* of borrowers in default is incremental: after 180 days overdue on the loan, CSLP funding ceases and after 270 days the debt is sent back to Canada Revenue Agency such that collection activities are initiated. Furthermore, borrowers in default become ineligible for future assistance and their credit ratings will be affected.

Repayment assistance

In addition to providing assistance for access to postsecondary education through loans and grants, federal, provincial and territorial jurisdictions provide assistance to student loan borrowers who are having difficulties meeting their repayment obligations.¹³ This subsection discusses such assistance for borrowers of the CSLP loan programs.

The Repayment Assistance Plan (RAP) put in place in 2009, replaced the Interest Relief (IR) and Debt Reduction in Repayment (DRR) programs. The program is available to borrowers who are residents of Canada and have difficulty paying back their student loans.¹⁴ It aims to help student loan borrowers manage their student loans by allowing them to pay back only what they can reasonably *afford*. The notion of *affordable loan payment* for the RAP comprises a loan repayment instalment calculated on the basis of the borrower's family income, family size and the amount of loan balance. The maximum affordable payment cannot exceed 20 per cent of the borrower's gross family income.¹⁵ To be eligible for the RAP, a borrower's affordable payment is required to be less than his/her required payment. Borrowers must apply every 6 months and enrolment to the program is not automatic. A delinquent borrower is not eligible for RAP until the student debt is brought back into good standing.

Under the RAP, the borrower's payments are applied to the loan principal first and the federal government covers the rest of the payment. The RAP has two stages that depend on the borrower's level of financial difficulties:

¹¹ Calculations based on information from Bayard and Greenlee (2009), converted to 2009 dollars.

¹² The default rate is defined as the percentage of borrowers who were behind on their loan repayment by 3 or more months following the loan consolidation date. For a listing of the default rates in Canada and CSLP provinces from 2001 to 2008, see Table 9 in HRSDC (2011b).

¹³ It should be noted that the provision of grants – at all jurisdictional levels – contribute to the prevention of default since they are non-repayable.

¹⁴ The specific eligibility conditions for the repayment assistance measures can be found in CSLP's Policy Manual (CSLP, 2011).

¹⁵ The exact formulas determining a borrower's affordable payment can be found in the CSLP's Policy Manual (CSLP, 2011).

- **Stage 1:** the federal government covers the interest amount owing that the assistance plan does not cover (up to 5 years or 60 months during the 10-year period after a borrower leaves school).
- **Stage 2:** for borrowers experiencing financial difficulties, even with the Plan. Stage 2 starts once the borrower completes stage 1 or has been in repayment for 10 years after he/she leaves school. The Federal Government continues to cover the interest and begins to cover a portion of the principal amount. The balance of the loan is gradually paid off so that no student loan debt remains after 15 years of leaving school (or 10 years for qualified borrowers with a permanent disability).

Thus, the RAP alleviates the student debt burden by decreasing the monthly repayments amounts and extending the amount of time it will take overall to pay off the loans. An important feature of the RAP is that some borrowers may not have to make any payments until their income increases. Furthermore, there is a maximum repayment period of 15 years (10 years for qualified borrowers with Permanent Disabilities) after which the outstanding debt is cancelled.¹⁶

In the 2009-2010 loan year, more than 155,000 borrowers benefited from the program. Of these beneficiaries, approximately 90 per cent were not required to make any payments on their student loan. In comparison, during the 2008-09 loan year, approximately 130,000 borrowers received Interest Relief (IR) and approximately 2,500 benefited from Debt Reduction in Repayment (DRR) (HRSDC, 2011b).

Another specificity of the RAP is the attention towards borrowers with a permanent disability. Hence, the RAP for borrowers with a permanent disability (RAP-BPD) offers similar features than the standard RAP with the noticeable addition to the definition of *affordable loan payment*, which takes disability-related expenses into consideration under the RAP-BPD.¹⁷ Like RAP, enrolment in the RAP-BPD is not automatic and the maximum affordable payment cannot exceed 20 per cent of a borrower's income. However, the maximum repayment period is shortened to 10 years. Furthermore, borrowers with a severe permanent disability – i.e., a disability preventing a person from working and from participating in postsecondary education for the remainder of his/her lifetime – may have their loans forgiven.

To conclude on the RAP and RAP-BPD programs, they may be effective in helping students manage the burden of their debt. They are designed to ensure that the required payments of borrowers are affordable by linking them to their income and ability to pay. The introduction of the RAP and RAP-BPD programs therefore brings a fair amount of income-contingency to the Canadian mortgage-like repayment system, albeit one which Canadians have to actively apply for. Hence, with these two programs, Canada joins a small group of countries with comprehensive programs that structure student loan repayment schedules according to borrowers' ability to pay. The next section of this report

¹⁶ It should be noted that borrowers who miss payments while on the RAP cannot receive additional student loans and grants until they have brought their loan payment to the up-to-date status. Borrowers in stage 2 benefit cannot receive additional student loans and grants until their student loans have been paid in full.

¹⁷ Disability-related expenses include allowable uninsured medical expenses, special care and other expenses directly related to the disability.

will contrast key features of the income-contingent repayment system of Australia and the United Kingdom to the Canadian system.¹⁸

However, as discussed in the literature review, more empirical work is required to gauge the true impact of the RAP. Another issue associated with the RAP and RAP-BPD is the lack of awareness of these programs among borrowers (SRDC, 2008 and HRSDC, 2011b), which limits RAP's take-up rate among the population of eligible recipients.

Loan forgiveness programs and provincial tuition rebates

Though they are not classified as assistance programs, loan forgiveness and tuition rebate programs are relevant for consideration as they alleviate student debt burden.

Starting in April 2013, the Government of Canada will offer Canada Student Loan (CSL) forgiveness to eligible family doctors or residents in family medicine, nurse practitioners, and nurses. Under this plan, eligible borrowers could receive up to \$8,000 per year to a maximum of \$40,000 over five years.

Several provinces have loan forgiveness or loan reduction programs. For example, British Columbia has the BC Loan Forgiveness Program that reduces debt by 33.33 per cent per year (hence all debts in three years) for eligible borrowers from the health and education sectors, and a loan reduction program that depends on the annual budget and the number of eligible applicants. Similarly, Newfoundland and Labrador has two programs that turn part of the provincial portion of the loan into grants: an automatic debt reduction grant and a grant for borrowers studying childhood education.

Another type of provincial assistance support consists of interest-free initiatives like the ones for eligible borrowers (e.g., medical residents or students on parental leave) in Alberta and Prince Edward Island. A common feature of these programs is that students must be in good standing with their repayments.

The provinces of Manitoba, New Brunswick, and Saskatchewan have tuition rebate policies that allow eligible graduates to benefit from a tax credit. All three rebate programs require formal educational programs that lead to a certificate, diploma or degree. For example, eligible students could benefit from an annual maximum of \$4,000 in New Brunswick (to a lifetime maximum of \$20,000), and from a lifetime maximum of \$25,000 in Manitoba. Students in Manitoba can claim 5 per cent tax credit advance on the tuition fees while still going to school (to a lifetime maximum of \$5,000). In Saskatchewan, eligible full-time students can claim up to \$20,000 over their lifetime (10 to 20 per cent maximum rebate per year).

It should be noted that, unlike RAP and RAP-BPD, the ultimate goal of these programs is not to help students with difficulty in managing their student debt. Rather, these programs intend to provide incentives to specific group of borrowers (health sector or education graduates) to help meet other government's priorities. Hence, the CSL forgiveness program aims to improve access to health care in rural and remote areas and the tuition rebates programs aims to improve the retention of graduates. Nevertheless, these programs can significantly alleviate debt for students.

¹⁸ For example, income thresholds and potential consequences on student's behaviour are analyzed.

3.2. Practices in the private sector

Although government aid is often the sole source of student loans, students accumulate debt from other sources such as private financial institutions.¹⁹ In general, the debt accumulated with these institutions is in the form of student lines of credit or student loans with fixed repayment schemes.²⁰ Table 1 provides an overview of the common features of student lines of credit.

Most banks and major credit unions offer student lines of credit and sometimes student loans. Unsurprisingly, different types of student lines of credit exist. This segmentation of the market is in line with the literature review: because the private sector recognizes that some fields of study (e.g., medicine) are more costly but at the same time more rewarding in terms of income than others, institutions adapt their offers. Hence, not only is the maximum amount of credit available higher for professional students, the interest rate is also often lower.

The amount of debt a student may incur with a line of credit can be quite high (up to \$250,000) so that the risk of encountering difficulties in managing the loans is high. Unfortunately, practices pertaining to repayment assistance are not transparent from the environmental scan. Results of the key informant interviews suggest that there is no specialized program to assist such student loan borrowers of repayment difficulties.

¹⁹ HRSDC (2011b) reports that 40 per cent of debt is solely from government sources, 30 per cent solely from family or private sources, 24 per cent from government and family or private sources, and 5 per cent accumulated debt from all three sources.

²⁰ It should be noted that some students may make use of their credit cards to finance their studies. In this case, standard credit card terms and conditions apply to them.

Table 1 An overview of student lines of credit

Type of lines of credit	<ul style="list-style-type: none"> ▪ Terms often depend on the field of study of the borrower. Typically two lines of credits are offered: <ul style="list-style-type: none"> ○ For undergraduate or graduate students ○ For professional students <ul style="list-style-type: none"> ▪ Some institutions have an additional line of credit targeting medical and dental students.
Eligibility criteria	<ul style="list-style-type: none"> ▪ Usually full-time students ▪ Program of study leading to a degree or diploma, and/or satisfying a minimum number of weeks or hours of instruction per week ▪ Citizens and landed immigrants are eligible ▪ Typically required to pass a credit history check and list assets and expenses ▪ Co-signor often required (especially for borrowers with low-income), except for professional students
Maximum amounts	<ul style="list-style-type: none"> ▪ As low as \$1,000, as high as \$250,000 ▪ Typically higher for professional students. The highest maximum amounts are observed for medical and dental lines of credits.
Repayment terms	<ul style="list-style-type: none"> ▪ Repayments: <ul style="list-style-type: none"> ○ Usually interest only during period of study and 6 months or 1 year period after graduation ▪ Amortization period: <ul style="list-style-type: none"> ○ Typically between 10 and 20 years ▪ Interest rate: <ul style="list-style-type: none"> ○ Minimum: prime ; typically prime +1 per cent or prime+2 per cent ○ Typically lower for professional students. The highest maximum amounts are observed for medical and dental lines of credits.

Note: Obtained from an internet search on the major banks and credit unions in Canada.

3.3. Summary

Students in Canada have access to different types of financial resources (e.g., loans, grants or student line of credit) from various sources (e.g., federal or provincial/territorial governments, banks or credit unions). Though the majority of student borrowers are able to repay their debt, the default rates are not negligible (16 per cent of borrowers defaulted on their CSLP loans in 2007-2008 – HRSDC, 2011b). Public authorities have put in place repayment assistance policies that target students who have difficulty paying back their student loans. Specifically, RAP and RAP-BPD ensure that the required payments of borrowers are affordable by linking them to their income and ability to pay; these programs bring a fair amount of income-contingency in the Canadian mortgage-like repayment system. However, more empirical evidence is required to gauge the true impact of the RAP and RAP-BPD.

Besides RAP programs, the federal government and provinces such as British Columbia and Newfoundland and Labrador have put in place loan forgiveness programs. These programs are often restricted to the health and education sectors.

In addition, to RAP programs and loan forgiveness programs, other policies such as the tuition rebates programs in Manitoba, New Brunswick, and Saskatchewan benefit borrowers and contribute to alleviate their debt burden. It should also be noted that the provision of grants, which are not repayable, helps alleviate student debt.

An important feature of the RAP program and loan forgiveness programs is that they often require that borrowers are in good standing. This eligibility condition may exclude the neediest borrowers.

Besides federal and provincial/territorial aid programs, students can incur debt from private financial institutions, especially through student lines of credit. The interest rates on these programs are typically lower than government loans (prime +1 per cent vs. prime +2.5 per cent), however students are required to pay interest while they are studying. The maximum limits of these programs can also be high: as much as \$250,000 for medical or dental students. Such high amounts of debt might be difficult to repay. Unfortunately, the repayment assistance practices for banks and credit unions were not transparent from the environmental scan; however findings from the interviews with key informants unveiled some common practices.

4. Policies in select OECD countries

Lessons on the effectiveness of different thresholds on student debt manageability can be drawn from examining policy decisions in other, similar, jurisdictions. This section reviews policies in selected OECD countries with respect to repayment assistance in general and income-contingent repayment in particular. The repayment assistance programs of Australia, the United Kingdom, Norway, and the United States are sequentially described and compared to the Canada Student Loans Program (CSLP). In order to maintain comparability with Canada, the examination is performed at a high jurisdictional level only: for example State level policies in the United States are not analyzed. This section provides an overview of the national policies of these countries. A discussion of these countries – and the Canadian – repayment systems is also provided. Table 4 below summarizes some of the key features of the repayment programs of all of the aforementioned countries.

4.1. Australia

Overview of the repayment scheme

Australia has a full income-contingent repayment (ICR) system that is managed by the Australian Taxation Office (ATO). Specifically, repayment of student loans occurs through the taxation system once the repayment income is above a compulsory repayment threshold. This threshold is adjusted to account for inflation every year. For the 2012-13 income year, the threshold was AU \$49,095, which roughly corresponds to CA \$51,500.²¹

A borrower's repayment income is calculated from the amounts given on the borrower's income tax return for:

- Taxable income;
- Reportable fringe benefits (reported on the payment summary);
- Total net investment loss (which includes net rental loss);
- Reportable *super contributions*;²² and
- Exempt foreign employment income amounts.

Table 2 shows the repayment rate for each repayment income for the income year 2012-13. Hence, for borrowers in the highest bracket, the repayment of student loans reaches 8 per cent of their repayment income. In other words, the maximum repayable amount in Australia cannot exceed 8 per cent of the repayment amount, which is a widely accepted threshold (Schwartz & Baum, 2006).

²¹ As an indication, the household median income in 2011 was AU \$64,168. Source: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/0.

²² *Super contributions* are contributions made by the employer that are additional to the compulsory contributions. These contributions are generally (1) salary sacrifice contributions; or (2) amounts above the compulsory contributions made by the employer; (3) or extra pre-tax contributions made by the employer. Source: Australian Taxation Office Web site.

Table 2 Income-contingent repayment in Australia (income year 2012-2013)

Repayment Income (in AU \$)	Below \$49,096	\$49,096 - \$54,688	\$54,689 - \$60,279	\$60,280 - \$63,448	\$63,449 - \$68,202	\$68,203 - \$73,864	\$73,865 - \$77,751	\$77,752 - \$85,564	\$85,565 - \$91,177	\$91,178 and above
Repayment rate (in %)	Nil	4	4.5	5	5.5	6	6.5	7	7.5	8

Source: Australian study assist Web site (<http://studyassist.gov.au>).

It should be noted that there is no interest on student's debt; however debt is indexed on the Consumption Price Index (CPI). Furthermore, the Australian system favours voluntary repayments: voluntary repayment of \$500 or more earn bonuses of 5 per cent of the value of the payment.²³

Repayment assistance and loan cancellation

Borrowers who have difficulty making their compulsory payments can apply to ATO to defer repayments. To proceed with assistance, ATO considers the borrower's household income and expenditure.

By law, there are no provisions for students to have their debt remitted if they have already completed their unit or course of study. However, borrowers who withdrew from their courses before the (semester-specific) deadline date because of serious illness or other special circumstances beyond their control can apply to their education provider to have their student debt remitted. The decision to remit debt is at the education provider's discretion.²⁴

HECS-HELP benefit

Besides repayment assistance, the Australian system provides incentives for graduates of particular courses to take up related occupations or work in specified locations. The incentive comprises a reduction in borrowers' compulsory repayments if they are graduates of an eligible field.²⁵

In practice, this program is similar to the Canadian loan-forgiveness program discussed above (section 3.1.): it does not ostensibly target student's debt manageability, but in effect it does.

²³ Voluntary repayments are made through the tax return system.

²⁴ In the Australian system, the loans are paid directly to the education provider.

²⁵ The eligible fields are mathematics, statistics or science; education, nursing or midwifery; and early childhood education.

4.2. United Kingdom

Overview of repayment scheme

The United Kingdom has a full ICR program in place, which is also managed through its tax-system.²⁶ The repayments are deducted at source by employers or through self-assessed tax returns. Though distinctions exist between British jurisdictions, the repayment schemes are similar.²⁷ Specifically, a borrower in the British tax system can be in one of two repayment plans:

- **Plan 1:**
 - Repay the loan from April following the date of graduation or quitting the course;
 - Pay 9 per cent of anything earned over £15,795 (roughly CA \$24,800) before tax per year.
- **Plan 2:**
 - For loans after September 1, 2012 in England and Wales; repayments will begin from April 2016;
 - Pay 9 per cent of anything earned over £21,000 (roughly CA \$33,000) before tax per year.²⁸

Borrowers who are outside of the United Kingdom tax system are asked to document their earnings. The gross earnings are then converted to Sterling and required repayments – 9 per cent of anything earned above a specific country of residence threshold – are established.²⁹ It should be noted that (total) unearned income is taken into account if it is over £2,000 and disregarded otherwise. All borrowers are allowed to repay some or all of their balances voluntarily at any time.

Hence, the British repayment system applies a single 9 per cent of gross earnings threshold. This differs from Australia where repayment rates gradually increase and plateau at 8 per cent. It can be noted that Plan 2 is more generous than Plan 1 since the repayment threshold is higher.

The interest rates on the loans are applied from the time the borrower makes his/her first payment until the loan is paid back in full.³⁰ A particularity of the British system is that the interest rates are indexed on inflation, and depend on the borrower's income and on whether he/she is studying. Table 3 presents the different interest rates.

²⁶ Loans that began before September 1998 have to be repaid mortgage-style in either 60 or 84 monthly instalments.

²⁷ The jurisdictions are England, Wales, Northern Ireland and Scotland.

²⁸ As an indication, the average household income was £25,800 in 2012.

²⁹ Thresholds by country of residence are listed at http://www.studentloanrepayment.co.uk/portal/page?_pageid=93,6678668&_dad=portal&_schema=PORTAL.

³⁰ Before 2011, British student loans did not contain any interest rates, which was costly for the British government.

Table 3 Interest rates on student loans in the United Kingdom

Income	While studying	£21,000 or less	£21,000 to £41,000	£41,000 and over
Interest rate	Rate of inflation (Retail Price Index) + 3%	Rate of inflation	Rate of inflation + up to 3%	Rate of inflation + 3%

Source: <https://www.gov.uk/student-finance/repayments>.

Loan cancellation

Outstanding debt can be cancelled under the following circumstances:

- The borrower reaches age 65;
- The borrower becomes permanently disabled and unfit for work; or
- The borrower dies.

Also the loans that have been approved under Plan 1 in 2006 or later are subject to a 25-year debt write-off (35 years for Scottish domicile students), where any debt unpaid after 25 years is forgiven by the Government. The debt write-off has been extended to 30 years under Plan 2.

Furthermore, jurisdictions sometimes have loan cancellation policies in place. For instance, the Welsh government introduced a loan cancellation of up to £1,500 for students who received loans in any academic year since 2010-11. The reduction is applied to the balance of the student loan when the student borrower starts repaying the loan.

In addition, like in Canada and Australia, there are occupation-specific loan forgiveness programs in the United Kingdom. In particular, the student loans of qualified teachers in specified shortage subjects in England and Wales can be repaid by the government.

4.3. Norway

Overview of the repayment scheme

Student support in Norway is initially given as a loan. Repayments of the loans occur in four instalments per year. However, the system has the original feature of converting 40 per cent (70 per cent for eligible graduates studying abroad) of the loans into a grant. This feature is similar to Newfoundland and Labrador's debt reduction program depicted earlier. In Norway, the conversion occurs under the following conditions:

- if the student passes his/her exams or graduates on schedule;
- under special arrangements for maternity leave, illness and for students with children;

- if the borrower has an annual income below a certain threshold (roughly CAD \$26,500) and net worth less than a threshold (roughly CA \$52,500).³¹

Norwegian student loans are free of interest as long as the student is registered as a full time student. Furthermore, the interest only accrues after the student has graduated.

Repayment assistance and loan cancellation

Student borrowers in difficulty with their repayment can apply for assistance that comprises waiving interest or postponing repayment. To qualify for the assistance, the borrower must have a low income, be unemployed, be sick, be approaching childbirth or caring for young children.

The Norwegian student aid office may cancel all or parts of the loan under specific circumstances:

- If the borrower lives and works in certain parts of Northern Norway;
- If illness prevents the borrower from working and the borrower receives a disability pension; or
- In case of death.

There is also a loan cancellation program – the Quota Program – for borrowers from developing countries, the Western Balkans, Eastern Europe and Central Asia. Under this program, students who return to their home country may apply for cancellation of their debt.

4.4. United States

Overview of the repayment scheme

The repayment of the Federal Student Aid program in the United States is flexible, but compared to ICR plans elsewhere the system is complicated.

The Perkins Loans and the Direct Stafford Loans are the major federal loan programs. Their repayment options differ from each other. The Perkins loans are for students with exceptional financial need and are administered (disbursements and repayments) by the school. Perkins loan repayment plan have minimum repayment rates and schools are allowed to extend repayment periods due to a prolonged illness, unemployment or low-income.

The Direct Stafford Loans are lent directly to undergraduate and graduate students through participating postsecondary schools, with government funds. Eligible students borrow directly from the government at participating school. There are four types of Direct Loans:

- **Subsidized Loans:** for students with demonstrated financial need (provide loans at lower interests);
- **Unsubsidized Loans:** demonstrated financial need is not required but interest rates are higher and accrue while the student is in school;

³¹ Importantly, the parents' income and worth are not taken into account.

- **PLUS Loans:** are loans to help pay for educational expenses not covered by other financial aid for students with dependents and for graduate or professional students;
- **Consolidation loans:** allow borrowers to combine federal education loan debt.

A Direct Loan borrower can choose from several repayment plans:

Standard repayment:

- Fixed amount each month until the loans are paid in full;
- Minimum payments of at least \$50. The borrower has to repay the loans within 10 years.

Extended repayment:

- The borrower's Direct Loan debt must exceed \$30,000 and the borrower must not have an outstanding balance on a Direct Loan as of October 7, 1998.
- The borrower has 25 years for repayment and two payment options: fixed or graduated
 - Fixed: same amount each month (same as in the standard scheme above);
 - Graduated: start low and increase every two years (same as in the Graduated plan below).

Graduated repayment:

- Payments start low and increase every two years;
- The monthly payments cannot be less than the amount of interest that accrues between payments. No single payment can be more than three times greater than any other payment;
- The borrower has to repay the loans within 10 years.

Income contingent repayment:

- Monthly payments are calculated each year on the basis of the borrower's discretionary income which takes into account adjusted gross earnings, spouse's income, family size and the total amount of Direct Loans.
- Borrower pays the lesser of:
 - 20 per cent of monthly discretionary income;
 - Amount necessary to repay the loan in 12 years multiplied by an income percentage factor that varies with annual income.
- The plan is available for all Direct Loans with the exception of PLUS Loans for parents. If the payments cannot cover the interest that has accumulated on the loans, the unpaid amount is capitalized once each year; capitalization cannot exceed 10 per cent of the original amount owed. Interest will continue to accumulate but will no longer be capitalized.
- Maximum repayment period is 25 years; the unpaid debt is discharged after 25 years.³²

Furthermore, it should be noted that the interest rates depend on the type of loan, and – for the Direct Subsidized Loan for undergraduate students – on the date of first disbursement. The rates for the fixed interest rates range from 3.40 per cent to 7.90 per cent, while the variable interest rates range from 1.79 per cent to 3.19 per cent.³³

³² Taxes may be applied to the amount that has been discharged.

³³ The full list of interest rates can be found at <http://www.direct.ed.gov/calc.html>.

Repayment assistance and loan cancellation

One form of repayment in the United States is the Income-based repayment (IBR). Under this plan, borrowers experiencing a partial financial hardship (i.e., the annual amount due under a 10-year standard repayment plan exceeds 15 per cent of the difference between the adjusted gross income and 150 percent of the poverty line for the borrower's family size and state) are only expected to make reduced monthly payments.³⁴ The conditions of the IBR are very similar to the income contingent repayment depicted earlier:

- Borrower pays the lesser of:
 - 15 per cent of monthly discretionary income;
 - Amount necessary to repay the loan in 10-year standard repayment amount.
- Payment may be adjusted annually, taking income and family size into account.
- The plan is not available for all Direct Loans (e.g., PLUS loans for parents).
- Maximum repayment period is 25 years; the unpaid debt is discharged after 25 years.

In December 2012, a new plan for students in partial financial hardship was introduced – the Pay as You Earn (PAYE) repayment plan.³⁵ The PAYE is similar to IBR with a few exceptions: the forgiveness period is 20 years instead of 25 years and the borrower is required to pay no more than 10 per cent of his or her discretionary income.

Besides IBR and PAYE repayment assistance, borrowers who have difficulty making their payments can apply to defer payments of their loans, in which case interest does not accrue on subsidized loans. To be eligible the borrower must be studying, on a form of qualifying duty service in the armed forces, be unemployed or experience economic hardship (defined by specific rules and limited in duration to three years).³⁶ Borrowers in default are not eligible for deferment.

Borrowers who do not qualify for deferment may obtain forbearance, which allows the borrower to make smaller payments, extend the time for making payments or temporarily stop making payments. Common reasons for obtaining forbearance are illness, financial hardship or serving in a medical or dental internship or residency. Interestingly, forbearance can be given automatically in the process of deferment, cancellation or change in repayment plan or if the borrower is involved in a military mobilization or in a local or national emergency.

Furthermore, loans may be partially or entirely cancelled in case of disability, bankruptcy or death. Finally, there also exist profession-specific loan forgiveness programs. For example, a proportion of loans can be cancelled if the borrower is a full-time teacher in a low-income elementary or secondary school for 5 consecutive years (as much as \$17,500 in this case) or if the borrower is employed in

³⁴ Some loans are not eligible under the IBR. These include PLUS Loans for parents and private education loans.

³⁵ The PAYE is available to *new* borrowers (defined as borrowers with no outstanding balance on a Direct Loan as of October 2007) who have received a Direct Loan on or after October 2011.

³⁶ If studying, the borrower must be enrolled at least half time in an eligible postsecondary school or studying full-time in a graduate fellowship program or an approved disability rehabilitation program.

certain public service jobs, or has made a total of 120 payments on their loans and has not been in default on the loans being forgiven.

4.5. Summary

The description of selected OECD countries indicates various repayment schemes, that can, however, be categorized into two broad types: mortgage-style plans with fixed repayment (e.g., Canada, Norway and plans in the United States) and income-contingent repayment (ICR) plans (e.g., Australia, the United Kingdom, and one plan in the United States) where payment is only required when income reaches a certain threshold.

The institutional framework of the aid system may foster the manageability of student debt. Hence, the fact that – under minimal eligibility conditions – borrowers in Norway can convert a substantial proportion of their loans into grants effectively reduces their debt burden. In comparison, other countries provide grants that serve the same purpose of preventing debt though their first goal is to improve the access to PSE of students with the highest needs. Nevertheless, the Norwegian conversion of loans into grants, is expensive and may not be applicable everywhere.

ICR plans are also effective for the manageability of student debt since they ensure that low-income borrowers are not overburdened by debt repayment. Importantly, on one hand, repayment rates have not been identified as based on rigorous empirical evidence although levels are commonly set between 0 and 20 per cent of gross income for different groups of students. On the other hand, income thresholds often represent a substantial proportion of the country's median or average household income: close to 75 per cent of median household income in Australia, close to 80 per cent of the average household income in the United Kingdom. As a consequence, default and delinquency in an ICR setup practically disappear. However, as discussed in the literature review, the implementation of these programs can be problematic, especially for collecting repayments from borrowers who live overseas.

Another feature that contributes to the manageability of the debt is the existence of grace periods, especially since the transition from school to employment may be difficult. Hence, all the countries studied provide a grace period. The duration varies by country: 6 months in Canada and the United States and 7 months in Norway. Alternatively, payments only commence when income reaches a certain threshold (Australia and the United Kingdom). Unlike Canada and Norway, no interest accrues during the grace period in Australia and the United States, and not until the first payment in the United Kingdom.

The environmental scan also reveals that assistance programs for indebted students are common. These assistance programs share features with their Canadian counterparts:

- They allow students to make smaller payments, defer payments or simply cancel the loans;
- Enrolment in these programs is not automatic: the borrower must apply and satisfy eligibility conditions;
- They often deny eligibility to borrowers who are not up to date with their payments.

The last common feature is important since it seems to contradict the ultimate goal of these assistance programs: to help students with debt management problems.

Importantly, there exist loan forgiveness programs for cases of illness, death or special circumstances. Finally, countries have created forgiveness programs as incentives for specific professions (e.g., eligible teachers in the United Kingdom and the United States, eligible fields of study in Australia) or for graduates to settle in remote areas (e.g., to work in the health sector in remote areas in Canada, in eligible fields of study in Australia and graduates settling in Northern Norwegian regions). Table 4 outlines key features of repayment programs in Canada and the selected OECD countries.

Table 4 Features of repayment programs in Canada and selected OECD countries

	Canada	Australia	United Kingdom	Norway	United States
Mortgage-style	x			x	x
Income contingent repayment		Up to 8% above repayment threshold	9% above repayment threshold		Up to 20% of adjusted gross earnings ^a
Grace period	6 months	Until income reaches threshold	Until income reaches threshold	7 months	6 months
Interest rate	Floating rate: Prime +2.5% Fixed rate: Prime +5%	Inflation only	Inflation + up to 3%	3.26% ^b	Variable rate: 1.79% - 3.19% Fixed rate: 3.4% - 7.9%
Interest rate during grace period	x			x	
Prevention of default	Provision of grants	Provision of grants	Provision of grants	Convert loans into grants	Provision of grants
Repayment assistance program	Reduced payments (up to 20% of gross family income) Debt could be cancelled.	Defer payments	Defer payments	Waive interests or postpone payments	Reduced monthly payment (up to 10 or 15% of discretionary income). Debt could be cancelled.
Loan forgiveness program besides cases of illness or death	Profession/ geographic specific programs; Tuition rebates	Profession/ geographic specific programs	Profession specific programs	Geographic specific program; Program for eligible foreigners	Profession-specific program

Note: ^a Plans in the United States are usually mortgage-style but borrowers can choose an income-contingent repayment plan.

^b Interest rate in August 2011.

5. Consultations with key informants

The purposes of the key informant interviews were to (a) provide an overview of the different ways the non-profit and private financial sectors measure and calculate manageable debt; (b) document the issues identified by interviewees that relate to debt manageability including current practices; and (c) to develop an inventory of debt benchmark measures. The methodology used in conducting the key informant interviews is presented in the next subsection, followed by a synopsis of the key findings from the interviews. The section concludes with a discussion of the implications of the findings from the key informant interviews.

5.1. Methodology

A detailed interview protocol including conversation script and interview questions was developed to facilitate the key informant interviews. This interview protocol was built on both the results from the literature review and the environmental scan. It was designed to seek in-depth information on each of the following eight areas of a loan cycle:

1. Loan program options, eligibility, and general repayment terms;
2. Calculating maximum borrowable amounts and loan default risks;
3. Repayment features, thresholds, and flexibilities;
4. Concepts, measures, and calculations for 'manageable debt;'
5. Helping borrowers manage debt;
6. Issues/Challenges;
7. Changes over time; and
8. Promising ideas or practices.

The protocol for the semi-structured interviews is presented in Appendix B. An early draft of the interview protocol and the organizational categories were provided to Alberta EAE and minor revisions were made based on EAE's feedback before finalizing the interview questions. The interview questions were designed to encourage key informants to reflect on specific issues previously identified, but also to extrapolate from these to provide new information for exploration.

In order to gain an in-depth understanding of the debt threshold assumptions, possible debt burdens of student loans, and their repayment, representation from across the following five organizational categories/sectors were sought, for the interviews:

- Consumer credit or credit counselling organizations;
- Private sector lenders including banks and credit unions;
- Student counselling and support;
- Academic experts in student financial aid; and
- Credit bureaus.

A mix of purposive and snowball sampling was used to recruit participants in the key informant interviews. This approach was felt to be the most appropriate in terms of locating sources that would be information-rich (Patton, 2002) and providing a diversity of perspectives and views. Based on advice from EAE, a special focus of the key informant interviews was placed on private lenders and credit counselling agencies to seek information of the concepts of manageable debt thresholds in the private sector. With input from EAE, the research team conducted an internet search to draft the preliminary list of relevant organizations and individuals to approach within each of the five categories. Initial contact with each of these organizations was made via email to a senior communications or media relations person, with 1 to 2 follow-up emails sent between 3 to 5 days later in the event of a non response. The researcher introduced and discussed the research objectives with the first contact to identify the most suitable interviewee in the organization who worked directly on loan management.

Of the 34 organizations approached, the research team was successful in interviewing 13 representatives (details of the interview statistics is in Table 5). The participation rates of organizations from the private lender and credit bureau categories were significantly lower than for the other three categories. Participants were, for the most part, high level executives (e.g., President, CEO, Executive Director; Senior VP; departmental director), program managers, content experts, or university professors. Although the majority of perspectives provided by respondents were specific to the Canadian context, one academic expert from a university in the United States was identified and invited to participate.

With the exception of one in-person interview with an academic expert, all other interviews were conducted by telephone and each interview lasted approximately 30-45 minutes. Key informants received an electronic copy of the interview protocol in advance of the interview. Interviews were conducted over a 1 month period from late February 2013 to late March 2013. Each interview was recorded for note taking accuracy.

Table 5 Summary statistics of the key informant interviews

	Number of organizations approached	Interviews completed
Credit counselling agencies	7	5
Private lenders ³⁷	14	2
Student counselling and support	3	2
Academic experts	8	4
Credit bureaus	2	0
Total	34	13

³⁷ Although most of the national banks were approached for an interview, all either declined to participate or did not respond to the request. The two private lenders that did participate were credit unions.

5.2. Findings from the key informant interviews

Main findings from the key informant interviews are organized by the eight topic area headings in this section. In the following, quoted sentences in *italics* are actual responses recorded during the interview. The implications of these findings are discussed in the section 5.3.

Concepts, measures, and calculations for ‘manageable student debt’

The private lenders did not report using the “manageable student debt” concept, with one credit agency agreeing that “*manageable is the right term but it’s not used in industry*”, whether for students or borrowers in general. Instead, there was consensus across most interviewees that the predominance in the lending sector has been on calculating *‘how much debt CAN be taken on, instead of how much SHOULD be taken on.’* One interviewee indicated that the focus has been on the capacity of a borrower to pay back the loan (e.g., debt resolution, debt execution, debt thresholds, and repayment strategy) considered separately from how debt repayment has the potential to affect borrowers across all aspects of their lives. One credit agency noted that it looks “*along the lines of affordability as opposed to capacity ... holistically, and how it affects [a client’s] financial well-being as a whole, not just currently, but also a person’s ability to save and reach other financial goals.*” According to one expert, the best measure of affordability is a thorough examination of budgets and cash flows.

Loan program options, eligibility, and general repayment terms

Private lenders and academic experts noted that when considering financial options for PSE, borrowing is often the last one – with savings, RESPs, and grants being in the preferred first tier of options, government student loans in second tier, followed lastly by credit from private lenders. One interviewee suggested that “*[government] student loans are perceived to be more generous, so people start with these*”, but if the assessment of financial needs falls short of the actual needs, the amount of government loan received may be insufficient to cover the actual expenditure, “*the result being that students have to go to the bank [to borrow].*”

According to the credit unions interviewed, loan and credit options/products are not specifically customized for younger borrowers (i.e., clients under 40) and only one credit product targeting students irrespective of age was identified: the student line of credit. Although only one of the credit unions reported currently offering student lines of credit – and then only to a very small segment of their clientele, the second credit union was actively researching into adding student lines of credit to their product list. No traditional loan or other credit options were identified and although student credit cards are offered by many of the national banks, neither credit union spoke of offering credit cards designed especially for students. It is worth noting that the participating private lenders talked extensively about parents and other family members using credit to finance their children’s postsecondary education.

One academic expert explained that compared to the US, Canada has less variety in private student lending options, in part because of a relatively smaller gap between the cost of education in Canada and the availability of government-sponsored financial aid. In other words, with the higher cost of postsecondary education in the US, there is a higher potential value of unmet financial need that exists

to be met by the private lending sector. In turn, this has generated a greater number of specialized lending products and specialized lenders for students in the US than in Canada. It was pointed out that since the 2007 credit crisis, these specialized lenders and the variety of specialized products for PSE financing have reduced in number.

With respect to basic eligibility requirements for student lines of credit in Canada, the industry standard criteria differ little from those of any other loans or lines of credit: the borrower must be over 18 years of age in order to sign a loan agreement; all loans and lines of credit are income-contingent; and the amount of loans or line of credit qualified for is assessed based on ability to pay rather than the financial needs. Since most students have no income or no credit history to demonstrate their ability to pay, private lenders rely on co-signors (such as parents) to back the loan or line of credit. The only difference in eligibility criterion between a traditional personal line of credit and a student line of credit is that a student must demonstrate student status (such as a proof of full-time registration) to qualify for the student line of credit. Lenders did not identify any specific mechanisms to verify whether student line of credit funds (or any other loans) are being used for their designated purpose of financing PSE, although one academic expert noted that an annual confirmation of school enrolment was the only verification used by lenders for student lines of credit. Without systematic tracking of the usage purpose of loans, one private lender commented that it is quite likely a considerable portion of funds in the forms of loans, home equity lines of credit, split mortgages (with multiple purposes and amortization schedules) are being used by parents to fund their children's PSE. No hard data on the number or value of the student lines of credit being provided by the credit unions were available. There was general consensus across the different types of organizations that few data are available to quantify the amount of credit being provided by private lenders either through student lines of credit or other credit or financing products and being used by students or their families to cover the costs of PSE. In general, student lines of credit appear to represent a small but growing part of the lending portfolio of private lenders. And where they are not already growing, they appear at the very least products of focus for possible expansion. In a similar vein, interviewees from credit counselling agencies noted that they were seeing more clients arriving with debt through student lines of credit and credit cards, as well as loans from friends and family. The last of these was referred to as an *"unspoken story."*

Calculating maximum borrowable amounts and loan default risks

Both the credit unions that SRDC interviewed indicated that they use a number of factors (including credit history and rating, income, employment history, home ownership among others) collectively to determine whether to extend a student line of credit to a client and how much can be borrowed. However, because a student often has little or no credit history, it is the guarantor's or co-signor's credit worthiness that matters most in determining the maximum borrowable amount. According to one lender, the maximum borrowable amount is *"... all based on the borrowing capability of the parent – their income, credit ratings, net worth and debt servicing ratios."* Since *"guarantors are released [from the line of credit] if and only if the student can demonstrate that they can take over the loan – they demonstrate that they are gainfully employed and have earnings"*, the loan is basically the guarantor's. According to one lender, in some instances, a student does not have a qualifying guarantor and is therefore ineligible for the line of credit. Similarly, a student whose guarantor has a strong borrowing

capability may be allowed to incur more debt than that student could manage on his or her own even after graduation and securing employment.

Irrespective of the purpose of the credit product (i.e., whether it is a student line of credit or other product), lenders confirmed that they used the long-standing industry standard thresholds of 30-32 per cent Gross Debt Service (GDS)³⁸ and combined 40 per cent Total Debt Service (TDS)³⁹ in determining the maximum permissible debt load, with rare exceptions possible over and above the TDS fraction if the borrower/guarantor had a large disposable income. The lenders and at least two academic experts confirmed that there was either no empirical evidence supporting the use of these long-standing thresholds or its source was too obscure to be known.

Interviews discussed the process for making a risk assessment. One expert put forward the breakdown of the credit score (e.g., the Beacon Score): 35 per cent on payment history, 30 per cent on amounts owed, 15 per cent on the length of credit history, 10 per cent on new credit inquiries and 10 per cent on the type of credit. One lender indicated that a computer algorithm combining the different criteria was used to calculate whether a client would be eligible and for what amount. However, in addition to factors related to the borrower, lenders also constantly review the exact cut-offs for specific credit products based on delinquency and default rates the lender currently experiences and the levels of capital available to lend, all of which affect the tolerance for risk the lender is willing to accept. One academic expert recalled that a retired bank executive characterized private lenders' level of risk tolerance as "cyclical" with the overall credit market. In other words, a loan amount that was considered to be "too much" at one time could be considered to be "tolerable" at another time. A private lender's risk tolerance is generally defined as a level at which a person's unsecured debt remains below the level of net worth.

With respect to student lines of credit, maximum borrowable amounts depend on the level of study, with professional programs (e.g., dentistry) being eligible for the highest amounts and undergraduate or college programs being eligible for a lesser amount. The maximum is determined according to the generalized acknowledgment that students in professional programs stand to earn substantially higher incomes and thus can have access to higher borrowed amounts to finance their studies.

In Canada, the level of study and credit worthiness appear to serve as the two main criteria for determining maximum borrowable amounts. One academic expert told SRDC that US banks had ventured to devise ways to use variables such as program of study and the school itself (e.g., Ivy League or other type of college) to determine maximum borrowable amounts. After the 2007 credit crisis, US banks have now reverted back to the traditional credit score / GDS calculations.

³⁸ Gross Debt Service is the percentage of the borrower's income that is needed to pay all required monthly housing costs (mortgage payments, property taxes, heat and 50 per cent of condo fees).

³⁹ Total Debt Service is the percentage of the borrower's income that is needed to cover housing costs (GDS) plus any other monthly obligations that an individual has, such as credit card payments and car payments.

Repayment features, thresholds, and flexibilities

As reported by one lender, student lines of credit require interest-only payments on the portion of funds used while in study, with a 6-month grace period after the end of studies. After this 6-month grace period, borrowers are additionally required to make re-payment towards the outstanding principal, typically with an amortization period of up to 10 years.

In addition to the calculations using the factors noted previously, the lenders agreed that accompanying clients through a budgeting process to ensure that they could manage their debt service (interest only payments) and repayments within the amortization period was an encouraged practice. Lenders reiterated the importance of budgeting as part of lending to younger people but noted that budgeting was not part of the formal process currently in place. In other words, lenders do not have a fixed threshold they apply based on a notion of “manageability.” They rely only on the industry standard thresholds of GDS and TDS.

Since credit counselling agencies serve many borrowers who face difficulties in debt repayment, their approach to determining manageable repayment levels is quite different. Not surprisingly, every credit counselling organization interviewed identified budgeting as a major component of the intake and assessment process. Despite it being a key activity, there were no pre-determined thresholds for what constituted “reasonable” living expenses in each budget category nor pre-determined “thresholds” for what constituted “manageable” repayment levels. The strong consensus across these organizations was that the use of such pre-determined thresholds would be *‘inappropriate’* and *‘counterproductive’* given the wide variety of clients’ personal circumstances and preferences. Instead, ‘manageable’ repayment is based on a detailed, comprehensive assessment of these individual circumstances, including net income, assets, liabilities, monthly expenditures, irregular expenditures, and life factors (such as family size, family composition, age with respect to stage in the life cycle of savings and wealth accumulation, potential income, health issues, and so on). As noted by one organization, the focus of the budgeting process is to apply SMART principles to help clients get out of debt (Specific; Measurable; Addjustable in case of circumstances changes; Realistic; and Tied to a timeframe).

Although pre-determined amounts of “reasonable” living expenses are not strictly followed, one organization reported having a reference sheet with national average expenditures available as a tool and a *“springboard for conversation”* to help clients consider their spending habits. The reference sheet, combined with the counsellor’s knowledge, experience and common sense, is used to develop what resembles individually-customized “reasonable living expenses.” The result would appear to serve as a first “benchmark” in the determination of a manageable debt level among credit counselling organizations.

The second, approximate “benchmark” identified by credit counselling organizations relates to the amount of debt repayment possible within a maximum 60-month period, once ‘reasonable living expenses’ have been calculated within the budgeting process. Clients who can reasonably expect to repay all their debts within this 60-month timeframe can opt for a self-administered repayment plan with continued support by the credit counselling agency (but absent direct creditor interventions). In this scenario, the focus is on the client being responsible for debt management: approaching creditors and making arrangements for repayment. This option does not affect the client’s credit rating.

Helping borrowers manage student debt

The credit union offering student lines of credit reported being “*quite aggressive with delinquent loans*”, regardless of whether the loan was for students or other borrowers. The lender’s financial advisor attempts to discuss and resolve delinquency within 30 days. There were three options identified by lenders in resolving delinquency:

- Extension of interest-only period (for student lines of credit);
- Extension of repayment term;
- As a last option, consolidation to bring payments down (with tangible securities to back the consolidated loan).

Although the lender offering a student line of credit talked about a 9-year repayment period for the lines of credit, both lenders interviewed indicated that the length of the loan repayment term could be extended by at least 2 mechanisms: a) if a student was having a difficult time repaying their loan, they could ask for an extension of their repayment term, and b) indirectly, if a parent was borrowing to pay for the child’s education, the repayment term could be extended considerably if options such as home equity line of credit or home re-financing were taken up.

If these options fail to resolve the delinquency, the relationship with the client would be considered “deteriorated” and the loan transfers to “Special Loans” within 90 days. The loan will be quickly written-off and reported to a credit bureau (affecting the borrower’s credit rating) if repayment is not likely.

Interviewees from credit counselling agencies indicated that approximately 15% of their clients carry student loans, although none collect information systematically that could provide a more accurate estimate of the number or value of these loans. Among those experiencing difficulty repaying their student loans, the credit counselling agencies noted that typical client circumstances included the following:

- they were not working in their chosen field;
- they could not move ahead financially – either because they did not know how to budget, or they had reduced income from losing their jobs or working reduced hours;
- they were often dependent on their family member(s);
- most had not completed school or had dropped out;
- most had loans in arrears already; and
- they had lost their self-esteem because of their financial difficulties.

Usually some unexpected event or change in personal circumstances (separation, divorce, or job loss) had changed these borrowers’ financial situation and they had entered delinquency.

According to one academic expert, income below \$20,000 ~ \$30,000 was an important threshold determining the likelihood of student loan default and although parental ability to contribute to

repayment could act as a significant buffer to default, debt level coupled with low income acted as the twin main reasons for loan delinquency.

According to the credit counselling organizations, when imposition of a “reasonable” debt repayment plan cannot yield repayment of the entire amount of debt within 60 months (i.e., because borrowers will likely be unable to manage the debt they have on their own), the client is presented with a series of more aggressive options to manage their debt.

- One is a formal debt management program that pools all debts into one debt comprising affordable payments on 100 per cent of the principal while creditors waive the interest accrued. The credit counselling agency works on behalf of the client with creditors. Taking up this option is registered on public record and affects the borrower’s credit rating. Estimates on the prevalence of this option provided by the participating credit counselling agencies suggest it is taken by 15 to 20 per cent of clients.
- Other options include legal debt management such as consumer proposal, orderly payment of debt (OPD) program, and bankruptcy. These most aggressive options affect credit rating significantly since creditors may not recover all outstanding principal.
 - Consumer proposals can be used if the borrower is able to make some payments (standard is 2.5 per cent for the minimum payment) but does not have enough income to support a debt management program assuming maintenance of a “reasonable” standard of living.
 - The voluntary orderly payment of debt (OPD) program is available in certain provinces. All debts are consolidated and a set amount is paid to the court on a periodic basis. In turn, the court pays creditors on behalf of the client. Borrowers under OPD are protected from wage garnishes or asset seizures. The maximum repayment period is 3 years and the total consolidated debt is equivalent to full amount owed plus 5 per cent.
 - The most aggressive legal option is bankruptcy. It affects the client credit rating most and a different set of living standard thresholds (less than the “reasonable” living standard thresholds) are used to determine repayments.

When a credit counsellor is helping a client in setting up a plan of debt management or debt restructuring, government student loans are included or excluded in the plan depending on the status of the loan. Unless the government student loan is in arrears or in collection, the amount of repayment for the student loan is treated as an essential expenditure and is therefore a part of the client’s monthly budget and would not be part of the repayment plan (i.e., the client continues to pay the loan as before). However, if the client’s student loans are in arrears, they are included in the debt management program. But the student loans are not eligible for bankruptcy until 7 years after the end of studies.

Issues/Challenges

Low financial literacy, unrealistic expectations

Perhaps not surprisingly, one of the biggest issues noted in interviews across all organizational categories was the low level of financial literacy about student loans among the students they dealt with, and their families. One respondent commented that “*students really have not received the*

education on how to manage their money, they've never been taught ... [The] problem we see is students not having a grasp of what they're really getting into", whether it is private or government loans they receive. The lack of financial literacy also explained why students borrowed more than they could realistically afford to pay back. There was general consensus across the groups that due to the relatively younger age of many of those who sought financing for PSE, there was a need to couple any offer of loans with more education about "what the repayment actually looks like...and that preparing a budget is the most effective way to do this."

Similarly, some students had an unrealistic and overly optimistic expectation of their future income. One respondent cited a finding from the BC Securities Commission that many second year university students expect to make a 6-figure salary within 5 years of graduation and also statistics that "60 per cent of students believe that 10 years after graduation, they'll be making \$100,000 a year."

Loan assessments predicated on manageable payments instead of manageable debt

According to one interviewee, the use of the industry standard GDS and TDS ratios and the loan assessments by private lenders "completely ignores discretionary expenses and make the whole difference between the rational economic man and what people actually do." Similarly, one respondent noted that the borrowers themselves "look at it in terms of manageable payments instead of manageable debt." Unfortunately, establishing different thresholds is an issue especially with student loans because "the obvious problem is that we don't have an income to compare it to [so it is] all based on potential" and "no one has come up with a good way to calculate this."

Debt loads are too high

There was consensus in interviews across organization categories that some students are carrying loan amounts that are too high. They thought that, in general, people had too much access to credit without consideration of their ability to manage it. A few respondents indicated that debt in the amount of \$20,000 did not seem unreasonable for a student after completing their studies, but that amounts above \$40,000~\$50,000 become much more unreasonable for a student to manage. In particular for the younger borrowers borrowing for PSE, all organizational groups indicated that there was an added responsibility to ensure that education about money management/budgeting should be included with all loans.

Other issues

Although not specifically the focus of the interviews, a few respondents identified other issues that affected the repayment and default rates on government student loans. Some respondents noted that there appeared to be a different attitude towards the 'seriousness' of government student loans relative to loans issued by private lenders which may affect repayment and default rates. According to one organization, some borrowers have the "perception that the government is the friendlier lender" and that, according to other interviewees, "the government won't hurt me" and "maybe if I wait this out long enough, it'll go away; maybe this will eventually be written off." Interestingly, another interviewee noted that some students considered the 'pay off' from repayment of government student loans as lower than that from paying back private loans: "Anecdotally, we find people don't take student loan debt as seriously – at the end of paying, what do you get? A financial institution is a place where you're going to want more

products in the future, credit card, mortgage, etc., and it's in the interest to keep the relationship with the bank good."

Similarly, a number of interviewees noted that repaying loans for postsecondary studies may be influenced by a perception held by students that *"they were sold a narrative [about the benefits of going to postsecondary education] and we sell the product to fulfill that narrative, and they buy it, and then they come out and they're on their own [regardless of the outcome of their studies]."*

In addition, although CSLP's RAP can help borrowers dealing with repayment difficulties, the borrowers only are eligible if their loans are in good standing. In addition, the application is a time consuming process. The *"biggest problem is that clients don't qualify for RAP because they cannot be in arrears ... this is a common problem and it's a catch-22."*

Changes over time

Multiple respondents noted changes in attitudes towards borrowing both from borrowers and lenders. One respondent noted a shift in the past 20 years in the relationship between people and their banks: *"we used to have relationships with our banks; now most are selling financial products where calculation is risk assessment."* Another respondent said *"we live in a world where debt is mainstream – people are really comfortable carrying a lot of debt."* One respondent commented that people would do just about anything to avoid default on their mortgage payment previously, now they are more worried about defaulting on their credit cards since people are using credit cards more, and more often as an extension of their income.

Beyond the evolution of the credit market, policy changes by governments have also been important in the usage of credit. One respondent mentioned how the ease of obtaining a mortgage with CMHC's mortgage insurance increased access to credit, even though recent tightening has helped to reverse that trend. Another respondent commented that the increasing cost of PSE without a matching increase in government student loans increased demand for private student loans, particularly during periods of lower interest rates. One respondent noted that recently students in Alberta had been borrowing more because of the elimination of grant programs and a loan release program.

Some respondents were concerned about higher default rates due to several real or foreseen changes: rising interest rate, unemployment rate, underemployment rate, and the increasing cost of education. Others welcomed the tightening of credits (such as on home equity lines of credit), requirements for proper disclosure of the cost of borrowing, and financial literacy initiatives that are becoming more prevalent in the industry and which should help reduced repayment difficulties.

Promising ideas or practices

Participants in the key informant interviews suggested that more efforts should be put into better risk calculations for students to prevent loan delinquency or default. For example, some suggested that the student loan program could take into account the program a student is borrowing for and labour market prospects for career pathways typically associated with that program which could include the risk of a graduate not having gainful or related employment. It would then make sure the repayment is manageable accordingly (such as through delayed repayments or stepped repayments). Another

suggestion was to make sure students entering postsecondary education had a long term plan and goal, such as *“having a statement saying ... why I want to go to school and take what I’m taking.”* *“to do a cost-benefit analysis: a lot of people just go to school to go to school, without thinking of the benefits. They need to know what it’s really going to cost them.”* Some even suggested that sitting through a budgeting session / workshop / webinar and learning about credit and debt management should be mandatory prior to obtaining a loan. Financial literacy organizations recommended teaching financial literacy in high school to help prevent delinquency and default.

Remarks from across organizational groups largely indicated perceptions of a collective responsibility to ensure that education about money management and budgeting should go along with all loans. A lender said, *“we need to provide advice-based as opposed to just providing you with a product.”* One respondent commented that maximums should not be a percentage only. They should be realistic numbers based on a budget to facilitate people’s plans and take into account of expected and unexpected circumstances. *“It’s important to sit them down and show them the kind of salary they’ll need to support the lifestyle they want.”*

Credit agencies noted that there were several changes they would want the CSLP to make to help students manage their repayments: a) to stop accumulating interest once CSLP had been approached with a legitimate repayment proposal; b) when assessing for RAP, consider all debt in the repayment amount instead of focusing on the debt ratio; c) consider turning some loan into a grant at graduation (for example, in Newfoundland and New Brunswick, there were maximum loan amounts which meant amounts provided for education above and beyond the maximum would be forgiven when a student completed the program on time).

A possible pilot project described during the interviews was one that provided monetary incentives for students to attend a 2 hour session of money management / financial literacy and made eligibility for a grant conditional on the attendance. Another promising example mentioned was the free financial planning / counselling services for students provided by students in some US schools. Some also mentioned the new income-based repayment scheme in the US as a promising practice to help students manage their debt.

5.3. Discussion

A major finding of the key informant interviews was the lack of a well defined manageable student debt concept in budgeting and credit counselling. Private lenders focused on their own tolerance of default risk instead of debts’ manageability. Although the industrial standard debt ratios GDS and TDS were used, it remains questionable whether these represent contributions to real manageability, absent a solid justification of their utility.

Some respondents were of the opinion that credit was too easily extended to borrowers. However, many agreed that the main culprit for unmanageable debts was not the high threshold but low financial literacy among borrowers. Unrealistic expectations for post graduation income, lack of understanding of the terms and conditions of student loans, and lack of skills in managing money were believed to be the factors putting borrowers into a potentially difficult position from which to manage their debts. Without knowing what they were getting into, many student borrowers sought credit counselling only once it was too late.

Although a well constructed budget was expected to help borrowers in managing their finances, there was no set standard set of thresholds to dictate what a borrower “should” do. Indeed, credit counsellors emphasized the many different individual circumstances and eschewed reliance on any single set thresholds, even though they might use “reasonable” living expenses as references to help people setting up a realistic budget and repayment plan. Notably, with a good planning and understanding of their own finances and broader conditions, some borrowers could borrow more than the commonly accepted thresholds (such as the 40 per cent TDS) without having difficulty in repayment. Without any knowledge in money management, some borrowers had difficulties in managing their debt even though their debt ratios were way below the industry standard.

Last but not the least, the interviews identified that the CSLP does not take into account various risk factors, such as labour market prospects particular to a PSE program, before loans are extended to students. Without a good and accurate awareness of the benefits of postsecondary education, some graduates exiting lower return programs may borrow too much and face difficulties in repayment when their post education income falls short of expectations. The income contingent repayment feature of the RAP seems to be able to help students managing their student debts; however, the strict program rules of CSLP could be counterproductive in resolving some borrower’s financial difficulties.

6. Quantitative analysis of Canadian data

6.1. Methodology and data

The last component of the research project estimated the various manageable student debt thresholds encountered during the project using Canadian data. The thresholds that have been selected are based on the results of the literature review, environmental scan, and the key informant interviews. Specifically, the section provides evidence for Canada of the following thresholds, as reviewed by Baum and Schwartz (2006):

- The rule of thumb 8 per cent cut-offs;
- The over-indebtedness definition in European literature – 25 per cent of gross income on credit commitments;
- The consumption expenditure definition: the maximum “discretionary income” available for debt repayment defined as the difference between disposable income and the after tax Low Income Cut-Offs (LICO-IAT); and
- The financial aid needs assessment definition: the maximum “discretionary income” available for debt repayment defined as the difference between disposable income and the Moderate Standard of Living (MSOL).

These thresholds are estimated separately by income percentiles and personal characteristics, such as gender, age, educational attainment, labour force status, and household size to obtain subgroup-specific thresholds. Importantly, these thresholds help in determining the maximum manageable debt a student may incur.

The thresholds are established by analyzing the latest public-use microdata files (PUMF) from multiple sources including: the 2006 Census, the 2005 National Graduate Survey (NGS), and the 2009 Survey of Labour and Income Dynamics (SLID) from Statistics Canada. These cross-sectional microdata files are used to estimate 5th, 10th, 15th, 20th, 25th, 50th, 75th, and 90th percentiles of the family or individual’s before-tax income (and disposable income) per month among Canadians of 24 to 35 years of age to cover most postsecondary student borrowers’ standard repayment period.

6.2. Results

The rule of thumb 8 per cent cut-offs

The rule of thumb 8 per cent threshold implies that individuals should not pay more than 8 per cent of their before-tax income on their student debt. Table 6 presents the 8 percent cut-off by percentiles of (before-tax individual) monthly income for the entire population (first row) as well as by gender, employment status, and selected education level.

By definition, the cutoff increases with income. It is as low as \$6.67 and \$33.33 per month for the 5th and 10th percentile, and as high as \$500 for the 90th percentile. Unsurprisingly, for all levels of income, the cutoff is higher for men, since they tend to have higher incomes than women. It is found that the

cutoff for women represents roughly 70% of the men's cutoff. In addition, the cutoff is higher for individuals who are employed and for those who have a higher diploma. In particular, at the highest income percentiles, individuals with a degree in the health field have the higher cutoffs.

Table 6 8 percent thresholds on before-tax monthly income, by employment status and education level (Source: Census 2006)

		Before Tax Individual Monthly Income Percentiles							
		5%	10%	15%	20%	25%	50%	75%	90%
Overall		6.67	33.33	53.33	73.33	93.33	186.67	293.33	500.00
Gender	Female	6.67	26.67	46.67	66.67	80.00	160.00	246.67	420.00
	Male	6.67	40.00	66.67	93.33	113.33	220.00	333.33	560.00
Employment Status	Employed	26.67	60.00	86.67	106.67	126.67	213.33	313.33	520.00
	Unemployed	0.01	6.67	20.00	33.33	46.67	106.67	186.67	360.00
	Not in the Labour Force	0.01	0.01	6.67	13.33	26.67	66.67	133.33	320.00
Highest Education Achieved	High School	6.67	26.67	46.67	66.67	80.00	160.00	246.67	413.33
	University Below Bachelor	0.01	20.00	40.00	66.67	86.67	186.67	286.67	486.67
	Bachelor's	6.67	40.00	66.67	93.33	120.00	240.00	353.33	580.00
	Master's	6.67	26.67	53.33	73.33	100.00	220.00	373.33	646.67
	PhD	0.01	26.67	40.00	73.33	120.00	240.00	426.67	866.67
	Degree in Health ^a	0.01	13.33	33.33	60.00	100.00	273.33	486.67	1400.00

Note: ^a Includes medicine, dentistry, veterinary medicine and optometry.

Plotting these cutoffs reveals several interesting features. For instance, Figure 1 illustrates the 8 per cent rule by income percentiles and gender. The positive slopes of the curves capture the fact that, mechanically, the cutoff increases with income. Interestingly, the cutoffs are depicted by convex curves with flat slopes at low income levels (roughly up to the 25th percentile), and steeper slope at higher income levels. In other words, the cut-off *risks more rapidly* at higher incomes.

Importantly, the determination of these thresholds permits ready estimation of the maximum amount of manageable debt a student may incur, assuming the rule. Under the current CSLP policy, a student must repay student debt within 114 months (9.5 years) at an interest rate of prime +2.5 per cent or prime+5 per cent. Assuming that students incur debt through CSLP only, and given a prime rate of 3 per cent, it follows that, with an interest rate of 5.5 per cent, students in the 5th percentile can borrow up to

\$594 while students in the 50th and 90th percentile can borrow \$16,622 and \$44,522 respectively; these numbers are \$535, \$14,972, and \$40,102 when the interest rate is 8% (Table 7).⁴⁰ Because these amounts are proportional to the numbers of Table 6, it can be seen that there is quite a great deal of variation in the maximum manageable debt.⁴¹

Figure 1 8 percent threshold on before-tax monthly income, by gender (Source: Census 2006)

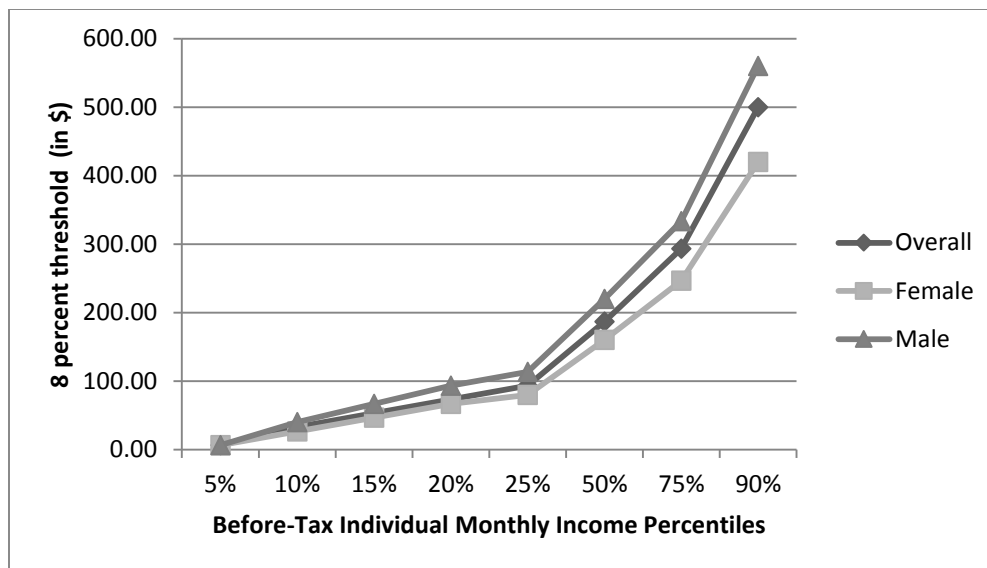


Table 7 Maximum manageable debts with a 8 percent threshold on before-tax monthly income (Entire Population)

	Before Tax Individual Monthly Income Percentiles							
	5%	10%	15%	20%	25%	50%	75%	90%
Interest rate: 5.5%	\$594	\$2,968	\$4,749	\$6,530	\$8,310	\$16,622	\$26,119	\$44,522
Interest rate: 8%	\$535	\$2,673	\$4,277	\$5,881	\$7,485	\$14,972	\$23,526	\$40,102

⁴⁰ In particular, the exercise is similar to computing the present value of monthly payments equal to the thresholds, with interest rates of 5.5 or 8 per cent during 114 months. The payments are assumed to be made at the beginning of each period.

⁴¹ The proportional factors are 89.04 and 80.20 when interest rate equals 5.5 per cent, and 8 per cent respectively.

The over-indebtedness definition in European literature

The over-indebtedness definition of manageable student requires that individuals should not spend more than 25 per cent of gross income on credit commitments. The threshold for student debt is therefore the difference between 25 per cent of gross income and Statistics Canada's estimated average consumer debt load.⁴² The thresholds are calculated as (25 minus the average debt load) per cent of the estimated before-tax monthly income.

Table 8 presents the thresholds for the over-indebtedness ratio by percentiles of (before-tax individual) monthly income for the overall sample (first row) as well as by gender, employment status, and selected education level. It can be seen that the trends described earlier under the 8 percent cutoff are the same. However, the thresholds under the over-indebtedness definition are higher than the ones seen earlier.

Using these cutoffs, it is possible to determine the maximum manageable debt amounts (Table 9). The methodology is the same as the one depicted in the previous subsection. It is found that, for the overall sample, the maximum manageable amounts go from \$1,300 for the 5th percentile to \$88,728 for the 90th percentile, if an interest rate of 5.5 per cent is assumed; and \$1,171 to \$79,919 with an interest rate of 8 per cent. Just as in the previous section, proportional factors can be applied on the numbers of Table 8 to obtain their respective maximum manageable debt amounts under the over-indebtedness definition.⁴³

⁴² The average consumer debt loads were obtained for the year 2007 and 2009. The 2007 measures are utilized with the income information from the 2006 Census, while the 2009 measures are utilized from the SLID.

⁴³ The proportional factors are the same: 89.04 and 80.20 when interest rate equals 5.5 per cent, and 8 per cent respectively.

Table 8 Over-indebtedness threshold on monthly income, by employment status and education level (Source: Census 2006)

		Before Tax Individual Monthly Income Percentiles							
		5%	10%	15%	20%	25%	50%	75%	90%
Overall		14.60	68.46	114.98	150.61	189.80	370.48	584.00	996.45
Gender	Female	14.60	58.40	94.13	129.43	160.60	319.38	502.07	830.38
	Male	14.60	87.60	133.35	178.85	233.20	438.35	670.89	1,124.20
Employment Status	Employed	58.83	127.75	175.20	217.18	255.50	424.44	627.80	1,037.17
	Unemployed	0.01	14.60	43.80	73.00	89.43	217.18	379.60	725.66
	Not in the Labour Force	0.01	0.01	13.69	29.20	47.07	131.40	265.80	638.75
Highest Education Achieved	High School	13.69	58.40	102.20	129.43	162.43	317.70	492.90	821.50
	University Below Bachelor	0.01	43.80	87.60	127.75	164.73	365.00	576.57	970.90
	Bachelor's	14.60	76.65	129.43	178.85	233.60	479.21	706.00	1,162.53
	Master's	11.77	51.10	102.20	152.97	191.63	438.13	741.30	1,270.20
	PhD	0.01	47.07	87.60	141.20	233.60	472.67	830.38	1,850.16
	Degree in Health ^a	0.01	25.55	73.00	123.23	204.40	576.57	1,009.43	2,896.18

Notes: ^a Includes medicine, dentistry, veterinary medicine and optometry.

The Over-indebtedness threshold is defined as (25 -average consumer debt load) x income.

Table 9 Maximum manageable debt under the over-indebtedness threshold (Overall Sample)

	Before Tax Individual Monthly Income Percentiles							
	5%	10%	15%	20%	25%	50%	75%	90%
Interest rate: 5.5%	\$1,300	\$6,096	\$10,238	\$13,411	\$16,901	\$32,989	\$52,002	\$88,728
Interest rate: 8%	\$1,171	\$5,491	\$9,222	\$12,080	\$15,223	\$29,714	\$46,839	\$79,919

Maximum discretionary income available for debt repayment with respect to LICO

The third threshold definition can be classified as a consumption expenditure definition. In simple terms, students should not pay debt on their loans unless their income exceeds a base income to spend on necessities. The after-tax Low Income Cut-offs (LICOs-IAT) from Statistics Canada represent such a measure since they capture the minimum expenditure needed for a set standard of living. The maximum “discretionary income” available for debt repayment at each income percentile is then calculated as the difference between disposable income and the LICOs-IAT.

Table 10 presents the threshold by percentiles of (after-tax individual) monthly income for the overall sample (first row) as well as by gender, employment status, and selected education level using the SLID.⁴⁴ It is found that the thresholds for the lowest percentiles – either in the overall sample or in subgroup characteristics – are often negative. However, for higher income percentiles, the discretionary income threshold exceeds the thresholds described earlier. For instance, the threshold for the 50th income percentile is \$2,404.

Interestingly, the analysis of the discretionary income across provinces reveals important differences (Table 11). For example, at the 20th income percentile, there is more than \$400 difference between the threshold in Newfoundland and Labrador (\$743) and Quebec (\$307) or British Columbia (\$368). These disparities reflect the tradeoff between higher income and higher cost of living across Canada.

⁴⁴ Because the LICO is available in real dollars, the SLID after-tax income variable (*atinc27*) is nominal and has been adjusted to real 2009 dollars.

Table 10 Maximum discretionary income available for debt repayment (LICO) by monthly income, employment status and education level (Source: SLID 2009)

		After-tax Family Monthly Income Percentiles							
		5%	10%	15%	20%	25%	50%	75%	90%
Overall		-789	-253	110	438	756	2404	4767	9748
Gender	Female	-1033	-429	25	521	837	2633	4952	9482
	Male	-1036	-397	82	585	990	2670	4987	9393
Employment Status	Employed	-631	180	756	1198	1538	3293	5525	9955
	Unemployed	-1413	-1071	-800	-393	-371	527	2755	6450
	Not in the Labour Force	-1381	-1108	-727	-509	-371	1149	3142	7322
Highest Education Achieved	High School	-1006	-493	-61	370	669	1977	3785	8180
	University Below Bachelor	-1171	-243	552	899	1257	2888	5806	9343
	Bachelor's	-883	102	603	1100	1491	3652	6030	11018
	University Above Bachelor	-1137	-295	460	1206	1862	3991	6639	12158

Table 11 Maximum discretionary income available for debt repayment (LICO) by Province (Source: SLID 2009)

	After-Tax Individual Monthly Income Percentiles							
	5%	10%	15%	20%	25%	50%	75%	90%
Overall	-789	-253	110	438	756	2,404	4,767	9,748
Alberta	-970	-215	298	701	1,124	3,139	5,930	10,827
British Columbia	-966	-415	12	368	687	2,348	4,786	10,397
Manitoba	-687	-135	163	549	786	2,254	4,194	8,375
New Brunswick	-577	-38	343	601	890	2,262	4,127	7,799
Newfoundland and Labrador	-245	139	423	743	1,016	2,516	4,583	8,778
Nova Scotia	-805	-100	190	410	658	1,988	4,118	8,424
Ontario	-786	-228	83	444	789	2,643	5,017	9,895
Prince Edward Island	-200	243	584	779	947	2,295	4,321	7,886
Quebec	-785	-330	25	307	574	1,878	3,824	7,507
Saskatchewan	-439	86	376	714	1,020	2,700	5,201	9,693

Maximum discretionary income available for debt with respect to MSOL

The last threshold definition is a financial aid needs assessment definition. It utilizes the table of Moderate Standard of Living (MSOL) from the CSLP needs assessment manual to represent the expenditure needed for a reasonable standard of living. The maximum “discretionary income” available for debt repayment at each income percentile can then be calculated as the difference between disposable income and the MSOL.

Table 12 shows similar patterns as Table 10. However, the cutoffs are lower, i.e. more constraining, when computing the threshold using the MSOL. Similarly, the disparities across provinces follow the same patterns as the ones observed when using the LICO. Interestingly, Tables 12 and 13 show that roughly 25% of students may have difficulties in repaying their debt. This finding can be related to the *flat*-repayment schedule at low income percentiles that have been depicted earlier in Figure 1.

Table 12 Maximum discretionary income available for debt repayment (MSOL) by monthly income, employment status and education level (Source: SLID 2009)

		After-tax Family Monthly Income Percentiles							
		5%	10%	15%	20%	25%	50%	75%	90%
Overall		-2,643	-1,792	-1,315	-891	-512	1,294	3,571	8,776
Gender	Female	-3,036	-2,208	-1,652	-1,174	-840	1,132	3,401	7,948
	Male	-3,008	-2,336	-1,709	-1,316	-924	939	3,261	7,584
Employment Status	Employed	-2,627	-1,669	-1,075	-621	-77	1,688	3,946	8,478
	Unemployed	-3,760	-3,020	-2,756	-2,473	-2,473	-1,315	394	3,697
	Not in the Labour Force	-3,508	-2,945	-2,723	-2,443	-1,951	-644	1,313	5,263
Highest Education Achieved	High School	-3,015	-2,612	-1,963	-1,430	-1,170	266	1,819	6,589
	University Below Bachelor	-2,865	-2,256	-1,393	-1,003	-689	1,283	4,181	7,587
	Bachelor's	-2,791	-1,769	-1,056	-557	-81	2,193	4,578	9,296
	University Above Bachelor	-2,954	-1,791	-1,487	-657	198	2,445	5,144	11,385

Table 13 Maximum discretionary income available for debt repayment (MSOL) by Province (Source: SLID 2009)

	Before Tax Individual Monthly Income Percentiles							
	5%	10%	15%	20%	25%	50%	75%	90%
Overall	-2,643	-1,792	-1,315	-891	-512	1,294	3,571	8,776
Alberta	-3,250	-2,275	-1,691	-1,071	-747	1,502	4,307	9,503
British Columbia	-3,016	-2,177	-1,384	-1,039	-718	1,318	3,582	9,368
Manitoba	-1,723	-1,142	-672	-324	-61	1,654	3,518	7,423
New Brunswick	-1,590	-917	-415	-184	20	1,524	3,342	6,930
Newfoundland and Labrador	-1,445	-841	-494	-244	24	1,452	3,602	7,630
Nova Scotia	-2,360	-1,540	-1,144	-720	-486	944	2,977	7,440
Ontario	-2,791	-2,047	-1,556	-1,092	-735	1,280	3,608	8,606
Prince Edward Island	-1,590	-863	-563	-293	-3	1,319	3,227	7,044
Quebec	-2,122	-1,483	-1,019	-694	-413	1,002	2,988	6,885
Saskatchewan	-2,051	-1,360	-662	-298	103	1,892	4,261	9,118

7. Conclusions

The results of the project's literature reviews, environmental scan and key informant interviews have confirmed that management of most student loan options currently in use are more or less based on the traditional manageability concepts of Gross Debt Services (GDS) and Total Debt Services (TDS). The introduction of the Repayment Assistance Plan has provided some income-contingent loan repayment features to the public student loan programs in Canada, but the strict rules of the program make incorporating of assistance difficult when a borrower try to restructure all debts.

Similar to the findings of Baum and Schwartz (2006), there is a lack of evidence or theory to justify the usage of 32 per cent GDS and 40 per cent TDS as manageable debt thresholds. It seems that private lenders can tolerate the delinquency and default risks associated with these thresholds and the practice of extending loans based on the incomes of the borrowers and consignors. In the cases made known to SRDC, private sector lenders do not have any special program to ensure that student borrowers are able to manage their debts.

The quantitative analysis has shown that applying common definitions of thresholds in the Canadian context produces a variety of thresholds. Importantly, the thresholds vary by group characteristics and across provinces. If a standard of living is applied in calculating the manageable debt thresholds, the Canadian data show that a substantial proportion (up to 25%) of students will be considered in difficulties in repaying their student debt.

The findings from the key informant interviews also highlight the difficulties in defining a universally applicable set of manageable debt thresholds. Many respondents believed that the lack of financial literacy (such as budgeting) was the most important factor in determining manageability and because of individual variation in circumstances and life planning, a set of thresholds could only be presented as a reference for planning. Although it was not explicitly expressed, one idea underlying respondents views seemed to be that debt ratios should not become the limiting factors preventing young people pursuing beneficial post secondary education. The preference not to extend the repayment period beyond 5 years suggests that people may be willing to give up certain aspects of living standards for a *limited* period of time in order to achieve a longer-term rewarding target.

The income contingent student loans implemented in Australia, New Zealand, United Kingdom, and United States have been identified as a promising development in ensuring manageability of student debts. In theory, the student debt must be manageable since the scheme ties repayment to income and borrowers do not need to repay if their incomes drop below a reasonable level. In practice, the debt manageability is not guaranteed if income contingency repayment is not automatic. The efficacy of Canada Student Loan Program's Repayment Assistance Plan, which incorporates the concept of "affordable repayment" to help students who are facing repayment difficulties, is yet to be examined. The researchers engaged on this project have examined the usage of the Repayment Assistant Program for the Canada Student Loan Program. There is some evidence to suggest that the program reduced student loan defaults but many who applied for the program were not accepted. More research is needed to determine whether the income contingent "affordable repayments" under the RAP reflect actual manageable student debt repayments.

References

- Baum, Sandy, and Schwartz, Saul (2006). "How Much Debt is Too Much? Defining Benchmarks for Manageable Student Debt." The College Board, New York.
- Bayard, Justin, and Greenlee, Edith (2009). "Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005". Statistics Canada Catalogue no. 81-595-M No. 074. Ottawa, Ontario.
- Berger, Joseph, Motte, Anne, and Parkin, Andrew (2009). "The Price of Knowledge: Access and Student Finance in Canada. Fourth edition." The Canada Millennium Scholarship Foundation. Montreal, Quebec.
- Boyd, L. A. (1997). Discrimination in mortgage lending: The impact on minority defaults in the Stafford Loan program. *The Quarterly Review of Economics and Finance*, 37(1), 23-37.
- Canadian Bankers Association (2012). *Credit Card Delinquency and Loss Statistics*. Toronto, Ontario.
- Canada Student Loans Program (2011). *Draft Policy Manual*. Ottawa, Ontario.
- Choy, S. P., & Li, X. (2006). Dealing with debt: 1992–93 bachelor's degree recipients 10 years later. NCES 2006-156. Washington, DC: US Department of Education, National Center for Education Statistics.
- Cohen-Cole Ethan & Jonathan Morse, 2009. "Your house or your credit card, which would you choose?: personal delinquency tradeoffs and precautionary liquidity motives," Risk and Policy Analysis Unit Working Paper QAU09-5, Federal Reserve Bank of Boston.
- Dynarski, Mark (1994). "Who Defaults on Student Loans? Findings from the National Postsecondary Student Aid Study". *Economics of Education Review* 13 (1): 55-68.
- Flint, Thomas A. (1997). "Predicting Student Loan Defaults." *Journal of Higher Education* 68 (3): 322-54.
- Foster, Chester, and Van Order, Robert (1984). "An Option-based Model of Mortgage Default." *Housing Finance Review*. 3(4):351-72.
- Foster, Chester, and Van Order, Robert (1985). "FHA Terminations: A Prelude to Rational Mortgage Pricing" *AREUEA Journal*. 3(4):351-72.
- Friedman, Milton (1957). *A theory of the consumption function*. Princeton, NJ: Princeton University Press.
- Guillemette, Yvan (2006). "The case for income-contingent repayment of student loans." *The Education Papers*, No 233, C.D. Howe Institute.
- Guttentag, J. (1992) "When Will Mortgage Underwriting Come of Age?" *Housing Policy Debate*, Volume 3, Issue 1.
- Hansen, J. (1991). "The shifting roles of parents and students." In J. P. Merisotis (Ed.), *The changing dimensions of student aid*. San Francisco: Jossey-bass.

- Harrast, S. A. (2004). "Undergraduate borrowing: A study of debtor students and their ability to retire undergraduate loans." *Journal of Student Financial Aid*, 34(1), 21-37.
- Herr, E., & Burt, L. (2005). "Predicting student loan default for the University of Texas at Austin." *Journal of Student Financial Aid*, 35(2), 27-49.
- Human Resources and Skills Development Canada (2011a). "Canada Student Loans Program Statistical Review 2009-2010." Ottawa, Ontario.
- Human Resources and Skills Development Canada (2011b). "Summative Evaluation of the Canada Student Loans Program." Ottawa, Ontario.
- Kapsalis, Constantine (2006). "Factors Affecting the Repayment of Student Loans." Statistics Canada Catalogue no. 81-595-M1E – No. 039. Ottawa, Ontario.
- Knapp, Laura Greene, and Terry G. Seaks (1992). "An Analysis of the Probability of Default on Federally Guaranteed Student Loans." *The Review of Economics and Statistics* 74(3): 404-411.
- Lando, D. (2004). *Credit risk modeling: Theory and applications*. Princeton Series in Finance.
- Lochner, Lance, and Monge-Naranjo, Alexander (2008). "Education and Default Incentives with Government Student Loan Programs." Unpublished Manuscript. University of Western Ontario.
- Lochner, Lance, Stinebrickner, Todd, and Suleymanoglu, Utku (2012). "Understanding Student Loan Repayment Problems: Evidence from the Canada Student Loan Program." Unpublished Manuscript. University of Western Ontario.
- Meyer, D. (1998). "Predicting which Borrowers are Most Likely to Default." In: Webster, J., Meyer, D. & Arnold, A. *Student Loan Defaults in Texas: Yesterday, Today, and Tomorrow*. Austin, TX: Texas Guaranteed Student Loan Corporation.
- Modigliani, F. & Brumberg, R. (1954). "Utility analysis and the consumption function: An interpretation of cross-section data." K. Kurihara, Ed., *Post-Keynesian Economics*. New Brunswick, NJ: Rutgers University Press.
- Moffat, Peter G. (2005). "Hurdle Models of Loan Default." *Journal of the Operational Research Society* 56, 1063-1071.
- Monteverde, Kirk (2000). "Managing Student Loan Default Risk: Evidence from a Privately Guaranteed Portfolio." *Research in Higher Education*, 41(3):331-352.
- Neil, Christine (2009). "Tuition Fees and the Demand for University Places," *Economics of Education Review*, 28(5): 561-570.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Podgursky, M., Ehlert, M., Monroe, R., Watson, D., & Wittstruck, J. (2002). "Student loan defaults and enrollment persistence." *Journal of Student Financial Aid*, 32(3), 27-42.

- Prairie Research Associates. 2005. "Survey of Secondary School Students." Montreal: Canada Millennium Scholarship Foundation.
- Schwartz, Saul and Finnie, Ross (2002). "Student loans in Canada: an analysis of borrowing and repayment." *Economics of Education Review*. 21, 497-512.
- Social Research and Demonstration Corporation (2008). "Feasibility Study for Evaluating Debt Management Measures." Report prepared for the CSLP. Ottawa, Ontario.
- Steiner, Matt and Teszler, Natali (2003). "The Characteristics Associated with Student Loan Default at Texas A&M University." Produced by Texas Guaranteed Student Loan Corporation in Association with Texas A&M University.
- Steiner, Matt and Teszler, Natali (2005). "Multivariate Analysis of Student Loan Defaulters at Texas A&M University." TG Research and Analytical Services.
- Steiner, Matt and Tym, Carmen (2005). "Multivariate Analysis of Student Loan Defaulters at the University of South Florida." TG Research and Analytical Services.
- Sy, Wilson (2007). "A Causal Framework for Credit Default Theory." Australian Prudential Regulation Authority Working Paper. Sydney.
- Vandell, Kerry D. (1995). "How Ruthless is Mortgage Default? A Review and Synthesis of the Evidence." *Journal of Housing Research*. (6)2:245-264.
- Volkwein, J. F., Cabrera, A. F., Szelest, B. P., and Napierski, M. (1998). "Factors Associated with Student Loan Default among Different Racial and Ethnic Groups." Unpublished Manuscript. University of Houston Institute for Higher Education Law and Governance.
- Volkwein, J. F., and Szelest, B. P. (1995). "Individual and Campus Characteristics Associated with Student Loan Default." *Research in Higher Education*, 36(1), 41-72.
- Wilms, W. W., Moore, R. W., and Bolus, R. E. (1987). "Whose Fault Is Default? A Study of the Impact of Student Characteristics and Institutional Practices on Guaranteed Student Loan Default Rates in California." *Educational Evaluation and Policy Analysis*, 9(1), 41-54.
- Woo, J. H. (2002). "Factors Affecting the Probability of Default: Student Loans in California." *NASFAA Journal of Student Financial Aid*, 32(2), 5-23.

Appendix A: Program Web sites

Canada

- **Repayment Assistance Measures Information:**
Canada Student Loans Program, *Draft Policy Manual – Chapter 5* (February 2011)
<http://www.canlearn.ca/eng/after/repaymentassistance/index.shtml>
- **Canada Student Loan forgiveness:**
<http://www.canlearn.ca/eng/after/forgiveness/index.shtml>

Australia

- <http://studyassist.gov.au>

Norway

- <http://www.lanekassen.no/nb-NO/Toppmeny/Languages/English/>

United Kingdom

- **Student Loans Company – Loan Repayment:**
<http://www.slc.co.uk/services/loan-repayment.aspx>
- **British Government – Loan repayment:**
<https://www.gov.uk/student-finance/repayments>

United States

- **Repayment Programs:**
<http://www.direct.ed.gov/RepayCalc/dlindex2.html>
<http://studentaid.ed.gov/repay-loans/understand/plans>
- **Deferment and cancellation:**
<http://www.direct.ed.gov/postpone.html>
<http://www.direct.ed.gov/cancellation.html>

Appendix B: Key Informant Interview Questions

Table 14 Key Informant Interview Questions, by Organization Type

	Consumer Credit/ Credit Counselling Organizations	Private Sector Lenders	Student Counselling and Support	Acade- mics	Credit Bureaus
A. Loan program options, eligibility, and general repayment terms					
Can you describe some of the different financing options typically taken up by borrowers in a younger age bracket (40 and under)? What are the eligibility criteria?		✓			
Are there any significant differences in the eligibility criteria between loans for different purposes such as the PSE-specific financing options? If so, what would these be?		✓			
Are there mechanisms in place to verify whether funds are being used for their designated purpose?		✓			
B. Calculating maximum borrowable amounts and loan default risk					
How is the maximum loan amount for a borrower from a younger age bracket calculated? This could include: i) credit history or credit rating? ii) asset and liability determination, including loans from other sources such as government-sponsored loans for postsecondary education? iii) maximum permissible debt load? iv) maximum number of repayment years? v) availability of a co-signer?		✓			
Does [organization] perform any type of risk assessment for borrowers? If so, could you please describe this risk assessment? Are there particular strengths and/or weaknesses in this risk assessment that have had an effect on loan default rates (e.g., presence of loan/credit products used by borrowers to meet education costs without the lending institutions being aware)?		✓			
Are the maximum borrowable amount thresholds in use by your organization optimal? If not, what would be better and what prevents the setting of a better threshold?		✓			

Table 14 Key Informant Interview Questions, by Organization Type

	Consumer Credit/ Credit Counselling Organizations	Private Sector Lenders	Student Counselling and Support	Acade- mics	Credit Bureaus
C. Repayment features, thresholds and flexibilities					
How does [organization] determine repayment thresholds? Does [organization] determine these repayment thresholds based on the notion of 'manageability'? Do factors such as age, socioeconomic status, or prospective income figure in any calculations of what is 'manageable' for repayment?	✓	✓	✓	✓	
Do you have any policies or mechanisms for borrowers who are having difficulty repaying their loans (e.g., repayment assistance plans, interest reduction, loan forgiveness, monthly payment cap, emergency monthly payment relief, extension of repayment term, etc.)?	✓	✓			
Which of these features are the most commonly take up among those having difficulties repaying their loans? What are the most typical outcomes of those pursuing different pathways to manage their debt?	✓	✓			
D. Concepts, measures, and calculations for 'manageable student debt':					
Does your organization use the term 'manageable debt' or another term describing a similar concept? How would [organization] define or calculate this?	✓	✓	✓	✓	✓
Are you aware of any other definition for manageable debt used either here in Canada or elsewhere? What are the advantages or disadvantages of these alternative definitions?	✓	✓	✓	✓	✓
E. Helping borrowers manage student debt					
Are there some types or permutations of debt that are more common among those experiencing problems with managing debt? Are there 'typical' situations or characteristics of borrowers who tend to be more likely to seek help managing their debt load?	✓	✓	✓		✓
Does [organization] provide services or products designed especially for those with student loans/debt? If so, can you describe these and who these services are targeted to? How popular are these among those with student loans/debt?	✓	✓	✓		✓

Table 14 Key Informant Interview Questions, by Organization Type

	Consumer Credit/ Credit Counselling Organizations	Private Sector Lenders	Student Counselling and Support	Acade- mics	Credit Bureaus
F. Issues/Challenges					
In your opinion, is there a part of the calculation or other loan/credit process that makes it more challenging for borrowers to repay their loans? Is there a particular issue that is most influential?	✓	✓	✓	✓	✓
G. Changes over time					
Have there been any significant changes in how calculations of maximum borrowable amounts are made, or of manageable debt, in the past 10-15 years? What would some of these changes be? How have they affected borrowers with student debt?	✓	✓	✓	✓	✓
Do you foresee any significant changes in the near future?	✓	✓	✓	✓	✓
H. Promising ideas or practices					
If you could change 1 or 2 things with the current way maximum borrowable amounts or manageable debt is calculated, what would they be?	✓	✓	✓	✓	✓
Are there any promising ideas or practices that you've heard of or seen in use elsewhere to make debt more manageable, whether in Canada or internationally?	✓	✓	✓	✓	✓