

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Lochner, Lance; Stinebrickner, Todd; Suleymanoglu, Utku

Working Paper Analysis of the CSLP Student Loan Defaulter Survey and Client Satisfaction Surveys

CIBC Working Paper, No. 2013-3

Provided in Cooperation with:

Centre for Human Capital & Productivity (CHCP), Department of Economics, University of Western Ontario

Suggested Citation: Lochner, Lance; Stinebrickner, Todd; Suleymanoglu, Utku (2013) : Analysis of the CSLP Student Loan Defaulter Survey and Client Satisfaction Surveys, CIBC Working Paper, No. 2013-3, The University of Western Ontario, CIBC Centre for Human Capital and Productivity, London (Ontario)

This Version is available at: https://hdl.handle.net/10419/121975

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU



by

Lance Lochner, Todd Stinebrickner and Utku Suleymanoglu

Working Paper # 2013-3

May 2013

Western

CIBC Working Paper Series

Department of Economics Social Science Centre Western University London, Ontario, N6A 5C2 Canada

This working paper is available as a downloadable pdf file on our website http://economics.uwo.ca/centres/cibc/

Analysis of the CSLP Student Loan Defaulter Survey and Client Satisfaction Surveys

Lance Lochner, Todd Stinebrickner and Utku Suleymanoglu

University of Western Ontario

April 3, 2013

Table of Contents

EXECUTIVE SUMMARY	4
I.INTRODUCTION	8
A. Background	8
B. Objectives and Report Overview	8
II. THE DEFAULTER SURVEY	10
A. Survey Design	10
B. Description of Defaulter Survey Data	11
1. Demographics	11
Gender, Language, Location and Age	11
Marital Status and Family	13
Education	14
2. At the Time of Default	16
Employment and Unemployment Duration	16
Income	17
Debt	18
Other Missed Payments	19
Reasons for Missed Payments	20
The Most Important Reason for Missed Payments	21
Contributors to Default	23
Contributors to Default by Income at the Time of Default	27
Defaulter Characteristics by Reported Contributors to Default	28
3. Consequences of Default	31
Consequences of Default	
Consequences vs. Anticipation	31
Status of the Loan Now	32
4. Awareness	
Program Awareness	33
Known Repayment Options (if aware of any now)	

Repayment Options Awareness before Default (if aware of any now)	. 34
Contact with NSLSC	. 35
5. Repayment Assistance Plan	. 36
RAP Applicants	. 36
RAP Application Ease and Problems Encountered by Defaulters	. 36
Application Success	. 37
Reasons for RAP Application Failure	. 38
Reasons for Default despite Receiving Assistance	. 38
Ever Considered Applying to the RAP and Why not?	39
PAD Awaranacs, Application, and Passint	
	. 40
6. Current Income	. 42
Current Household Income	. 42
Current Personal Income	. 42
7. Alternative Policies and Views on Government Support of Education	. 44
What would have helped?	. 44
Views on Government Support of Education	. 45
8. Defaulters Who Returned to Good Standing	. 46
C. Discussion	. 47
III. COMPARING RESPONDENTS IN THE DEFAULTER SURVEY AND THE CLIENT SATISFACTION SURVEY	. 48
IV. ANALYSIS OF STUDENT LOAN REPAYMENT PROBLEMS IN THE 2010-2012 CLIENT SATISFACTION SURVEYS	51
A. Introduction	. 51
B. CSS Data Description	. 53
C. Analysis of Repayment Problems using the CSS	. 55
Repayment Problems and Parental Transfers	. 59
Repayment Problems 12 and 18 Months after 2010 and 2011 CSS	. 61
D. Summary	. 62
V.POLICY DISCUSSION	. 64

EXECUTIVE SUMMARY

In 2010-11, the Canada Student Loans Program (CSLP) provided loans to approximately 425,000 full-time students in the ten participating provinces and territories. Many of these students are likely to encounter difficulties in repaying their student loans. Given the scope of the program and the central role it plays in human capital accumulation, it is important to understand the reasons for these repayment difficulties.

The Canada Student Loans Program (CSLP) measures the satisfaction of its loan and grant recipients through an annual Client Satisfaction Survey (CSS). For the years 2010-2012, new survey questions were included on the CSS in an effort to understand why some people experience repayment problems for their student loan obligations while others do not. However, the CSS does not contain defaulted borrowers. As a supplement to the CSS, a project was conducted in 2011-2012 to survey government student loan borrowers who had defaulted on their student loans – the Student Loan Defaulter Survey. The purpose of this survey is to provide a better understanding of why borrowers go into default and the characteristics of defaulted loans. This project was also intended to provide feedback on the effectiveness of the Repayment Assistance Plan (RAP) which was launched in 2009 and designed to ensure that student loan borrowers can make affordable payments while in repayment.

This report discusses results from the 2011-2012 Student Loan Defaulter Survey and 2010-2012 Client Satisfaction Surveys related to student loan repayment problems. Much of Section II is devoted to a description of the observable characteristics of borrowers who are in default (e.g., highest educational background completed, program of study, marital status, age, and income) and the loans that they hold (e.g., the loan size at the time of default). Section III compares defaulters in the Defaulter Survey with a comparable random sample of non-defaulters from the 2010-12 Client Satisfaction Surveys.

Results from Sections II and III suggest that defaulters have lower education levels than borrowers in good standing: 38% of non-defaulters have a university degree or higher compared to only 22% of defaulters. Student debt levels are much more similar for those who default and those who do not. Most notably, however, the Defaulter Survey strongly suggests that a student borrower's economic situation is of central importance in determining whether he/she defaults. Roughly half of defaulters have an annual income of less than \$10,000 at the time they default, while about three-in-four have an annual income of less than \$20,000. Comparing respondents from the Defaulter Survey and CSS shows just how bad these statistics are for defaulters. Comparing borrowers under age 30 who consolidated their loans within the past 2 years in the Defaulter Survey and CSS, 43% of defaulters were not employed at the time of default, while only 14% of non-defaulters were not employed at the time of the CSS. 85% of defaulters had monthly income of less than \$1,600 at the time of default, while only 53% of non-defaulters did at the time of the CSS.

The notion that income plays a central role is further confirmed by a variety of direct questions in the Defaulter Survey. For example, 93% of respondents believe that difficult economic circumstances contributed in some way to default, and 71% of respondents said that economic circumstances contributed a great deal to default. Similarly, 77% of respondents listed a lack of income as a reason for missing payments, and 64% of respondents listed a lack of income as a reason for missing payments.

Defaulters are also asked to comment on the importance of a number of other factors that may have led to their default. CSLP policies, communication and administrative problems, and defaulters' own choices are generally regarded as less significant contributors to default. Although 62% of borrowers report that CSLP policies contributed in some way to their default, only 21% reported that they contributed a great deal.

The Defaulter Survey also examines defaulters' views on the consequences of default. Roughly half of all defaulters say that they experienced a credit downgrade after their default, while 20-27% report receiving collection calls, experiencing stress, and/or having money withheld from their pay cheques and other payments. Only 12% claim that the default was inconsequential. Interestingly, over half reported that the consequences of default were worse than they had anticipated.

Finally, the Defaulter Survey provides information about defaulter knowledge and/or usage of CSLP repayment assistance measures and any obstacles encountered by defaulters who attempted to apply to RAP and/or the CSLP Rehabilitation program. Roughly 85% of defaulters report that they did not know about any repayment assistance programs at the time of their default. As many as one-in-three defaulters say that better communication with CSLP would have helped them avoid default. However, there are several reasons to be cautious about these findings and their implications for RAP. First, it is difficult to know exactly what clients have in mind when they report that better communication might help them avoid default. Indeed, we find internal inconsistencies between different questions focused on communication issues: while 34% of clients say that better communication would have prevented default, this number drops to 26% when measured by a different survey question. Second, RAP was new at the time individuals in this sample had defaulted. It is possible that current borrowers are more knowledgeable about RAP, in which case additional efforts to provide more information about the program may have little impact. Finally, it seems likely that many defaulters did know something about repayment options at the time of default even if they now report that they did not. More than half of all defaulters report contacting the NSLSC about repayment options before they defaulted. It seems likely that these individuals would have been told about RAP and other assistance options; yet, we find that 45% of those reporting that they had talked to the NSLSC about repayment options before their loan went into default claim on a separate survey question to have had no knowledge of repayment assistance options before they went into default.

The difficulty with asking respondents why they may have defaulted is that there may be many contributing factors. Furthermore, just how much does a response like 'very important' mean in terms of affecting someone's probability of default? Traditional empirical techniques aimed at understanding the determinants of some outcome involve examining whether that outcome varies across individuals with different values of observed explanatory variables. In our context, this type of analysis can be informative about the extent to which different factors contribute to the probability of default.

Part IV of this report examines repayment problems using the 2010-2012 Client Satisfaction Surveys, which includes respondents who have and have not experienced different forms of repayment problems. The CSS also contains unique questions about a comprehensive set of factors that might influence whether a person experiences difficulties with repayment. In this analysis, we consider a few different measures of repayment problems, including 'serious repayment problems' (delinquency, default, or bankruptcy) and 'any repayment problem' (also includes borrowers on interest relief, IR, or RAP). Using extended administrative data on CSS borrowers, we show that borrowers on IR or RAP at the time of the CSS are much more likely to be

experiencing different forms of repayment problems 12 to 18 months later than those who have no form of repayment difficulties, justifying our broader measure of repayment problems.

Our CSS analysis confirms the central message from the Defaulter Survey regarding quantitatively important relationships between repayment problems and borrower income. Borrowers currently earning less than \$20,000/year are 32 percentage points more likely to have 'any repayment problem' at CSS than those earning \$20-40,000; they are 47 percentage points more likely to have a problem than those earning at least \$40,000. We also identify an important role for student debt, educational attainment, and beliefs about repayment. Repayment problems are increasing and concave in CSLP debt, conditional on current income and other factors. The estimates imply that someone with \$10,000 in CSLP debt is 14 percentage points more likely to experience 'any repayment problem' at CSS than someone with only \$1,000 in CSLP debt. Someone owing \$40,000 is 24 percentage points more likely to have 'any repayment problem' than someone owing \$10,000. Beliefs about the importance of repaying student loans are also important. Repayment problems are 10 percentage points higher among borrowers who report that they would stop paying their CSLP loan first if they could not afford to repay all their debts. Educational attainment is also important, even when conditioning on current income, student loan debt, and repayment beliefs. CSS respondents with university degrees or higher are 11% less likely to run into repayment problems compared to college/vocational school graduates. Completion of a college/vocational program has relatively small and statistically insignificant effects after controlling for income and debt levels. Attendance at a private institution is associated with an 11% higher rate of 'any repayment problem'. Other demographic variables are generally not statistically significant. Our results also suggest that these same factors are important determinants of more serious repayment problems as well.

Our analysis further reveals the importance of intergenerational relationships for repayment. Children whose parents are able and willing to financially help them out in times of economic stress are much less likely to experience repayment problems. The 2011 and 2012 CSS contain a question that elicits the amount of money that a student borrower could, if necessary, borrow from parents or family in the next six months. Students with sufficient family support (potential transfers of at least \$2,500) are only 11 percentage points more likely to experience repayment problems if their income falls below \$20,000 than if their income ranges between 20 and 40 thousand dollars. By contrast, students with potential family support of less than \$2,500 are 36 percentage points more likely to have repayment problems if their income falls below \$20,000.

Finally, our CSS results also suggest that income (at the time of CSS), student loan debt, and educational attainment are important factors affecting default/bankruptcy a year or more after CSS. Interestingly, youth who attended private post-secondary institutions were significantly more likely to experience serious repayment problems 12 and 18 months after CSS.

In Part V of the report we highlight some conclusions of importance for policy. With a borrower's income beyond the control of the CSLP, an open question is whether policy levers exist that could significantly reduce default rates. One possibility would be to attempt to make repaying CSLP loans a higher priority (relative to repaying other debt) among borrowers by influencing perceptions about the importance of student loan repayment. Suggesting that this may be worthwhile, defaulters often report that the consequences of default were worse than they had anticipated. However, there may be natural limits to this approach, since defaulters often miss other types of payments (e.g., credit card or cell phone payments) at the time they default on their student loans. Perhaps, more importantly, over 80% of all defaulters earned less than \$1,600 per month at the time they went into default. Many of these borrowers are unlikely to be able to afford even modest payments.

A second policy effort would bolster forms of repayment assistance to help borrowers with (temporarily or permanently) low income levels. The CSLP currently has many such programs, so it is important to make sure that clients are fully informed about all repayment assistance options. The Defaulter Survey provides some evidence that more can be done in this respect; however, it is difficult to draw any clear lessons from these findings for reasons discussed above. A broader question is whether the design of repayment assistance meets the needs of low-income debtors. Our results suggest that these programs are likely to be of the greatest value for borrowers earning less than \$20,000 per year and with little family support.

I.INTRODUCTION

A. Background

In 2010-11, the Canada Student Loans Program (CSLP) provided loans to approximately 425,000 full-time students in the ten participating provinces and territories.¹ Many of these students are likely to encounter difficulties in repaying student loans. For example, the three-year cohort default rate for loans consolidated in 2008-09 was 14.3%. Given the scope of the program and the central role it may play in human capital accumulation, it is important to understand the reasons for these repayment difficulties. Such an understanding could potentially help policymakers redesign programs which are more effective for students and less costly for the government.

Jurisdictions are constantly monitoring and analyzing the repayment performance of government student loan portfolios. The Canada Student Loans Program measures the satisfaction of its loan and grant recipients through an annual Client Satisfaction Survey (CSS). For the years 2010-2012, new survey questions were included on the CSS in an effort to understand why some people experience repayment problems for their student loan obligations while others do not.

However, the CSS does not contain defaulted borrowers, a potentially important limitation given that default rates are a key performance measure of student loan portfolios. As a supplement to the CSS, a project was conducted in 2011-2012 to survey government student loan borrowers who had defaulted on their student loans – the Student Loan Defaulter Survey (DS). The purpose of this survey is to provide a better understanding of why borrowers go into default and the characteristics of defaulted loans. This project was also intended to provide feedback on the effectiveness of the Repayment Assistance Plan (RAP) which was launched in 2009 and designed to ensure that student loan borrowers can make affordable payments while in repayment.

B. Objectives and Report Overview

Part II of this report discusses results from the 2011-2012 Student Loan Defaulter Survey. Much of this section involves describing the observable characteristics of borrowers who are in default (e.g., highest educational background completed, program of study, marital status, age, and income) and the loans that they hold (e.g., the loan size at the time of default). However, because people with the same observable characteristics may have different beliefs, we also examine defaulter attitudes towards student loans, including how important repayment of student loans is relative to meeting other financial obligations. In terms of attempting to provide direct evidence about why default occurs, the Defaulter Survey contains a substantial number of questions asking respondents directly about why they entered default. Finally, because the decision to default will take into account what a person knows about alternatives to default, we examine survey responses which provide

¹All provinces and territories except for Quebec, Northwestern Territories and Nunavut participate in the CSLP.

information about defaulter knowledge and/or usage of CSLP repayment assistance measures and any obstacles encountered by defaulters who attempted to apply to RAP and/or the CSLP Rehabilitation program.

The difficulty with asking respondents why they may have defaulted arises because there may be many contributing factors. It is also difficult to know how important a factor like income may be in a probabilistic sense. For example, just how much does 'very important' mean in terms of affecting someone's probability of default? Traditional empirical techniques aimed at understanding the determinants of some outcome involve examining whether that outcome varies across individuals with different values of observed explanatory variables. In our context, this type of analysis can be informative about the extent to which different factors contribute to the probability of default. As such, it would be valuable to examine differences in background, education, debt, and income characteristics between individuals who defaulted and those who did not. This cannot be done with Defaulter Survey alone, since all individuals in this sample have the same outcome: default. This motivates us, in Part III of this report, to compare results from the Defaulter Survey (which contains no defaulters).

The comparison undertaken in Part III relies on our ability to establish a comparable sampling frame from the two surveys in terms of time since consolidation. This suggests that it may be better to make comparisons within a single dataset. In Part IV of this report, we examine repayment problems using the 2010-2012 Client Satisfaction Surveys. In addition to the virtue of including respondents who have and have not experienced repayment problems, the CSS also contains unique questions about a comprehensive set of factors that might influence whether a person experiences difficulties with repayment.

In Part V of the report we highlight some conclusions of importance for policy.

II. THE DEFAULTER SURVEY

A. Survey Design

A total of 3,200 borrowers who had defaulted between Aug 1, 2009, and July 31,2011, were interviewed in March 2012 for the Defaulter Survey. We analyze a subsample of these respondents who allowed their survey information to be linked to their administrative records. The survey sample was stratified by region and RAP experience. To account for this stratification, we use sampling weights provided by CSLP for all results reported in this document. Table 1 summarizes the population and sample counts in each stratum.

Region	RAP Experience	Borrower Count #	Proposed Sample Size (n)*	Completed
Alberta	With RAP experience	581	231	137
	Without RAP Experience	4,541	569	663
	Sub-Total	5,122	800	800
Northwest	With RAP experience	1,973	400	315
(BC, MB, SK, YT)	Without RAP Experience	12,206	400	485
	Sub-Total	14,179	800	800
Ontario	With RAP experience	5,328	400	399
	Without RAP Experience	27,858	400	401
	Sub-Total	33,186	800	800
Atlantic	With RAP experience	1,705	400	276
(NB, NS, PE, NL)	Without RAP Experience	7,849	400	524
	Sub-Total	9,554	800	800
All regions	With RAP experience	9,587	1,431	1,127
	Without RAP Experience	52,454	1,769	2,073
	Sub-Total	62,041	3,200	3,200

Table 1: Survey Strata

B. Description of Defaulter Survey Data

1. Demographics

In this section, we describe demographic characteristics of the Defaulter Survey respondents.

Gender, Language, Location and Age

Figure 1 shows that 55.7% of defaulters are female.

Figure 2 shows that a vast majority of defaulters speak English as their first language, reflecting the fact that Quebec does not participate in the CSLP. Figure 3 shows the geographic distribution of defaulters. More than half of respondents (49.3%) live in Ontario, 27.3% live in the Northwest (BC, MB, SK, YT), 15.8% live in Atlantic provinces (NB, NS, PE, NL), and 7.5% live in Alberta.



The average age of defaulters is about 30, while the median age is 29 (Figure 4).









Marital Status and Family

More than 65% of the defaulters are single (including separated, widowed or divorced) as reported in Figure 5. Roughly 40% (17.8% + 21.8%) of defaulters have dependent children living with them, and slightly less than half of these respondents are not married. (Figure 6)





Education

The Defaulter Survey collected detailed information about the education of its respondents. In Figure 7, we see that only 23% of defaulters are university graduates or have a graduate/professional degree. As we discuss further in Part III of this report, this is low relative to borrowers from the 2012 Client Satisfaction Survey who were not in default. About one-half of defaulters did not graduate from any type of post-secondary institution.

Figure 8 shows the fields of study taken by those who defaulted. "Business and public administration", "Medicine and Health" and "Social Sciences" are the most common areas of study with combined 40% of all defaulters.





Note: Weights are used. Linked respondents only. Sample size: 2565 Borrowers with some post-secondary education only

Figure 8

2. At the Time of Default

In this section, we summarize the characteristics of defaulters at the time they began to miss payments. For ease of exposition, we sometimes refer to the time the respondent began to miss payments as the "Time of Default."

Employment and Unemployment Duration

Figure 9 shows the employment status of clients at the time of default, and Figure 10 shows the unemployment duration of those that were unemployed at that time. Slightly less than half of the respondents (48.5%) were employed at the time of default. Among those respondents in the labour force at the time of default, 41.5% (34.4% / (26.1%+22.4%+34.4%)) were unemployed. 43.6% had been unemployed for more than a year. Thus, unemployment is both prevalent and persistent at the time of default.





Income

Figure 11 shows that, at the time of default, about half of all respondents had annual income of less than \$9600 (\$800 per month). 82.3% earned less than \$19,200 per year (\$1600 per month), and 93.4% earned less than \$30,000 per year (\$2,500 per month).



Debt

Questions 6 and 7 in the Defaulter Survey elicit information about the debts of CSLP borrowers at the time of default. Figures 12 and 13 reveal that average government student loan balances are larger than average private debt balances. For example, only 25.1% of defaulters had a balance of more than \$10,000 in bank loans (including credit card and mortgage debt), whereas 52.1% had a balance of more than \$10,000 for their student loans. Table 2 shows that only 15.2% of defaulters had a bank loan balance that was greater than their student loan balance.



Figure 12



Figure 13

Q6:		Q7: B	ank Loan B	alance (in t	housands of	dollars)				
Government Loan Balance	None	1-5	5-10	10-15	15-20	20-30	30+	Total	Bank Debt > Government Debt	Count
	%	%	%	%	%	%	%	%	%	
None	33.2	0	61.3	0	0	0	5.5	100	66.8	5
1-5	38.2	33.3	10.1	3.1	3	2.6	9.8	100	28.6	385
5-10	33.3	30.6	14.4	5.2	5.2	4.2	7.1	100	21.7	726
10-15	38.6	26.1	13.4	7	4.1	4.3	6.6	100	15	470
15-20	32.5	30.2	12	7.5	6	3.1	8.7	100	11.8	312
20-30	23.2	29.5	13.4	9.6	4.6	10.7	9	100	9	380
30+	23.7	20.9	12.3	13.2	7	7	15.9	100		384
Total	32.5	28.9	12.9	6.9	4.8	5	9	100	15.2	2,662

Table 2:Distribution of Bank Loan Balance Conditional on Government Loan Balance

Other Missed Payments

Clients who defaulted on their student loans often missed other types of payments at the time of default as well. On average, the number of missed payments was 2.5. 50.8% missed credit card payments, 49.7% missed cell phone payments, and 31.4% missed utility bill payments. Only 24.3% missed rent or mortgage payments; however, it is not possible to know many respondents had these types of commitments. Roughly one-in-four missed payments for personal and/or bank loans as well. Of course, many defaulters may not have had these forms of debts (e.g. Figure 14 shows that 32% did not have any other bank loans).



Figure 14

Reasons for Missed Payments

Figure 15 summarizes the (potentially multiple) reasons given by respondents in Question 9 for missing payments. The most commonly identified reasons are lack of income (61.2%) and unemployment (23.9%). Figures 16 and 17 re-examine the results from Q9 after we aggregate similar reasons for default. These figures make it clear that issues related to economic circumstances play a central role in default. For example, Figure 16 shows that 77.0% of respondents identify at least one reason related to low levels of income. Figure 17 shows that 86.1% reported that either low income or high debt levels contributed to their default. Fewer than 20% offered a reason related to CSLP miscommunication/administration or their own inattention.











The Most Important Reason for Missed Payments

Question 10 asks respondents to identify the most important reason for missing payments. Figure 18 shows that 44% identify a lack of income and 16% identify unemployment. As above, Figures 19 and 20 re-examine these results aggregating similar responses. Figure 19 shows that 63.5% of respondents identify the most important reason to be income-related, and 79.9% report that the primary cause was low income or high debt levels (Figure 20).













Contributors to Default

Questions 11 through 14 ask respondents about the extent to which various factors contributed to their default. As above, these questions highlight the importance of poor economic circumstances.

Q11: Contribution of government or student loan program policies and rules regarding repayment.



Q12: Contribution of communication or administrative issues with the Canada or provincial student loans programs.



Q13: Contribution of my own choices or actions, such as not making payments on time, or not communicating with the National Student Loans Service Centre.



Q14: Contribution of economic issues that were outside my control, such as unemployment, not enough income, or other bills



In Figures 25 and 26, we combine some of the response categories from questions Q11-Q14 in order to summarize findings. Consistent with our earlier findings (e.g. Figures 11, 15, 16, and 17), defaulters indicate that economic circumstances are very important contributors to default. Figure 25 shows that 93.1% report that economic circumstances contributed in some way to their default (answered other than 'Did not contribute') and Figure 26 shows that 70.5% report that economic circumstances "contributed a great deal."

In contrast, CSLP policies, communication and administrative problems, and defaulters' own choices are generally regarded as less significant contributors to default. Although 61.9% of borrowers report that CSLP policies contributed in some way to their default (Figure 25), only 20.6% reported that they contributed a great deal (Figure 26).



Note: Percent of respondents who responded to Q11-Q14 with an answer other than 'did not contribute'.

Weights are used. Linked respondents only. Sample Size: 2826





Reasons for Default: Contributed a Great Deal

Weights are used. Linked respondents only. Sample Size: 2826

Figure 26

Contributors to Default by Income at the Time of Default

Figure 27 shows the most important reported reason for missing payments by monthly income at the time of default. Defaulters with lower monthly incomes are more likely to report that lack of income and/or high debt was the main reason for their default when compared to borrowers with higher monthly incomes. However, lack of income and/or high debt is still the reported main reason for default among borrowers with higher incomes at the time of default. Even among those in default with incomes greater than 1600 dollars a month, fewer than 20% place the most blame the CSLP or some oversight on their own.



Figure 28 offers a similar picture from a different set of questions. Regardless of income, a majority of defaulters report that economic circumstances contributed greatly to their default. Not surprisingly, poorer borrowers are more likely to do so. Across all income groups, roughly 20% report that CSLP policies greatly contributed to their default, whereas 24-30% report that administrative problems did so.



Defaulter Characteristics by Reported Contributors to Default

We next describe a few key characteristics of defaulters based on their views regarding the contribution of economic factors to their default: defaulters who think that economic circumstances greatly contributed to their default vs. all other defaulters. In Figures 29 and 30, we see that education and student debt levels are similar regardless of whether economic circumstances were a major contributor to default. In contrast, Figures 31 and 32 reveal that monthly income and employment at the time of default are lower for those reporting that economic circumstances were a major contributor.









3. Consequences of Default

This section summarizes the post-default experiences of defaulters.

Consequences of Default

As a consequence of their student loan default, almost half of defaulters reported a credit downgrade (Figure 33). Furthermore, 20-27% report receiving collection calls, experiencing stress, and/or having money withheld from their pay cheques and other payments. 12% claim that the default was inconsequential.



Consequences vs. Anticipation

Question 16 of the Defaulter Survey examines whether the consequences of default match pre-default expectations: "Are the consequences of defaulting on your loan more or less serious than you anticipated them to be?". Figure 34 shows that only 15.1% of defaulters encountered consequences less serious than they anticipated, while 52.8% consider the realized consequences to be more serious than expected.



Status of the Loan Now

Figure 35 shows that only 25% of respondents are currently back in good standing or have paid off their loans entirely. Roughly one-third is not making payments or had declared bankruptcy. Another 31.7% are currently making payments but are still in collection. Given that the amount of time since default may have been less than a year for many respondents (respondents defaulting between August 1, 2009, and July 31, 2011, were surveyed, while the survey was administered in March 2012), it is unclear what fraction will eventually return to good standing and pay off their loans.



4. Awareness

The Defaulter Survey includes questions to assess the awareness of defaulters about the CSLP assistance programs at the time of default and now.

Program Awareness

73.7% of respondents were unaware that borrowers can "rehabilitate" their Canada Student Loan to bring it back to good standing (Figure 36). 66.9% of respondents report that they are unaware of any repayment options that could be utilized by borrowers having difficulty making scheduled loan payments (Figure 37).





Known Repayment Options (if aware of any now)

Respondents who indicate on Q19 that they are aware of repayment options are asked to elaborate on their current knowledge. Figure 38 shows the percentage of this group who reported awareness of various possible repayment options. 39.5% were aware of Interest Relief (IR). Perhaps because it is a newer program, only 12% reported knowledge of RAP. Given that only one-third of all defaulters were aware of any of these programs (Figure 31), these findings imply that only 13% (4%) of all defaulters were aware of IR (RAP).



Repayment Options Awareness before Default (if aware of any now)

Figure 37 showed that 66.9% of respondents are currently unaware of repayment options. Figure 39 shows that 55.1% of defaulters who are currently aware of some repayment options were not aware of these options before they defaulted. Combining these results, 84.7% of defaulters reported no knowledge about CSLP repayment programs at the time they began missing payments.



Contact with NSLSC

When asked whether they had talked to the NSLSC about repayment options before their loan went into default, 54.4% of defaulters answered "yes" (Figure 40). About 45% of those who had this contact also claim to have had no knowledge of their repayment options before default.



5. Repayment Assistance Plan

In this section, we describe the experiences of defaulters regarding the Repayment Assistance Plan (RAP).

RAP Applicants

Only a small proportion (14.3%) of defaulters report that they applied for RAP in the two years preceding the survey (Figure 41). Questions 24 through 28 were answered by those who applied for RAP.



RAP Application Ease and Problems Encountered by Defaulters

Of defaulters who report that they applied for RAP, about 45% regard the application process as difficult, whereas 36.5% consider it easy (Figure 42).

Survey respondents who answered other than '1' and '2' on Q24 were asked to give details about their problems with the application. Figure 43 reveals that the most common issues experienced include being 'unclear about the rules or process' (32.2%) and having problems 'filling out the application' (26.6%).





Q25: RAP Application Problem (If Applied for RAP and Experienced Difficulty)

Application Success

Of the defaulters who reported that they had applied for repayment assistance, 50.9% report that they were successful and received assistance (Figure 44).



Reasons for RAP Application Failure

Defaulters who reported applying for repayment assistance but not receiving any were asked in Question 27 to elaborate on the reasons for the failure of their application. Figure 45 shows that communication issues with the NSLSC (23.9%) is perceived to be the leading cause of RAP application failures.



Figure 45

Reasons for Default despite Receiving Assistance

For the small number of respondents who received RAP, Figure 46 shows their reported reasons for default. As with the sample as a whole in Figure 15, reasons related to lack of finances are identified most frequently.



Q28: Received RAP and Defaulted-Reasons (If Received RAP)



Figure 47 demonstrates that 84% of the defaulters who did not apply for RAP had never considered applying to the program. Figure 48 reveals that this is primarily due to a lack of awareness about the program.







Q30: Reasons for not Applying for RAP (If did not Apply for RAP)

RAP Awareness, Application, and Receipt

Figure 49 shows self-reported RAP application rates for those who reported elsewhere in the survey that they were aware/unaware of different repayment options. The figure shows that 17% of respondents reporting that they were unaware of RAP reported elsewhere in the survey that they had previously applied for RAP.



Additionally, 12% of those claiming to be unaware of any repayment options also reported applying for RAP.

There is also mismatch between the self-reported RAP receipt and administrative records. Table 3 shows actual RAP receipt (based on administrative records) by self-reported awareness of repayment options and by self-reported application/receipt of RAP in the Defaulter Survey. Here, we see that 12% of those reporting that they were unaware of any repayment options (17% of those unaware of RAP) had actually received RAP prior to the survey. Only 37% of the defaulters who claimed to have a successful RAP application in the previous two years are observed to have actually received RAP prior to the survey.

	Admin: Ever received RAP (N=863)	Admin: Received RAP at some point two years prior to the DS (N=470)
1. Aware of RAP as a Repayment Option (N=991)		
AWARE (N=139) NOT AWARE (N=852)	0.27 0.18	0.16 0.09
2. Aware of any Repayment Option (N=2827)		
AWARE (N=991) NOT AWARE (N=1836)	0.19 0.12	0.10 0.07
3. Applied to RAP in the last two years? (N=2827)		
YES (N=517) NO (N=2310)	0.31 0.11	0.16 0.06
4. Received RAP due to this application? (N=2827)		
YES (N=288) NO (N=2539)	0.37 0.12	0.20 0.07

Table 3: Actual RAP Receipt by Reported Awareness, Application and Receipt of Repayment Assistance

Note: Sampling weights are used. Linked respondents only.

6. Current Income

Current Household Income

Figure 50 reports current household income levels of defaulters with spouses. Many defaulters still live in relatively poor households: 39.4% of households have annual gross income of less than \$30,000 (less than \$2500 per month). Still, 16.9% live in households with an annual income of \$60,000 or more (monthly income of \$5,000 or more).



Current Personal Income

Personal gross incomes have generally improved since the time of the default. Figure 51 shows that 18.6% earn more than \$2,500 a month (\$30,000 per year) at the time of the survey, whereas only 4.1% made this much at the time of default.



Personal Income at the Time of Default and Now

7. Alternative Policies and Views on Government Support of Education

What would have helped?

When asked to identify the most important thing student loan programs could have done to prevent their default (Question 35), one-in-three respondents report that better communication with the CSLP would have prevented default (Figure 52). However, when asked specifically whether better communication could have helped to prevent their default (Question 36), only 26.3% of defaulters responded with 'yes' (Figure 53). This discrepancy highlights potential difficulties when trying to interpret responses to survey questions of this type.

One-in-four defaulters think that more supportive repayment policies would have prevented their default ('better assistance' + 'more grants' + 'lower interest' + 'lower monthly payments' + 'other--be considerate' + 'other--extended grace period').







Views on Government Support of Education

The Defaulter Survey contains a question that measures the attitudes of defaulters towards student loan repayment. Nearly two-thirds of defaulters agree (somewhat or totally) with the following statement: "Education is an investment that governments should make and therefore the government should not expect to be repaid for student loans."



8. Defaulters Who Returned to Good Standing

In Table 4, we examine the role of income at the time of default and current income (i.e., income at the time of the survey) in determining whether a borrower returns to good standing. Column 1 shows that the probability of returning to good standing ranges from .164 to .198 for borrowers who have current income of less than \$1,600 per month. Column 2 shows that the probability of returning to good standing (includes those who paid off their debt) ranges from .368 to .410 for borrowers who have current income of more than \$1,600 per month. The fact that, for each of the two columns, the entry in the first row is similar to the entry in the second row implies that previous income does not play an important role in determining current default status after taking into account current income. A student's current income is a primary determinant of whether he/she returns to good standing independent of his earnings at the time he/she entered default. Table 5 shows that respondents report that income played a crucial role in causing default in the first place regardless of whether they return to good standing or not.

Table 4: Share of Defaulters in Good Standing at Defaulter Survey Date by Income at Default and Survey Dates

	Monthly Income at Survey Date			
Monthly Income at Default Date	Less than \$1,600	More than \$1,600		
Less than \$1,600	0.164	0.368		
	(0.009)	(0.017)		
More than \$1,600	0.198	0.410		
	(0.037)	(0.024)		

Note: Cells in table show percentage of defaulters that paid off their loans entirely or are currently in good standing at the time of the survey. Standard errors are in parentheses. Sampling weights are used. Sample Size: 2677

Table 5: Reported Reasons for Default by Current Loan Status

	Current Loan Status				
Reason for Default	Not in Good Standing	Paid off or in Good Standing			
Lack of Income / High Debt	0.832	0.709			
	(0.011)	(0.023)			
CSLP/Borrower's Fault	0.092	0.171			
	(0.009)	(0.019)			
Observations	2,409	791			

Note: Proportion reporting different reasons for default for those whose loans are not currently in good standing and those who have paid off their debt or are back at good standing at the time of the Defaulter Survey. Standard errors are in parentheses. Sampling weights are used.

C. Discussion

The Defaulter Survey strongly suggests that a student borrower's economic situation is of central importance in determining whether he/she defaults. For example, we find that approximately 50% of borrowers have an annual income of less than \$9600 at the time they default, while 72% have an annual income of less than \$19,200 (Figure 11). While it is not possible to compare the incomes of defaulters and non-defaulters using the Defaulter Survey alone, it is clear from other studies and data sources that the incomes of defaulters are quite low relative to a similarly educated population of non-defaulters. Further, the notion that income plays a central role is confirmed by a variety of direct questions in the Defaulter Survey. For example, 93% of respondents believe that difficult economic circumstances contributed in some way to default and 71% of respondents listed a lack of income as a reason for missing payments (Figure 16), and 64% of respondents listed a lack of income as the most important reason for missing payments (Figure 18).

It would be valuable to examine differences in background, education, debt and income characteristics between individuals who defaulted and those who did not. In general, this is not possible with the Defaulter Survey alone since all individuals have the same outcome: default. However, in Section II.B.8 we were able to examine an outcome of interest – whether a defaulter returned to good standing – that does vary within the sample. Consistent with our earlier findings, income (in this case, income at the survey date) appears to be very important for determining which defaulters return to good standing. In Part III and Part IV of this report, we take two additional approaches to study determinants of default based on variation in repayment outcomes across individuals. In Part III, we compare respondents in the Defaulter Survey to respondents in the Client Satisfaction Survey. In Part IV, we examine repayment problems other than default using the Client Satisfaction Survey.

III. COMPARING RESPONDENTS IN THE DEFAULTER SURVEY AND THE CLIENT SATISFACTION SURVEY

One approach for examining differences in background, education, debt and income characteristics between individuals who defaulted and those who did not is to compare individuals in the Defaulter Survey (who have defaulted) to individuals in the Client Satisfaction Survey (who have not defaulted). In order to make this comparison, we need to establish a comparable sampling frame from the two surveys in terms of time since consolidation. The approach we take is to use the same sample selection criteria for the Defaulter survey as we use for our analyses involving the CSS survey as described in Part IV of this report. In short, we only consider respondents under age 30 that have consolidated their loans and entered their final repayment period no more than two years prior to the survey date.

Figure 55 reveals striking differences in employment status between respondents in the Defaulter Survey and respondents in the Client Satisfaction Survey. For example, 43.2% of DS respondents are not employed at the time of default, while only 13.5% of all CSS respondents are not employed at the time of the survey. Only 31.6% of DS respondents are working more than 20 hours per week at the time of default, while 72.7% of CSS respondents are working more than 20 hours per week at the time of the survey. As discussed in more detail in Part IV of the report, some respondents in the CSS experience repayment problems, while others do not. Figure 55 indicates that respondents in the CSS who experience some form of repayment problem tend to have employment levels more similar to those observed for respondents in the DS. For example, only 43.9% of CSS respondents with repayment problems are working more than 20 hours per week.



Figure 56 indicates that differences in income also exist between DS respondents and CSS respondents. For example, 24.7% of DS respondents have no income at the time of default, while only 13.5% of all CSS respondents have no income at the time of the survey. 84.7% of DS respondents have monthly income of less than \$1600, while only 52.5% of all CSS respondents do. Again, we see that income levels for the subset of CSS respondents who experience repayment problems tend to be relatively similar to those of DS respondents. For example, 81.9% of CSS respondents who experience repayment problems tend problems have monthly income of less than \$1600.



A natural question is whether DS and CSS respondents differ in other observable ways. Figure 57 indicates that CSS respondents tend to have more education than DS respondents, with this finding representing a potential, partial explanation for the better labour market outcomes observed for CSS respondents in Figures 55 and 56. Figure 58 reveals minor differences between CSS respondents and DS respondents in the amount of student loan debt.





IV. ANALYSIS OF STUDENT LOAN REPAYMENT PROBLEMS IN THE 2010-2012 CLIENT SATISFACTION SURVEYS

A. Introduction

A simple economic model would consider students deciding whether to repay their loans by comparing the costs and benefits of repayment (relative to the consequences of non-payment).² Making loan payments is costly in that it directly lowers current family resources; yet, failure to make timely loan payments can also be costly in the long-run as lenders enact various penalties in case of default or delinquency. Despite loan repayment alternatives (e.g. the Repayment Assistance Plan, RAP) designed to ease the burden of repayment for those who experience poor labour market outcomes, many borrowers experience repayment problems that include delinquency, default, and bankruptcy.

There are three broad reasons some borrowers may experience repayment problems while others do not. First, financial resources and income may differ, affecting the capacity for some borrowers to make timely payments. Second, the amount or type of debt (or payment obligations) may differ. Third, people with the same financial resources and debt may have different views about the importance of repaying their student loans.

Lack of financial resources and income, high debt levels, and beliefs about the cost of not repaying are the three fundamental reasons we observe repayment difficulties. These issues also factor into decisions to apply for repayment relief through programs like RAP. Understanding the extent to which these determinants contribute to repayment difficulties is important from a policy standpoint. For example, if most repayment difficulties are the result of poor post-school labour market outcomes, increased repayment enforcement is unlikely to yield any improvement and may be harmful to those in particularly poor circumstances. Instead, it might be better for the CSLP to reconsider loan limits to those most likely to experience labour market difficulties or to further enhance repayment assistance programs if financial problems tend to be transitory. On the other hand, if most repayment problems are due to a lack of information about the costs of delinquency or default, providing additional information to borrowers can help reduce loan repayment difficulties.

The traditional difficulty in understanding the relative importance of the three determinants of student loan default is that existing data sources do not contain detailed measures of the variables needed to fully characterize each of the three determinants. A handful of studies that examine student loan default (e.g. Lochner and Monge-Naranjo (2004), Flint (1997), Dynarski (1994) and Schwartz and Finnie (2002)) consider the effects of a subset of these determinants, finding that income and student debt levels are significant contributors to student loan default. However, these studies are unable to account for a number of other

² Lochner and Monge-Naranjo (2004) provides an example of how this type of a model could be used in the analysis of student loan defaults.

Analysis of Defaulter and Client Satisfaction Surveys

factors that may influence default incentives, like beliefs about the penalties associated with default, asset levels, or transfers from parents. The omission of these factors may explain why Lochner and Monge-Naranjo (2004) and Dynarski (1994) find that borrower characteristics such as race and major area of study are significant determinants of default even after controlling for income and student debt. For example, black Americans may have higher default rates than their white counterparts (conditional on their own income and debt levels) because they are less able to rely on parental help when they need it.

Many studies consider the impacts of characteristics like age, race, field of study and GPA on default.³ Many of these characteristics are likely to be related to the three determinants above and may, therefore, identify groups with a greater likelihood of default. As such, they can be useful for policymakers who wish to be cautious about lending to high risk groups. However, understanding the relative importance of the three determinants of repayment problems is crucial if the policymaker hopes to understand the implications of, for example, a change to loan programs or changes in the labour market conditions.

This part of the report provides new evidence from the 2010-12 Client Satisfaction Surveys (CSS) about the relative importance of the three underlying determinants of repayment difficulties. The analysis addresses traditional data difficulties by combining detailed administrative data with unique survey data. The administrative data allows us to track loan status and balance for each respondent over the duration of their loan repayment process. The survey data allows us to observe not only a set of standard observable characteristics of borrowers (e.g. race, age and education level) but also variables that directly measure the three determinants, such as income, student loan and other debt, parental income and financial support, and views on the importance of repayment. This offers a unique opportunity to work with a set of controls rich enough to take most aspects of student loan repayment into account.

This analysis investigates a broad set of factors that lead borrowers to participate in repayment assistance programs, become delinquent on their loans, and/or default. Our results confirm that borrower's income and CSLP debt levels are major contributors to repayment problems. We also find that respondents who declare that they would stop repaying their student loan before all other types of loans if they were unable to meet all their obligations are more likely to experience a repayment problem. Thus, attitudes towards repayment play a significant role in determining the likelihood of repayment difficulties. The CSLP may offer more lenient repayment terms and penalties compared to credit card or mortgage lenders, which could contribute to some of the observed repayment assistance requests and defaults. Interestingly, we find that educational attainment and attendance at private institutions are significant factors, even with a rich set of controls including post-school income, student debt, and attitudes towards repayment.

The administrative records also contain family income measures for a subset of the main sample. Regression results show that family income has a modest but significant impact in reducing repayment problems. It is possible that families act as a safety net against financial difficulties faced by young adults in the early years of their post-school careers. To investigate this further, we employ a unique question in the survey. Respondents were asked how much financial assistance they would expect to receive from their families if they were in need of income support. Borrowers with no or little family support are significantly more likely to experience a repayment difficulty with parental support particularly important for borrowers with low income.

³ Gross et al. (2009) provides a comprehensive summary of the previous research on the causes of student loan defaults.

Lastly, we repeat our main analysis with repayment difficulty observed twelve and eighteen months after the CSS date. Our results suggest that many factors that play a role in determining likelihood of repayment problems at the time of the survey are also significant predictors of serious repayment difficulties in the long run. Thus, the factors we examine have long-term implications for student loan repayment. In the next section, we describe the rich data set employed for this study.

B. CSS Data Description

The CSS is conducted by HRSDC to investigate CSLP clients' satisfaction about the program. As part of the telephone survey, taking place February/March 2010, January/February 2011, and January/February 2012, CSLP recipients were asked questions specifically designed to understand the causes of repayment problems. Sample sizes ranged from 1,835 in 2010 to 2,688 in 2012.

The CSS includes questions about borrowers' characteristics such as gender, province of residence, education level and field of study, income level of the respondent and their spouses, debt levels associated with different types of liabilities, asset levels, living situation, parental support and perceptions of consequences of delinquency. Some of these variables are available only in the 2011 and 2012 CSS; therefore, a subset of our analysis only uses these surveys. We match the respondents from the CSS with administrative records kept by the CSLP. These administrative records provide reliable information regarding the loan status and balances of the respondents in our sample throughout the entire time they were clients. Administrative records also contain information on any repayment assistance schemes the respondents may have benefited from, as well as information about respondents' parental income levels (for dependent students).

Since our analysis focuses on non-payment, we restrict our samples to individuals who have entered their final repayment period⁴ no more than two years prior to the CSS. This is largely due to the sampling nature of the CSS, which did not survey respondents that have already paid off their CSLP loans. Failure to limit the sample to those who recently consolidated their loans would produce a sample selected in favour of individuals unlikely to pay off their loan in a timely manner. We focus on repayment outcomes associated with the final repayment spell to avoid issues associated with school re-entry. When youth re-enter school, they need not make loan payments on previous loans while enrolled, so there is no possibility of delinquency/default during that period. Finally, we restrict our sample to borrowers under age 30 to ensure a more homogeneous group of respondents.

The variables used in our analysis are reported in Table 6, along with their means and standard errors (for the subsample used in our analysis). We use the provided sample weights for all calculations, which correct for stratified sampling by province, loan type, and repayment status (within the CSS sampling frame). Statistics are reported for the 2011 and 2012 CSS combined as well as for all three CSS over 2010-2012, since we will use both of these samples for our analysis. Not surprisingly, the samples are very similar.

Using the loan designation files, we calculate the total CSLP loan amount outstanding at consolidation (summing across all loans). On average, Table 6 shows that borrowers in our sample owed nearly \$14,000 when they left school. We also create multiple measures of 'repayment problems' from the designation and RAP records. We create a 'serious repayment problem' indicator which has a value of one if the respondent is

⁴ We use the final repayment period as of two months after the CSS.

Analysis of Defaulter and Client Satisfaction Surveys

Table 6: Sample Descriptive Statistics

Variable	2011-2012	2010-2012
any repayment problem at CSS (default/banktrupcy+delinquency+IR+RAP)	0.262	0.278
	(0.024)	(0.021)
serious repayment problem or delinquent at CSS (default/banktrupcy+delinquency)	0.107	0.119
	(0.015)	(0.013)
CSLP loan amount outstanding at consolidation (in \$10,000)	1.367	1.366
	(0.650)	(0.558)
current month's income < \$20,000/yr	0.489	0.492
	(0.032)	(0.027)
current month's income < \$40,000/yr	0.847	0.855
	(0.023)	(0.019)
college/vocational school graduate or more	0.795	0.806
	(0.027)	(0.022)
university graduate or post-graduate degree	0.408	0.398
	(0.031)	(0.026)
would stop paying CSLP loan first if unable to repay all loans	0.409	0.436
	(0.031)	(0.027)
Male	0.425	0.426
	(0.031)	(0.026)
Age	23.710	23.710
	(0.183)	(0.149)
Aboriginal	0.094	0.079
	(0.019)	(0.015)
private post-secondary institution	0.150	0.144
	(0.014)	(0.013)
parental income in \$10,000 (first observation in NARS, dependents only)	4.591	4.894
	(2.924)	(2.592)
parental income < \$20,000 (first observation in NARS, dependents only)	0.175	0.192
	(0.032)	(0.026)
parental income < \$40,000 (first observation in NARS, dependents only)	0.465	0.441
	(0.050)	(0.038)

Notes: Weighted sample means and standard errors (in parentheses) are given. Sample size is 757 for the first column and 1099 for the second for all variables except parental income, which has a sample size of 290 and 509 for the two columns, respectively.

recorded as delinquent or if the respondent has a loan status of bankruptcy, claim submitted, consumer proposal, return-to-government, aging default, or other defaults. We also create a second indicator for 'any repayment problem', which is set to one for all serious repayment problems as well as individuals on interest relief (IR) or repayment assistance (RAP). These repayment outcomes can be measured at various dates. We focus primarily on examining whether individuals were experiencing any repayment problems at the CSS dates.⁵

Table 6 shows that slightly more than 25% of all borrowers had some form of repayment problem as of the CSS, while roughly 10% had more serious repayment problems. We use the CSS to categorize individuals based on current monthly income and educational attainment. Nearly half of our sample had monthly income of less than \$1,600 (\$20,000 on a per year basis). Roughly 40% of borrowers were university graduates or had a post-graduate degree, while 80% had a college/vocational degree or better. The type of institution individuals attended (associated with CSLP loan used in sampling for the CSS) is also recorded. Roughly 15% of borrowers had loans associated with attending a private institution. The CSS also contains demographic measures such as gender, age, and aboriginal status. The average age is twenty-four, 43% of respondents are male, and slightly less than 10% are aboriginal. The CSS contains unique survey questions about what borrowers would expect to happen to them if they did not repay their CSLP loans and questions about which type of loan (e.g. CSLP, credit cards, home mortgage) they would pay off first or second if they had financial difficulties and could not pay them all. We create an indicator variable equal to one if individuals report that they would stop paying their CSLP loan first (if they could not continue repaying all their debts). Nearly half of all respondents report that they would stop paying their CSLP loans first. Thus, many individuals view that failure to make CSLP payments is less harmful than failing to repay other forms of debt.

Finally, we link our survey respondents to NARS data to obtain a measure parental income as of the first time a CSLP loan is received. This information is only available for dependent students (less than half our sample). Average annual parental income was less than \$50,000. Fewer than one-in-five students came from families with parental income below \$20,000.

C. Analysis of Repayment Problems using the CSS

We now empirically analyze repayment problems in our sample. Table 7 reports rates at which borrowers had any repayment problems at the CSS date by the borrower's current monthly income, CSLP loan amount at the time of consolidation, and by educational attainment, separately for the two years. (Qualitatively similar patterns arise for other definitions of repayment problems, or if repayment problems are measured at other dates.)

Consistent with our findings from the Defaulter Survey, repayment problems are much more likely among borrowers with lower income levels. Among borrowers earning less than \$20,000, more than 40% experienced some form of repayment problem. Less than 4% of borrowers earning at least \$40,000 experienced a repayment problem at CSS. Repayment problems are generally increasing in CSLP debt levels at consolidation;

⁵ Specifically, we determine repayment status as of March 2010, February 2011, and February 2012.

Analysis of Defaulter and Client Satisfaction Surveys

Table 7: Any	Repayment	Problem at	CSS by	Income,	CSLP	Debt, and	Education
--------------	-----------	-------------------	--------	---------	------	-----------	------------------

	2011-2012		2010-	2012
		Std.		Std.
	Mean	Error	Mean	Error
<u>1. by current monthly income (\$1,000/yr)</u>				
less than \$20,000	0.423	0.041	0.445	0.035
\$20,000 to less than \$40,000	0.148	0.030	0.156	0.025
at least \$40,000	0.030	0.016	0.037	0.015
2. by CSLP loan amount at consolidation				
less than \$10,000	0.202	0.027	0.219	0.025
\$10,000 to less than \$20,000	0.294	0.046	0.314	0.041
\$20,000 to less than \$30,000	0.365	0.068	0.398	0.059
at least \$30,000	0.377	0.073	0.372	0.059
3. by highest educational attainment				
no post-secondary degree	0.309	0.055	0.366	0.051
college /vocational/technical degree or higher	0.312	0.038	0.329	0.032
university graduate or higher	0.209	0.031	0.201	0.025
4. by institution type				
Public	0.247	0.026	0.260	0.022
Private	0.380	0.039	0.401	0.038

Note: Sample weights used in calculating all statistics.

however, the relationship is weak for high debt levels. Higher debt levels may not indicate a higher propensity to default if those who borrow more have also obtained more schooling and earn more after finishing school. Our multivariate regression analysis below accounts for this.

Table 7 also reveals that repayment problems are much less common among those with a university degree than either those with a college/vocational/technical degree or those with no post-secondary degree. Repayment problems are more common among who study at private post-secondary institutions. Borrowers at colleges and private institutions tend to have lower debt and income levels than their counterparts. Our

multivariate regression analysis below helps to isolate the effect of school level and institution type for individuals accounting for these (and other) differences.

It is important to simultaneously control for debt, income and education when analyzing repayment problems, since these measures are strongly related. In Table 8, we report ordinary least squares (OLS) estimates from linear probability models for our measures of repayment problems at the CSS date. In these regressions,

Table 8: OLS Estimates for Probability of Repayment Problems: Base Specifications (2010-2012 CSS)

	Any Repayn	Serious Repayment Problem	
	Excludes	Includes	Excludes
	family	family	Family
VARIABLES	income	income	income
current month's income < \$20,000/yr	0.315	0.375	0.129
	(0.042)	(0.060)	(0.027)
current month's income < \$40,000/yr	0.151	0.146	0.011
	(0.039)	(0.067)	(0.021)
CSLP loan amount outstanding at consolidation (in \$10,000)	0.178	0.161	0.033
	(0.038)	(0.051)	(0.024)
CSLP loan amount (in \$10,000) squared	-0.017	-0.013	-0.005
	(0.007)	(0.008)	(0.004)
college/vocational school graduate or more	-0.042	-0.117	-0.030
	(0.059)	(0.118)	(0.043)
university graduate or post-graduate degree	-0.114	-0.095	-0.042
	(0.047)	(0.068)	(0.027)
would stop paying CSLP loan first if unable to repay all loans	0.102	0.123	0.014
	(0.039)	(0.054)	(0.025)
Male	0.045	0.008	-0.011
	(0.040)	(0.057)	(0.026)
Age	0.010	0.012	0.000
	(0.008)	(0.013)	(0.006)
Aboriginal	0.037	-0.002	0.035
	(0.080)	(0.100)	(0.048)
private post-secondary institution	0.110	0.092	0.115
	(0.047)	(0.069)	(0.039)
parental income in \$10,000 (dependents only)		-0.020	
		(0.007)	
Sample Size	1099	446	1099
R-squared	0.233	0.326	0.077

Notes: Linear Probability Estimates using OLS. Specifications also include indicators for each CSS cohort. Sampling weights are used. Robust standard errors in parentheses.

we control for important characteristics of the student that might predict repayment problems: income, debt amount (in a quadratic form to account for potential nonlinearities), educational attainment, attitude towards repayment, and a collection of background indicators.⁶ Regression results are shown for all three CSS samples pooled. The first two columns consider our measure of 'any repayment problem', while the third column considers only more serious repayment problems (excluding those on IR or RAP). Column 2 includes a measure of parental income in addition to all other covariates, limiting the sample to dependent students only.

As Table 8 shows, current income, CSLP debt, and beliefs about loan repayment are all important determinants of repayment problems. Consider column 1 first. Borrowers currently earning less than \$20,000/year are 32 percentage points more likely to have some form of repayment problem at CSS than those earning \$20-40,000; they are 47 percentage points more likely to have a problem than those earning at least \$40,000. Repayment problems are increasing and concave in CSLP debt, conditional on current income and other factors. The estimates imply that someone with \$10,000 in CSLP debt is 14 percentage points more likely to experience repayment problems at CSS than someone with only \$1,000 in CSLP debt. Someone owing \$40,000 (as opposed to \$10,000) is 24 percentage points more likely to have repayment problems. These differences are much greater than those reported in Table 7, which do not hold current income and other factors constant. Repayment problems are 10 percentage points higher among borrowers who report that they would stop paying their CSLP loan first if they could not afford to repay all their debts. Completing a university degree is also important, even when conditioning on current income, student loan debt, and repayment beliefs. In our pooled sample, respondents with university degrees or higher are 11% less likely to run into repayment problems compared to college/vocational school graduates. Completion of a college/vocational program has relatively small and statistically insignificant effects after controlling for income and debt levels. Attendance at a private institution is associated with an 11% higher rate of repayment problems. Other demographic variables are generally not statistically significant.

Column 2 of the table reports results where the specification now includes parental income as an additional regressor. The inclusion of family income substantially reduces our sample, since it is only measured for dependent students. The estimated effect of parental income is small and negative but statistically significant. It suggests that a respondent with parental income of \$50,000/year is 4 percentage points less likely to experience repayment problems compared to a respondent whose parents earned \$30,000/year. This effect is small relative to the effects of current income levels for borrowers themselves, student loan debt, repayment beliefs, and educational attainment. Still, it suggests that parental resources may sometimes be tapped by borrowers experiencing financial difficulties. We take a deeper look into the family's effect on repayment below.

The final column of Table 8 shows that the same types of factors – low earnings, high debt, low education, private school attendance – tend to predict more serious forms of repayment problems as well; however, not all effects are statistically significant. The fact that serious repayment problems are about half as likely as any repayment problem explains why the estimated effects of most variables on serious repayment problems are smaller in magnitude. An important exception is the coefficient on attendance at a private post-secondary institution. Students attending these institutions are 11% more likely to have a serious repayment problem, an effect nearly identical in size to that reported for any repayment problem.

⁶ In all specifications here and below, we also include CSS cohort indicators.

Analysis of Defaulter and Client Satisfaction Surveys

Repayment Problems and Parental Transfers

Little is known about the role that parental assistance plays in determining why some borrowers have repayment problems, while others do not. As shown in Table 8, a standard measure related to parental support – family income – is a statistically significant predictor of repayment problems. However, this measure is less than ideal because, among parents with the same income, there may be substantial variation in actual willingness and/or ability to provide support during difficult times. This motivated the inclusion of a question on the 2011 and 2012 CSS that elicits the amount of money that a client could, if necessary, borrow from parents or family in the next six months.

Using data from the 2011 and 2012 CSS only, Table 9 reports regression results examining the importance of this new "expected parental transfer" variable for student loan repayment problems. Column (1) is the base specification analogous to the first column of Table 8. Column (2) adds information about the expected parental transfers in the form of an indicator variable that is equal to one if expected parental transfers are less than \$2,500. The estimate of the importance of the indicator variable in specification (2) suggests the usefulness of the new information. Expected family transfers are significantly related to repayment problems, with individuals who could borrow less than \$2,500 being 15 percentage points more likely than other borrowers to have a repayment problem.

Recognizing that the availability of parental assistance may be particularly important for borrowers who are suffering through difficult economic times, column (3) adds an interaction term that equals one if the respondent makes less than \$20,000/year and has an expected parental transfer of less than \$2,500. The estimates in column (3) show that what matters is not just low current income or low potential parental transfers, but the combination of the two. Students with sufficient family support (potential transfers of at least \$2,500) are only 11 percentage points more likely to experience repayment problems if their income falls below \$20,000 than if their income ranges between 20 and 40 thousand dollars. By contrast, students with potential family support of less than \$2,500 are 36 percentage points (.11+.25) more likely to have repayment problems if their income falls below \$20,000. Alternatively, students earning less than \$20,000 are thirty percentage points (.05+.25) more likely to have repayment problems if their potential transfers are less than \$2,500 (relative to those with the same low income but at least \$2,500 in potential transfers). Some families appear to provide an important financial buffer for their children when they experience adverse labour market outcomes, significantly reducing the likelihood of repayment problems. Column (4) shows that this is not explained away by differences in parental income. There are important differences in (perceived) willingness of parents to help out financially, and these differences serve as an important form of insurance that reduces problems with student loan repayment.

Table 9: The Effects of Parental Transfers on Any Repayment Problem (2011 and 2012 CSS)

VARIABLES	(1)	(2)	(3)	(4)
current month's income < \$20,000/yr	0.313	0.285	0.111	0.001
	(0.051)	(0.053)	(0.078)	(0.097)
current month's income < \$40,000/yr	0.139	0.153	0.150	0.158
	(0.042)	(0.046)	(0.044)	(0.071)
CSLP loan amount outstanding at consolidation (in \$10,000)	0.130	0.102	0.111	-0.016
	(0.043)	(0.043)	(0.042)	(0.067)
CSLP loan amount (in \$10,000) squared	-0.009	-0.006	-0.008	0.011
	(0.008)	(0.008)	(0.008)	(0.011)
college/vocational school graduate or more	-0.029	-0.004	0.001	-0.147
	(0.069)	(0.069)	(0.068)	(0.138)
university graduate or post-graduate degree	-0.067	-0.040	-0.047	0.003
	(0.061)	(0.062)	(0.064)	(0.097)
would stop paying CSLP loan first if unable to repay all loans	0.096	0.094	0.093	0.138
	(0.047)	(0.048)	(0.047)	(0.053)
Male	0.022	0.046	0.044	-0.083
	(0.048)	(0.051)	(0.051)	(0.075)
Age	0.015	0.014	0.016	0.007
	(0.010)	(0.010)	(0.010)	(0.017)
Aboriginal	0.048	0.038	0.041	-0.072
	(0.090)	(0.091)	(0.091)	(0.103)
private post-secondary institution	0.091	0.087	0.081	0.188
	(0.051)	(0.054)	(0.056)	(0.093)
expected parental transfer < \$2500		0.153	0.046	-0.030
		(0.045)	(0.044)	(0.068)
(current month's income < \$20,000/yr) x (expected parental transfer <				
\$2500)			0.249	0.542
			(0.089)	(0.121)
parental income in \$10,000 (dependents only)				-0.014
				(0.008)
Observations	757	600	600	250
R-squared	0.209	0.224	0.241	0.419

Notes: Linear Probability Estimates using OLS. Dependent variable is 'Any Repayment Problem at CSS'. Specifications also include indicators for each CSS cohort. Sampling weights are used. Robust standard errors in parentheses.

Repayment Problems 12 and 18 Months after 2010 and 2011 CSS

Updated designation files for the 2010 and 2011 CSS respondents allow us to observe outcomes twelve and eighteen months after the survey dates. Examining how the status of respondents changes during this period provides information about whether particular repayment problems tend to be especially persistent or tend to be good predictors of other (more serious) repayment problems in the future.

Table 10 reports the probabilities of different types of repayment problems 12 and 18 months after the 2010 and 2011 CSS. Among those who had any form of repayment problem at the CSS, one-in-three had a serious repayment problem (delinquency or default/bankruptcy) 12 and 18 months later, compared to about 5% of those with no problems as of the CSS. Thus, repayment problems were evident early and were quite persistent. Breaking the sample up by different types of repayment problems at CSS, 13% of those who were on IR or RAP at the CSS had a serious repayment problem 12 and 18 months later, while over half of those already in delinquency at CSS had a serious repayment problem a year or more later. IR/RAP recipients as of the CSS were also much less likely to be in default or have declared bankruptcy 12 and 18 months later when compared with those in delinquency at CSS (less than 2% vs. 27-35%). While IR and RAP may help borrowers continue on a path to eventual payment, these differences need to be interpreted with caution. First, individuals must go through a lengthy period of delinquency before they are considered in default, so many respondents on IR/RAP at the CSS. Second, those on IR/RAP may be in a better position (i.e. lower debt, higher income) to repay their loans, on average. Related, those choosing to sign up for IR/RAP may have a strong desire to repay their loans relative to those who go straight to delinquency.

Table 10: Probability of Problems in 12 and 18 Months after CSS by Repayment Status at CSS (2010 and 2011 CSS)

	Status 12 Months after CSS		Status 18 Months after CSS	
Status at CSS	Delinquency	Default or Bankruptcy	Delinquency	Default or Bankruptcy
No Problem (N=464)	0.0352	0.005	0.035	0.019
	(0.009)	(0.003)	(0.009)	(0.008)
IR/RAP (N=212)	0.129	0.004	0.114	0.019
	(0.033)	(0.002)	(0.031)	(0.010)
Delinquency (N=165)	0.262	0.274	0.213	0.345
	(0.071)	(0.055)	(0.066)	(0.064)
Any Problem (N=377)	0.183	0.148	0.155	0.185
	(0.036)	(0.026)	(0.033)	(0.031)
All (N=863)	0.076	0.045	0.068	0.065
	(0.013)	(0.008)	(0.012)	(0.011)

Note: Uses extended designation files for 2010 and 2011 CSS. 'Any problem' indicates being either in IR, RAP, delinquency or default/bankruptcy. Sample size is 863. Proportions are estimated using sampling weights.

Given our sample criteria (individuals are only included if they entered repayment within 2 years prior to CSS), few individuals experience more serious forms of repayment problems by the CSS. To directly investigate the role of income, debt, education and other factors on more serious (and persistent) repayment problems, we perform a similar analysis to that reported above in Table 8 examining serious repayment problems 12 and 18 months after CSS. The results are shown in Table 11, which shows that income (at CSS), debt, and educational attainment are still important determinants of repayment problems a year or more after CSS. The effects of these variables are quite similar to their counterparts reported in column 3 of Table 8, which considers the determinants of serious repayment problems at the time of the CSS. Interestingly, enrolment in private institutions has a much stronger effect on serious repayment problems 12 and 18 months after CSS than it does at CSS; although, the differences are not statistically significant at conventional levels. It is likely that enrolment in these institutions is associated with lower long-term income levels. At CSS, this is accounted for by including a measure of current income; however, we do not have an income measure 12-18 months after CSS. Thus, former students at private schools may have lower income a year after CSS (conditional on income at CSS) than their counterparts. This would likely lead to greater problems with repayment at the later date. More importantly, however, these results highlight the importance of many of the same factors that impacted repayment at CSS.

D. Summary

This analysis confirms our findings from the Defaulter Survey regarding quantitatively important relationships between repayment problems and borrower income. We also identify an important role for student debt, educational attainment, and beliefs about repayment. The analysis further reveals the importance of intergenerational relationships for repayment. Children whose parents are able and willing to financially help them out in times of economic stress are much less likely to experience repayment problems.

The extended period of loan designation data associated with the 2010 and 2011 CSS samples allows us to examine the persistence of repayment problems. Individuals who had some form of repayment problem at the date of the CSS (early in their repayment period) were much more likely to be experiencing repayment problems a year or more later than were individuals with no repayment problem as of the CSS. Individuals on IR/RAP were less likely to be experiencing repayment problems 12 and 18 months later than those who were delinquent at CSS; however, both groups had significantly higher serious repayment problems at the later date than did those with no problem at CSS. Our results also suggest that income (at CSS), student loan debt, and educational attainment are important factors affecting default/bankruptcy a year or more after CSS. Interestingly, youth who attended private post-secondary institutions were significantly more likely to experience serious repayment problems 12 and 18 months after CSS.

Table 11: OLS Estimates for Probability of Repayment Problems 12 and 18 Months after CSS (2010 and 2011 CSS)

	12 Months after CSS		18 Months after CSS	
VARIABLES	Serious Repayment Problem	Default or Bankruptcy	Serious Repayment Problem	Default or Bankruptcy
current month's income < \$20,000/yr	0.115	0.083	0.110	0.085
	(0.032)	(0.020)	(0.035)	(0.027)
current month's income < \$40,000/yr	-0.016	-0.023	-0.026	-0.047
	(0.035)	(0.015)	(0.044)	(0.039)
CSLP loan amount outstanding at consolidation (in \$10,000)	0.061	0.026	0.066	0.015
	(0.031)	(0.020)	(0.033)	(0.025)
CSLP loan amount (in \$10,000) squared	-0.010	-0.004	-0.011	-0.003
	(0.005)	(0.003)	(0.006)	(0.004)
college/vocational school graduate or more	-0.077	-0.029	-0.058	-0.057
	(0.052)	(0.035)	(0.057)	(0.048)
university graduate or post-graduate degree	-0.072	-0.049	-0.071	-0.065
	(0.032)	(0.019)	(0.031)	(0.022)
would stop paying CSLP loan first if unable to repay all loans	0.072	0.029	0.013	0.007
	(0.030)	(0.019)	(0.032)	(0.026)
Male	-0.030	-0.014	-0.032	-0.014
	(0.027)	(0.018)	(0.030)	(0.024)
Age	-0.001	-0.001	-0.002	0.000
	(0.006)	(0.004)	(0.007)	(0.006)
Aboriginal	0.080	0.090	0.162	0.073
	(0.060)	(0.049)	(0.075)	(0.050)
private post-secondary institution	0.179	0.081	0.174	0.113
	(0.052)	(0.035)	(0.054)	(0.049)
Observations	731	731	731	731
R-squared	0.118	0.089	0.111	0.093

Notes: Linear Probability Estimates using OLS. Specifications also include indicators for each CSS cohort. Sampling weights are used. Robust standard errors in parentheses.

V.POLICY DISCUSSION

With a borrower's income beyond the control of the CSLP, an open question is whether policy levers exist that could significantly reduce default rates. One possibility would be to attempt to make repaying CSLP loans a higher priority (relative to repaying other debt) among borrowers by influencing perceptions about the importance of student loan repayment. Suggesting that this may be worthwhile, defaulters often report that the consequences of default were worse than they had anticipated (Figure 34). However, there may be natural limits to this approach: Figure 14 shows that defaulters often miss other types of payments (e.g., credit card or cell phone payments) at the time they default on their student loans. Perhaps, more importantly, Figure 11 shows that over 80% of all defaulters earned less than \$1600 per month at the time they went into default. Many of these borrowers are likely to have a very difficult time making even modest payments. Our results also suggest that some defaulters will see better economic times within a few years after leaving school, and some of these individuals will return to good standing with the CSLP, making timely payments. This suggests a useful role for efforts that help ensure that borrowers who experience limited periods of unemployment or low income levels remain engaged with the CSLP, so that they honour their debts when their economic situation improves.

A second policy effort would bolster forms of repayment assistance to help borrowers with (temporarily or permanently) low income levels. The CSLP currently has many such programs, so it is important to make sure that clients are fully informed about all repayment assistance options. The Defaulter Survey provides some evidence that more can be done in this respect. Roughly 85% of defaulters report that they did not know about any repayment assistance programs at the time of their default (see page 34). As many as one-in-three defaulters say that better communication with CSLP would have helped them avoid default (Figure 52). However, there are several reasons to be cautious about these findings and their implications for RAP. First, it is difficult to know exactly what clients have in mind when they report that better communication might help them avoid default. Indeed, we find internal inconsistencies between different questions focused on communication issues: while 34% of clients say that better communication would have prevented default (Figure 52), this number drops to 26% when measured by a different survey question (Figure 53). Second, RAP was new at the time individuals in this sample had defaulted. It is possible that current borrowers are more knowledgeable about RAP, in which case additional efforts to provide more information about the program may have little impact. Finally, it seems likely that many defaulters did know something about repayment options at the time of default even if they now report that they did not. More than half of all defaulters report contacting the NSLSC about repayment options before they defaulted. It seems likely that these individuals would have been told about RAP and other assistance options; yet, we find that 45% of those reporting that they had talked to the NSLSC about repayment options before their loan went into default claim on a separate survey question to have had no knowledge of repayment assistance options before they went into default. We also observe that roughly 12% of defaulters claiming no awareness of any repayment assistance options had actually been enrolled in RAP at some point prior to the survey. A broader question is whether the design of repayment assistance meets the needs of low-income debtors. Our results suggest that these programs are likely to be of the greatest value for borrowers earning less than \$20,000 per year and with little family support.

References

Dynarski, M. (1994). Who Defaults On Student Loans? Findings From The National Postsecondary Student Aid Study. *Economics of Education Review 13*(I), 55–68.

Flint, T. (1997). Predicting Student Loan Defaults. Journal of Higher Education 68(3), 322–354.

Gross, J. P., O. Cekic, D. Hossler, and N. Hillman (2009). What Matters In Student Loan Default: A Review Of The Research Literature. *Journal of Student Financial Aid*, 19–29.

Lochner, L. J. and A. Monge-Naranjo (2004). Education and Default Incentives with Government Student Loan Programs. *Working paper*, 1–32.

Schwartz, S. and R. Finnie (2002). Student Loans In Canada: An Analysis Of Borrowing And Repayment. *Economics of Education Review* 21(5), 497–512.