

THE PRICE OF KNOWLEDGE:
AN EXPLORATION OF STUDENT DEMOGRAPHICS BETWEEN REGULATED AND
FIRST-DEGREE PROFESSIONAL PROGRAMS IN ONTARIO

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Abstract

In recent decades, we have seen various governing bodies reduce their economic support for the publicly funded post-secondary education (PSE) system in Canada. This trend is one of the neoliberal measures which seeks to reorganize the structures and distribution patterns of public goods and services. Through the process of neoliberalization, the lack of public financing has created a funding gap for universities and colleges, which has been increasingly filled by relying on private sources of funding, primarily in the form of tuition fees. This shift has led to a rapid increase, and at times, deregulation of PSE tuition fees. In 2006, tuition differentiation assigned professional programs higher tuition fees than regulated program, revealing a new, reconstructed version of tuition deregulation.

This study seeks to explore the differences between student demographics of first-degree (undergraduate) professional and regulated programs in Ontario. A secondary data analysis using the 2018 National Graduates Survey (NGS) is conducted. Logistic regression models are used to predict the likelihood of professional or regulated program enrollment controlling for social markers such as source of funding, race/ethnicity, SES, gender, etc. An analysis of student debt is also performed to investigate the management of large PSE student loans. Findings reveal that students from more privileged and affluent backgrounds are more likely to be enrolled in first-degree professional programs, both nationally and in Ontario. The odds of enrollment for professional programs are higher for self-funded (not relying on student loans), non-racialized, Canadian-born-citizens, males, with high levels of parental education in Ontario. Additionally, students from marginalized groups are more likely to accrue high levels of student debt (\$25,000 or more), take longer to repay their loans, and struggle with debt repayment. There is evidence to suggest that tuition differentiation may be functioning as an exclusionary policy that reproduces

social inequities and class disparities. First-degree professional programs, which have higher tuition fees than regulated programs, are largely populated with students from affluent backgrounds.

When examined cumulatively, these findings have implications for PSE policy and the ability of PSE to function as a great equalizer. Since professional programs tend to lead to more affluent employment positions and higher wages, the cycle of economic marginalization may be reproducing itself through PSE.

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Table of Contents

Abstract	ii
Acknowledgments.....	iv
Table of Contents.....	vi
List of Tables.....	x
List of Figures	xii
Chapter 1:.....	1
Overview.....	1
Introduction	1
Theoretical Approach.....	4
Research Questions	4
Why Study the Cost of Professional Programs?	5
Organization of the Study	7
Chapter 2: Perspective and Context.....	9
Political Economy	9
Feminist Political Economy	13
Political Economy of PSE	15
Neoliberalism	17
Human Capital Model	22
A frail system	25
Neoliberalism, austerity, and the welfare state	26
The 21 st -Century Economy and Precarious Work.....	28
Labour market discrimination and segmentation	35
Income Inequality.....	37
Wealth Inequality	39
Racialization of Poverty	41
Feminization of poverty	43
Lifetime Income and Educational Attainment	44
Conclusion.....	45
Chapter 3: PSE Policy Landscape.....	46
Overview of University Education in Canada.....	46
PSE Fiscal Policy in Canada	47
Federal Expenditures on PSE.....	49

The Canadian Social Transfer (CST)	50
Research Funding through Granting Councils	50
Scientific Agencies and Government Departments	51
Special Investments in Capital Spent on PSE Institutions	51
PSE Policy in Ontario	52
Increasing Commodification of Education: Rising Tuition Rates	55
Neoliberalism and PSE.....	69
Accountability through Performance-Based Funding (PBF)	74
Indebted to the system.....	76
Conclusion.....	80
Chapter 4: University Program Cost Recoveries	82
The Sociology of Education.....	82
PSE and Accessibility	98
Overview of tuition fee framework in Ontario: 1997-2021	105
Additional Cost Recovery (ACR) to Professional Programs	110
Reaching Higher Plan.....	112
Professional Programs: The Policy Issue	114
Application of Policy	116
Conclusion.....	116
Chapter 5: Student Debt.....	118
University and college student debt from the 1990s-2021	118
Canada Student Loans Program	120
Ontario Student Assistance Program.....	123
The Grant Era: Pre-1994	123
The Loan Era: 1994-2005	125
The Capped Era: Post-2006.....	127
Student Debt and Access to PSE.....	128
Conclusion.....	133
Chapter 6: Survey Data & Methods.....	135
Sampling Frame	135
Data Collection Methods.....	137
Weights.....	138

Survey Description.....	138
Hypotheses	141
Program Choice Hypotheses	142
H1 Rationale.....	142
H2 Rationale.....	145
Debt Hypotheses	145
H3 Rationale.....	146
H4 Rationale.....	147
H5 Rationale.....	147
Variables.....	148
Regulated or Professional Program (name of 2015 program).....	149
Main Source of Funding: Loans or Self-Funded.....	151
Mother's Education	153
Father's Education.....	154
Minority Status.....	155
Gender	156
Status in Canada.....	157
Region of Institution.....	158
Debt Size at Graduation	159
Debt Size at Interview (three years post-graduation).....	159
Received Government Assistance through the Repayment Assistance Program (RAP)	160
Annual Wage or Salary	161
Limitations of the Survey.....	162
Method	165
Conclusion.....	166
Chapter 7: Results and Discussion.....	167
Results	168
Results for Model 1: Regulated or Professional Programs in Canada	168
Model 1 Discussion.....	169
Results for Model 2: Regulated or Professional Programs in Ontario.....	173
Model 2 Discussion.....	174
Results for Model 3: Debt Size at Graduation in Ontario	178

Model 3 Discussion	179
Results for Model 4: Debt Size Three Years Post-graduation	183
Model 4 Discussion	184
Results for Model 5: Received Repayment Assistance Program (RAP)	189
Model 5 Discussion	190
Conclusion	194
Chapter 8: Policy Implications and Conclusion	196
Policy Recommendations	203
References	207
APPENDICES	225
Appendix 1a: Additional Cost Recovery Policy, Ministry of Education and Training – Colleges	225
Appendix 1b: Additional Cost Recovery Policy, Ministry of Education and Training – Universities	230
Appendix 2: Additional Cost Recovery (ACR) definition	235
Appendix 3: Tuition Differentiation policy, April 10, 2006, Ministry of Training, Colleges and Universities	236
Appendix 4: Professional and Regulated Program List	243
Appendix 5: University of Toronto Fee Schedule, 2021-2022	244
Appendix 6: University of Toronto Professional Program Tuition Fees 2021-2022	245
Appendix 7: Ministry of Training, Colleges and Universities Reply to Professional Program Inquiry	246
Appendix 8: University of Waterloo Degree Requirements	247
Appendix 9: Classification of Instructional Programs (CIP 2016)	248

List of Tables

Table 1	Error! Bookmark not defined.
<i>Average Undergraduate Tuition Fees in Ontario by Field of Study between 2006-2022</i>	Error! Bookmark not defined.
Table 2	60
<i>Average Canadian Undergraduate Tuition Fees by Field of Study between 2006-2022</i>	60
Table 3	Error! Bookmark not defined.
<i>Average Undergraduate Tuition Fees by Provinces and Territories between 2006-2022</i>	Error! Bookmark not defined.
Table 4	Error! Bookmark not defined.
<i>Average Undergraduate Tuition Fees by Provinces and Territories, and Field of Study in 2014-2015 (NGS reference year)</i>	Error! Bookmark not defined.
Table 5	67
<i>Average Undergraduate Professional and Regulated Program Tuition Fees in Current Dollars in Ontario between 2006-2022)</i>	67
Table 6	77
<i>Percentage of Undergraduates Owning Student Debt at Graduation in Ontario and Canada between 2000-2015</i>	77
Table 7	79
<i>Percentage of Undergraduates with Large Student Debt at Graduation (\$25,000 and over) in Ontario and Canada between 2000-2015</i>	79
Table 8	109
<i>Tuition fee framework in Ontario between 1997-2021</i>	109
Table 9	136
<i>NGS Response Rate by Province / Territory – Unweighted</i>	136
Table 10	141
<i>Government-sponsored Student Loans Frequency</i>	141
Table 11	150
<i>2015 Program of Study Frequency</i>	150
Table 12	151
<i>Professional and Regulated Program Classification</i>	151
Table 13	153
<i>Professional and Regulated Program Frequency.....</i>	153
Table 14	154

<i>Mother's Education Frequency</i>	154
Table 15	155
<i>Father's Education Frequency</i>	155
Table 16	156
<i>Minority Status Frequency</i>	156
Table 17	156
<i>Gender Frequency</i>	156
Table 18	158
<i>Status in Canada Frequency</i>	158
Table 19	158
<i>Region of Institution Frequency</i>	158
Table 20	159
<i>Debt Size at Graduation Frequency</i>	159
Table 21	160
<i>Debt Size at Interview Frequency</i>	160
Table 22	161
<i>Received Government Assistance through the Repayment Assistance Program (RAP) Frequency</i>	161
Table 23	162
<i>Annual Wage or Salary Frequency</i>	162
Table 24	168
<i>Model 1 Regulated or Professional Programs in Canada</i>	168
Table 25	173
<i>Model 2 Regulated or Professional Programs in Ontario</i>	173
Table 26	178
<i>Model 3 Debt Size at Graduation</i>	178
Table 27	183
<i>Model 4 Debt Size Three Years Post-graduation</i>	183
Table 28	189
<i>Model 5 Received Repayment Assistance Program (RAP)</i>	189

List of Figures

Figure 1	167
<i>York University Undergraduate Student Headcount, Field of Study Comparison.....</i>	<i>167</i>

Chapter 1: Overview

Introduction

In recent decades, we have seen various governing bodies reduce their economic support for the publicly funded post-secondary education (PSE) system in Canada. This trend is one of the neoliberal measures which seeks to reorganize the structures and distribution patterns of public goods and services. There have been two distinct effects that have surfaced following these government cuts – one, is to university budgets, which are no longer funded primarily by public funds, and two is the shift in student aid from a system based on grants to one centred on loans. During the 1960s-1970s, approximately 90% of the operating budgets of PSE institutions were publicly funded (Burley & Awad, 2014). Since that time, government support has been reduced to roughly half of its previous funding, now accounting for close to 45% of operating budgets (Burley & Awad, 2014; CMEC, 2021). Although PSE in Canada “may be mostly publicly owned, it is publicly-aided rather than publicly-financed” (Usher, 2020, p. 33).

There are three main revenue sources for universities in Canada (CMEC, 2021). The first is government funding, both federal and provincial, the second is tuition fees, and the third is other revenue such as donations, endowment income, and gifts (CMEC, 2021; Coelli, 2009). PSE is mainly funded by governments (the primary source), accounting for 45.8% of the overall funding. Tuition fees make up 29.4%, while bequests, donations, nongovernmental grants, sales of products and services, and investments bring in about 25% of total PSE revenue (CMEC, 2021).

As Canadian PSE institutions are primarily public, their objective is not profit-maximizing; however, they are subject to a balanced budget requirement (Coelli, 2009). Under neoliberal governments, the lack of public financing has created a funding gap for universities and colleges,

which has been increasingly filled by relying on private sources of funding, primarily in the form of tuition fees; these public funding shortfalls have been downloaded onto individual students – and especially international students - in the form of high tuition fees (Burley & Awad, 2014; Usher, 2020). This shift has led to a rapid increase, and at times, the deregulation, of PSE tuition fees. As PSE is framed as an economic/social opportunity equalizer, for marginalized students especially, PSE holds the key to improved financial prospects and intergenerational upwards social mobility.

This trend is especially problematic since thousands of students (citizens and permanent residents) who choose to pursue PSE in the hopes of securing upward socio-economic mobility must rely on loans offered through government assistance programs such as the Canada Student Loan Program (CSLP) and the Ontario Student Assistance Program (OSAP). Students who rely on financial assistance to fund their PSE pursuits often come from marginalized backgrounds, including immigrants, racialized people, and low-income families. As tuition fees continue to increase, so do student debt loads. As of 2017, the total student debt in Canada is approximately \$28 billion (CFS, 2017).

Collectively, students in Ontario owed over \$2.6 billion dollars to the Ontario government in PSE student debt in 2012, a large increase since the \$1.1 billion in 2005 (Statistics Canada, 2012). This investment can affect individuals long after graduation, with some repayment arrangements lasting up to 14.5 years (Ontario Government, 2014). Because access to financial assistance is essential for many to obtain a PSE, and because the attainment of such assistance heavily determines one's subsequent quality of life, the decisions made by recipients of student loans become an important area of study.

In 1997, the provincial government of Ontario announced that they would move towards permitting universities to deregulate their tuition fees for some first- and second-degree professional programs (formerly known as Additional Cost Recovery programs¹). Tuition fees for certain programs were “decoupled from the formula fee, [while] tuition differentiation among programs was written into policy, and tuition differentiation among institutions occurred” (Boggs, 2009, p.74). Professional programs are those considered costly to operate, are in high demand, and/or are assumed to provide a high-earning employment post-graduation (MTCU, 1998). They also tend to lead to higher-wage, more permanent employment. These include bachelors’ and advanced degree programs in areas such as engineering, computer science, law, business, and medicine (MTCU, 1998; 2006; 2013). Tuition rate hikes resulting from this announcement started to take effect in the 1998 and 1999 academic school years (Dooley et al., 2009). In 2006, professional programs were re-regulated, but qualified for tuition differentiation – an extension of deregulation that continues to allow higher tuition fees (MTCU, 2006; 2013). Professional programs entail higher tuition fees than regulated programs, and at times, can cost upwards of \$16,000 per year (MTCU, 2006; 2013; U of T, 2021). The elevated cost of professional program tuition fees can be burdensome for students who graduate with large sums of debt. With the threat of amassing large loans, especially if enrolled in costly professional programs, it becomes imperative to examine the student demographic of those enrolled in these programs. Alternatively, the high cost of these programs may be functioning to exclude economically marginalized students altogether.

¹ First-degree Additional Cost Recovery (ACR) programs were known as a set of deregulated programs between 1998-2006. In 2006, ACR programs were replaced with professional programs and re-regulated. This study focuses exclusively on first-degree (undergraduate/bachelor’s degree) professional programs that do not require any previous university degree. This excludes university certificates or diplomas above a bachelor’s degree in law, medicine, dentistry, veterinary medicine, optometry and pharmacy, as well as all graduate programs.

In my previous work, I focused on PSE student debt and the decline of the grant era (pre-1994) and the shift to the loans era (1994-2005) in Ontario. A pursuit once heavily subsidized by government grants has progressively shifted to a system contingent upon both federal and provincial/territorial loans. The federal government budget deficit, alongside an increase in neoliberal and austerity practices at the federal and provincial levels, led to heavy clawbacks in social/universal programs, including resources for PSE. PSE continues to be an area under attack in the current political climate.

Theoretical Approach

Grounded in a political economy perspective, this research focuses on the link between first-degree professional programs and participation rates for marginalized students in Ontario. Political economy recognizes the intertwined relationship between the economic, political, and cultural/ideological moments of social life (Clement, 1997). In order to understand these dynamic realms, we cannot exclusively focus on one without taking into account the other; we are therefore required to contextualize each with the other (Clement, 1997). This theoretical approach is useful when exploring PSE in the neoliberal era. The influence of governments, through budgets, funding and policy, on the PSE landscape is significant. PSE is often caught in the crossfire of the political and economic spheres. Dominant ideologies, austerity measures, and governments of the day all contribute to the precarity of PSE in Canada.

Research Questions

Given the high tuition fees of professional programs and their link to lucrative employment post-graduation, this research explores the student demographics of first-degree (undergraduate) professional programs and regulated programs in Ontario. This study seeks to examine whether higher tuition fees for professional programs are barriers to enrollment for disadvantaged students.

With the potential of taking on larger loans to pay for higher professional program tuition, debt becomes an important element in the PSE equation. Are students who primarily rely on loans enrolling in professional programs? Are marginalized students underrepresented in these costly programs? Additionally, the research explores the ways in which the neoliberal fee environment reinforces existing socio-economic inequalities and how it produces new inequalities. For example, how does the fee structure reproduce income disparities, the racialized and gendered wage gap, the polarization of wealth, and social inequities?

This study employs a secondary data analysis using the 2018 National Graduates Survey (NGS). Logistic regression models have been estimated to take a number of variables into account simultaneously, and to determine which variables are associated with professional program enrollment, and high levels of student debt. The logistic regression models provide a snapshot of the current student demographic characteristics, including social markers such as citizenship, ethnocultural background, gender, and the key student debt variable (source of funding for PSE: government loans or self-funded). The results may suggest whether professional program tuition fees have impacted access for marginalized students.

Why Study the Cost of Professional Programs?

The research that has been conducted on professional program tuition fees in Ontario largely focuses on second-degree professional programs such as law and medical schools, or lumps first- and second-degree professional programs together (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). There is very little research on first-degree (bachelor's) professional programs in Ontario. The general themes in many of the studies are fundamentally similar. They discuss the significant government cuts (especially in the 1990s) made to PSE and the ways in which universities had to make up this lost revenue by increasing

their tuition fees and enrollments (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). When deregulation occurred, all professional programs classified as first- and second-degree became much more expensive in a short period of time (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). Scholars and advocates became concerned with the impact of deregulated fees on accessibility, particularly for lower-income and marginalized peoples (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). They began conducting research on diversity and the representation of low-income students in these programs (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). However, the focus of the literature on professional programs is limited to second-degree programs (graduate studies) such as pharmacy, dentistry, law, business (MBA), etc. and not to first-degree programs (undergraduate programs) (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). The gap in the literature must be addressed.

Moreover, it was recently revealed that both male and female bachelor graduates of management sciences and quantitative methods (professional programs) had the highest earnings in Canada (Frenette & Frank, 2016). In 2010, “management sciences and quantitative methods graduates earned the most—\$130,547, or \$43,004 more than the average bachelor’s degree graduate (after adjusting for age)” (Frenette & Frank, 2016, p. 3). Some regulated programs, such as an arts-related degree, are considered disadvantageous in comparison to professional programs vis-à-vis labour market value (Fenesi & Sana, 2015; Frenette & Frank, 2016). In fact, past studies indicate that arts-related graduates face much greater labour market disadvantages than other program graduates (Fenesi & Sana, 2015; Frenette & Frank, 2016). A recent study on the value of

select PSE programs in facilitating employment after graduation reveals that “graduates from humanities are more likely to pursue higher education, are less likely to be employed full time, are more likely to have jobs unrelated to their program and are more likely to be overqualified for their jobs” (Fenesi & Sana, 2015, p. 383). These findings reveal that certain regulated programs may not provide the knowledge and skills that are in current demand in the labour market. Art-related degrees have very high enrollment rates in Ontario. Next to the business programs, humanities have the second-highest enrollment rates with 277,038 students enrolled in 2017-2018, while the social sciences (social and behavioural sciences and law) had the third-highest rate at 275,838 (Statistics Canada, 2018). Since there are material consequences to PSE program enrollment, it becomes important to examine the differences between the student demographics of regulated and professional programs. Revealing who is more likely to be enrolled in these programs will help us understand the long-term effects of these trends. This research will provide a snapshot of the students enrolled in each of these programs and will allow for a comparison of the profiles of students.

Organization of the Study

The next chapter sets the contextual foundation for the dissertation. By providing an overview of the theoretical frameworks, Chapter 2 discusses the political economy and feminist political economy perspectives that guide the intersectional approach to this dissertation. A literature review of neoliberalism takes place, followed by an in-depth examination of the 21-century economy, precarious work, and economic inequity in Canada. Chapter 3 explores the historical PSE landscape in both Canada and Ontario and proceeds with a discussion on the neoliberalization of education. Chapter 4 traces the history of the current university funding framework through its roots in the neoliberal movement. It also locates the dissertation within the

area of the sociology of education through a literature review. Included in this section is a detailed account of tuition differentiation policy (i.e., the deregulation of professional programs). Chapter 5 discusses the resulting commodification of student debt, of PSE, and of students. Chapter 6 outlines the methodology for the logistic regression models and the hypotheses. It also includes survey data on the National Graduates Survey. Chapter 7 presents the results and discusses the data and analysis of tuition differentiation through professional programs, and issues of student debt in relation to the findings from the literature reviews in Chapters 2 and 4. Chapter 8 presents the conclusions, recommendations for further study and policy recommendations stemming from the dissertation.

Chapter 2: Perspective and Context

This chapter serves as the contextual foundation of the dissertation. It provides an overview of the theoretical frameworks guiding this research and examines the current conditions of the 21st-century economy and labour market. Political economy and feminist political economy are first explored to better understand the ways in which the political and economic values supported by various education policies are both complex and highly contradictory. Next, a literature review on theoretical conceptions of neoliberalism and the process of neoliberalization is conducted. This is followed by a section that traces the history of the shift from the welfare state to the contemporary neoliberal regime in Canada, including austerity measures. Precarious work and the 21st-century economy are then described and analyzed to gain insight into the potential returns on investments in PSE. The chapter concludes by examining structural barriers (i.e., labour market discrimination) and their outcomes (income and wealth inequity, the racialization and feminization of poverty, lifetime income). These topics set the stage to understand the value of PSE in an unpredictable and precarious environment that disproportionately discriminates.

Political Economy

Political economy (PE) is a materialist perspective that was developed from the works of Marx's historical materialism (Clement, 1997; Clement & Vosko, 2003). It takes a holistic approach to the interpretation of society and functions under the belief that material conditions shape and impact most phenomena (Clement, 1997; Thomas et al., 2019). PE is used to explore the ongoing and historical social relationships that give rise to certain phenomena and systems. It recognizes the intertwined relationship between the economic, political, and cultural/ideological

moments of social life, and seeks to prevent these aspects from being solely reduced to economic theory and logic (Clement, 1997; Thomas et al., 2019). In order to understand these dynamic realms, we cannot solely focus on one without taking into account the other; we are therefore required to contextualize each with the other (Clement, 1997).

PE continues to examine the social processes and forces that influence society, focusing on their tensions and contradictions (Thomas et al., 2019). Through a PE lens, possibilities and potential for social change can emerge from these conflicts and contradictions. Its historical linkage to Marxism and class relations focuses on the inequalities within capitalist societies and the resulting social movements (Clement, 1997; Clement & Vosko, 2003; McNally, 1981; Panitch, 1981; Thomas et al., 2019). Canadian Political Economy (CPE), a strand of PE developed to analyze Canada's political-economic development, has five key features identified by Clement (1997) as the guiding principles of research,

“(i) social relations are shaped by relations of economic production and social reproduction; (ii) the organization of production and social reproduction are not just “economic” relations but are fundamentally social, cultural, and political relations; (iii) social relations are historical and dynamic; (iv) tensions and contradictions within society produce resistance to the social order; and (v) human agency plays an important role in shaping social, political, and economic relations” (Thomas et al., 2019, p. 4).

Building from these principles, additional themes have been established to accommodate new and significant issues at the forefront of contemporary CPE scholarship. As aforementioned, scholars have highlighted the conflicts and contradictions embedded in society that ultimately serve as vessels of resistance and change. CPE investigates the dynamic nature of social change which stems from the unequal access to resources and the often polarized political-economic conditions. The tensions and conflicts that arise can be traced to the global restructuring of the economy and international relationships and policies (Thomas et al., 2019). Resistance and the push for social change are outcomes of the frequent oppressive nature of the system.

CPE pays homage to the historical events that have and continue to shape institutions, material conditions, and everyday lives through contextualization. Its emphasis on the importance of history and its long-lasting legacies, encourages scholars to merge the past and the present in their analyses (Thomas et al., 2019). Moreover, CPE's focus on the reproduction of systems and relations through change, suggests that although Canada's political economy may have undergone transformations over time, the resilient social relations of capitalism have persevered and even taken on new forms to withstand change, a new version of the same old (Thomas et al., 2019).

Themes regarding the importance of the state emphasize the power and authority that it holds in a neoliberal environment. This is done covertly as the state intentionally downplays its significance (Thomas et al., 2019). Institutions of the state have been assigned the task of protecting and regulating market processes in the interests of capital. Despite the contradictory rhetoric advocating for minimal state intervention in a neoliberal era, the state continues to be an important actor in the advancement of capital interests, thus retaining its power in a new form. Furthermore, the adoption of intersectionality in CPE, which will be discussed below, dissects the dominant social relations through the inclusion of marginalized voices and experiences (Thomas et al., 2019). Voices that are often silenced or overlooked are used as a starting point of analysis, thus incorporating an intersectional lens. These themes are useful conceptual tools that provide CPE scholars with the ability to confront and unpack current and complex phenomena.

When CPE first emerged, it focused on the staples economy and Canada's role in the global market (Clement, 1997; Clement & Vosko, 2003; Thomas et al., 2019). The staples approach investigated the linkages of staple production and the elastic value associated with the process. This approach exposed the uneven power relations between the suppliers of raw materials and the

buyers of such (Thomas et al., 2019). The traditional staples approach neglected the social factors of production as an important feature of the ways in which development occurs.

Over time, scholars recognized the limits of the staples approach and traditional CPE. Keen on developing a more holistic approach that acknowledged the role of social reproduction in the capitalist system, scholars began to incorporate a feminist perspective. By emphasizing the interdependent relationship of reproductive labour, sex/gender systems, and capitalism, the work of women and their subordinate status was no longer ignored (Clement & Vosko, 2003; Thomas et al., 2019). Additionally, CPE widened its scope to issues of race/ethnicity, Indigeneity, and immigration and discrimination in the labour market. It eventually adopted an intersectional approach that now includes social markers and location in its analysis (Clement, 1997; Clement & Vosko, 2003; Thomas et al., 2019). CPE has come full circle reclaiming the importance of the staples production in the ever-changing Canadian economy, however with a more critical approach. Issues involving the environment and sustainability are at the forefront of CPE given the current context (Thomas et al., 2019). Environmental degradation and finding new ways of sustainably producing energy have become imperative in the discussion of the Canadian economy.

There has been a great deal of theoretical innovation in PE which now accommodates a wide range of social markers through an intersectional perspective. Feminist Political Economy (FPE) paved the way for diverse social markers, such as gender, to become central departures of analyses in the unpacking of the conflicts and contradictions of capitalism (Clement & Vosko, 2003; Thomas et al., 2019). PE now encompasses important social markers such as race and ethnicity, citizenship, sexuality, Indigeneity, and ability, in the understanding of oppression and social inequalities (Thomas et al., 2019). These social markers are not treated as independent categories, but rather as interconnected and historically situated. This intersectional approach to

the construction of inequalities has added significant insight and value to the growing body of PE scholarship. An expansion of the concept of class now recognizes the intersectional and inseparable relationship it holds with social location and the potential impacts of this conglomerate (Clement & Vosko, 2003; Thomas et al., 2019).

Feminist Political Economy

Feminist political economy (FPE) is a body of scholarship that emerged from feminist critiques of classical political economy, derived from the theories of Marx, Polanyi, Smith, Veblen, and Mill (Armstrong & Connelly, 1989; Vosko, 2002). Early FPE aimed to fill the gap of Marxism and its neglect of social reproduction and its link to production (Armstrong & Connelly, 1989; Vosko, 2002). Through the feminist critique of PE, the concept of class was reconceptualized to incorporate race and gender within varying geographical contexts. Contemporary FPE scholars are working towards systematically placing social markers such as race, ethnicity, gender, and class on equal analytical footing (Ferguson, 2014). There have been four overlapping phases of FPE since the mid-1970s (Vosko, 2002). The first confronted the issue of gender blindness in traditional PE. The second phase focused on levels of analysis, the ways in which sexual inequality could be understood under capitalism, and the struggle to situate women's work, both paid and unpaid, in the mode of production (Vosko, 2002). Building from these theories, the third stage resolved the levels of analysis debate, and brought applied case studies in FPE to the forefront. The contemporary, and fourth, stage of FPE took two complementary directions: the intersection of gender, class, and race/ethnicity in defining women's relationship to capitalism (feminist intersectional theorizing); and women, the law and the welfare state (Vosko, 2002; Thomas et al., 2019).

The inception of FPE can be traced back to the works of Pat and Hugh Armstrong, Marjorie Cohen, Pat Connelly, Meg Luxton, Angela Miles and Martha MacDonald amongst others (Armstrong & Connelly, 1989; Vosko, 2002). These scholars took issue with the gender blindness inherent in the writings of Marx and Engels and focused on women's position under capitalism, as well as the gender division of labour (Armstrong & Connelly, 1989; Vosko, 2002). A growing body of research investigated the gender division of labour in the household, labour market segmentation by sex, and wage inequality (Armstrong & Connelly, 1989; Vosko, 2002). These issues led scholars to the exploration of the origins of women's marginalized status through their paid and unpaid work; a rise in theory-based case studies emerged, such as Armstrong and Armstrong (1985), and Luxton (1980). These significant works were some of the first to draw attention to daily and intergenerational reproduction, and the fundamental relationship between production for surplus and social reproduction. In the mid-1980s, a debate over levels of analysis began to dominate FPE. Two distinct schools of thought emerged, one that identified ideology as the main source responsible for women's position under capitalism, and another that situated women's position in the context of material relations (Vosko, 2002). As a result, a divide in the scholarship regarding the level(s) of analysis to be used when studying women's disadvantaged position in the economy developed. Nevertheless, in the late-1980s, a rise in applied case studies focusing on the experiences of women in capitalist societies took shape, putting the level(s) of analysis debate to a temporary halt. Dorothy Smith (1987) centred her work around women's experiences of everyday life, giving voice to something often invisible.

In the mid-1990s, FPE evolved to its present form incorporating an intersectional lens. As aforementioned, FPE now accommodates two complementary strains: the intersection of gender, class, and race/ethnicity in defining women's relationship to capitalism (feminist intersectional

theorizing); and women, the law and the welfare state (Thomas et al., 2019; Vosko, 2002). Research on racism and racialization was integral in establishing an analysis of intersectionality. The link between production and the racialized nature of the international division of labour enriched analyses of the public/private divide under capitalism. Probing the numerous and contradictory intersections of gender, class, and race provided deeper understandings of the power relations emerging from them. Emphasized by Creese & Stasiulus (1996), “race, ethnicity and related axes of exclusion and subordination are often named, but seldom form an integral part of feminist and non-feminist political economy” (p.7). A special issue of *Studies in Political Economy* brought the interrelations of race, class and gender to the centre of analysis. Contributions by Caroline Andrew, Himani Bannerji, Daiva Stasiulus and Abigail Bakan, changed the way FPE understood and incorporated racism and racialization in its scholarship, and legitimized the assertion that racial and ethnic struggles are political economic struggles.

In tandem with the work on race, there is an increasing importance on investigating women and the welfare state, sex/gender and social policy, and women and the law. With higher participation rates for women in the labour force, changes in regulation are leading to the feminization of employment and, at times, the erosion of employment norms. Additionally, the theme of citizenship through an intersectional lens has gained traction in the field. FPE continues to unpack the ever-evolving intersections of race, class and gender, and their relationship to capitalist systems.

Political Economy of PSE

The scholarly literature on PE has been used to examine education. Debates surrounding education as a private versus a public good (Boadway, 1997; Bozeman, 2002; Elmore, 1984; Guthrie, 1985; Labaree, 1997; Levin, 1987) have been long contested. Additionally, PE has

investigated the role of education as a character development process versus an area of training in technical skills and knowledge (Brown, 2001; Carnoy, 1985; Collins, 1979; Guthrie, 1990; Weber, 1946). This dissertation will assess the ways in which the political and economic values supported by various education policies are both complex and highly contradictory. It will also probe the relationship between PSE, the reproduction of social class structures, and the accumulation of human capital (Becker, 1964; Bowles & Gintis, 1976). This framework captures the diverse perspectives by recognizing that PSE is not only valued for its production of a staple good, but also as a human capital investment, and as a mechanism for producing and reproducing social class structures.

PSE policy, both federally and provincially, has been driven by changing political-economic influences. The growing demand for access to PSE has led to the rise of new institutional forms, and has raised concerns regarding differentiation, and new lines of stratification. Governments and political ideologies have impacted the levels and intentions of public funding which have shifted drastically over time. Public investments in PSE, such as grants and tuition subsidies, have fluctuated in size, with some grants distributed universally, while others intended for select social groups or economic sectors (MTCU, 1998; 2006; 2013; 2019b). The role of PSE itself has been used by policymakers as an avenue to achieve social inclusion and equality, a tool for labour force development, and at times, and a standalone market sector (Fisher et al, 2009). Many of these objectives are inherently contradictory and have resulted in rising tensions.

For example, in 1997, the Ontario Research and Development Challenge Fund (ORDCF) was established with the intention of driving university-industry collaborations to promote job creation and economic growth, as well as to attract and retain qualified researchers (Government of Ontario, 2022). The 1990s were responsible for a plethora of new PSE policies in Ontario

focusing on research, innovation, and development. These policies were pushed onto the academy in order to enhance economic development (Fisher et al, 2009). It was believed that investments in research and development would generate knowledge leading to economic progress and greater international competitiveness. Conservative and Liberal federal governments have employed market and quasi-market political ideologies to try to encourage academics to embrace commercial interests. Since the late 1980s, the goal of science and technology policy has been to blur the lines between academia and industry (Fisher et al, 2009). There has been a significant emphasis on accountability through performance indicators, as well as a parallel trend toward pushing the system to match the needs of the labour market (MTCU, 2019a).

Access to and the affordability of PSE have brought issues of inequity to light as intersectional axes of exclusion (i.e., race, gender, socioeconomic status) continue to influence the likelihood of participation. The contradictory role of PSE as both a space of social inclusion and exclusion has sparked movements of social change advocating for the abolition of tuition fees and student debt forgiveness. Using data from the 2018 NGS, this research investigates student demographics and participation rates in first-degree professional programs. Additionally, it explores the ways in which the neoliberal fee environment reinforces existing socio-economic inequalities and how it produces new inequalities.

Neoliberalism

Neoliberalism can be understood as a political project and process which seeks to “restore and reconstitute class power through the (re)establishment of the conditions conducive to capitalist accumulation” (Fanelli & Hurl, 2011, p.90; Harvey, 2007; Peck, 2008). It is considered to be a comprehensive set of political and economic practices that entails several important features: (1) decentralization: its commitment to restructuring state administrations; (2) privatization: the

development of endless and innovative profit opportunities for businesses through deregulation and privatization of public goods; (3) the lean state: the shrinking of the role of the state and minimal intervention, with the exception of its required tasks of enforcing the protection of private property, security, national defence, the legal enforcement of contracts, and labour market discipline; (4) individualism/private good: a shift from the collective good to individualism through the dismantlement of the welfare state and an attack on social provisions (public goods). Pushed forth is the notion that individuals are responsible for their own well-being and should not receive support from government programs as they perpetuate cycles of dependency; (5) freedom: the protection of individual choice and freedoms (Harvey, 2007; Peck, 2008).

Operating as a powerful force, neoliberalism aims to reduce state interventions in economic and social activities while deregulating labour and financial markets, as well as commerce and investments (Pupo & Noack, 2009). In this regard, it advocates for the elimination of government-imposed restrictions on transnational movements of goods and capital (Cleaver, 2000; Fanelli & Hurl, 2011; Harvey, 2007; McBride & Shields, 1997; Peck, 2008). Its emphasis on the reduction of state intervention should, according to classic liberal thought, create enormous potential of capital in all areas, including public goods such as healthcare and education (Friedman, 2009). The maximization of economic freedom for individuals is of utmost importance and should be implemented at any cost; naturally, this leads to a nearly complete reduction in state intervention.

According to Harvey (2007), neoliberalism is a policy framework that encourages and protects the relatively unregulated operation of markets. The focus here is on the ways in which governments and institutions have promoted or resisted policies that aim to reduce the overall role of government and its involvement in the economy while simultaneously shifting the power of

structuring social life to markets (Cleaver, 2000; Fanelli & Hurl, 2011; Harvey, 2007; McBride & Shields, 1997; Peck, 2008).

The scholarship on neoliberalism is often used to account for changes in everyday life and their relationship to neoliberal policy and politics. However, analyses on the topic tend to assume that neoliberalism is “predetermined, universalizing, territorially immobilized, and rigid”, preventing them from accommodating variation or diversity (Brenner et al., 2010, p.201). The trajectory of neoliberal thinking was never linear or one-dimensional. Although often linked to 19th-century laissez-faire ideology, it can be traced to the 1930s as “an experimental and polycentric project aimed at the contradictory problem space between the state and the market” (Peck, 2008, p.4). Early on, there were many different conceptual approaches applied to the thinking, for example, the Chicago School of Economics and the Ordoliberalism of the German Freiburg School, among others (Peck, 2008). These diverse approaches to neoliberal thinking “did not rest on a set of immutable laws, but a matrix of overlapping convictions, orientations and aversions, draped in the unifying rhetoric of market liberalism” (Peck, 2008, p.6). Therefore, the notion of neoliberalism is fluid and transformative, encompassing many different schools, ideas, conceptions, and opinions. Regardless of the differences, most agree that neoliberalism involves the expansion of “market-based competition and commodification processes” into areas of social life formally protected from these forces.

Despite efforts to redevelop a consistent neoliberal theory and agenda starting in the 1930s, it wasn't until the late 1970s and early 1980s that neoliberalism garnered attention. As welfare states began to crumble (i.e., Keynesian policies), stagnation stifled economic growth, and the global economic crisis emerged, support for neoliberal arguments grew. Neoliberal theories were proposed as desirable alternatives and were circulating in discussions about the “postwar capitalist

order and post-1970s patterns of institutional and spatial reorganization” (Peck et al., 2012, p.269). This was evident through the political changes and regimes of Ronald Reagan in the United States and Margaret Thatcher in the United Kingdom², sparking the era of neoliberalism. Since then, neoliberalism has become something of a shapeshifter; changing into different forms by adapting as needed to its environment. For example, Thatcherism signified a type of reconciliation of “the free economy and the strong state,” (p.22) while modern China adopted a completely different arrangement of state power and market forces (Gamble, 2006).

The features of neoliberalism do not appear in consistent manners but vary across geographies and contexts. They are shaped by pre-existing institutional arrangements and are differentially contested by opposing powers, creating neoliberal terrains that are inherently diverse, conditional, and challenged (Brenner et al., 2010). One of the major issues within the study of neoliberalism has been trying to find a way to explain both its systemic nature and the institutional variety that it produces across time and space. Peak et al. (2012) conceptualized neoliberalism as a process that itself is a “crisis-induced, crisis-inducing form of market-disciplinary regulatory restructuring” (p.268). Rather than framing neoliberalism as a pure archetype that is universally applicable to all contexts, its variegation, the ability to transform to meet the needs and demands of the geoinstitutional context, is arguable its greatest feature. Through its variegated form of regulatory restructuring, it can self-sustain across time and space in a systematic process despite its self-destructive tendencies. It has the ability to morph into various shapes, forms, and stages depending on the pre-existing conditions and structures in place. Therefore, it is essential to recognize the neoliberalization process as a “historically specific, unevenly developed, hybrid,

² Prior to its adoption in the US and UK, neoliberal policy was introduced in Chile.

patterned tendency of market-disciplinary regulatory restructuring” (Peck et al., 2012, p.269). Its intent to secure the state and redirect its power and purpose to meet the needs of the corporate, free-trade, market-oriented agenda remains a defining feature. It cannot completely fail as it does not fully exist; only does it operate in a series of fragmented and chaotic hybrids, never in a fixed state. Unfortunately, its inherent contradictions and varied forms function as barriers to the achievement of its purported goal, a free market economy.

Albo et al. (2010) stress the importance of finance in the neoliberal agenda. Finance has played a crucial role in managing the state through loans and debt; individuals are similarly disciplined through finance with personal debts, student loans, mortgages, and pensions (Dumenil & Levy, 2004; Harvey, 2007; McNally, 2010). Through the rise of finance, the growing indebtedness of the state was painted as an economic crisis. This perceived crisis was then used as justification for the attack on social provisions and public sector unions (Cleaver, 2000; Fanelli & Hurl, 2011; Harvey, 2007; McBride & Shields, 1997). Moreover, another key criterion of neoliberalism is its strict and limited conditions for which the state is granted permission to interfere within the economy and social life. Although its advocates stress the importance of limited interference, they simultaneously assign the state with essential responsibilities to secure the institutional preconditions for a competitive market and market rule. The state, then, is expected to enforce the protection of private property, security, national defence, and the legal enforcement of contracts (Fanelli & Thomas, 2011). Scholars from the Chicago school of economics, as well as thinkers such as Von Mises (1944), Friedman (2009), and Hayek (1944) contend that government interference in the economy outside of the specified responsibilities would inevitably obstruct the invisible hand of the free market and therefore compromise the general equilibrium (Milonakis & Fine, 2008). If the economy were to suffer an economic illness,

this would be a direct result of government policies and intervention and not indicative of overall market failure (Friedman 1962; 1980). Efforts to secure basic social entitlements such as education, pensions, healthcare, welfare, unemployment insurance, etc. are classified as outside the parameters of state responsibilities and are seen as an intrusion on individual rights and freedoms (Friedman 1962; 1980; Hamowy, 1982; Steiner, 2009; Van Horn and Mirowski, 2009). The market itself is capable of ensuring that “factors of production are paid what they are worth, therefore supposedly removing the need for social infrastructure, legal and juridical protections and unions which are viewed negatively as market impediments” (Fanelli & Hull, 2011, p.92). As a result, the need for collective benefits is no longer valued, and a shift, both ideological and policy-based, towards individual culpability, occurs (Duffy & Pupo, 2018).

Human Capital Model

As aforementioned, privatization and deregulation are essential in the neoliberal framework in supporting capitalist market structures. Through privatization and deregulation, conditions of competition emerge giving rise to the theory of human capital. Individuals must compete as market actors to attain the most capital, in any given society. Thus, to ensure success within a neoliberal society, one must acquire the appropriate skills and knowledge to remain competitive. Neoliberalism tends to punish those who do not collect human capital by labelling them as individual failures, regardless of context.

The human capital model has a neoclassical economic view of education and considers it to be an investment (Baptiste, 2001; Becker, 1993; Hansen, 1983; Kiker, 1971; Schultz, 1968; Weisbrod & Karpoff, 1968). It assumes that when an individual increases his/her human capital through education, it will lead to employment which entails higher wages in the labour market (Baptiste, 2001; Becker, 1993; Hansen, 1983; Kiker, 1971; Schultz, 1968; Weisbrod &

Karpoff, 1968). Essentially, the model treats education as an asset and focuses on the ‘returns on the investment’ (Baptiste, 2001; Becker, 1993; Hansen, 1983; Kiker, 1971; Schultz, 1968; Weisbrod & Karpoff, 1968). If PSE is expected to enable only greater access to a higher paid job for the individual, student loans – rather than grants – may be justified, since student loans essentially allow a student to borrow against her/his own future income. If there are social costs and benefits associated with accessing higher education and if changes in the labour market have lowered the returns on the investment in an education for some disproportionately, these two additional considerations undermine the merits of a narrow cost-benefit analysis in important ways. Many of the PSE policies today are still influenced by the human capital perspective.

Unfortunately, this theory does not take into account or measure the social cost and consequences of student debt. Its sole focus on numbers (cost-benefit analysis, returns on investment) completely neglects the social and other economic effects of this investment such as the postponement of adulthood life events. Not only do those in debt suffer economically, but they also reported delaying marriage, purchasing a vehicle, taking out a mortgage and having children – effects that are even more pronounced for members of already marginalized groups. In addition, it fails to account for the low wages, precarious employment and insecurity experienced by a large number of graduates in the contemporary labour market. With an increased proportion of low-wage, precarious jobs held by members of marginalized groups especially, the rates of return on the education ‘investment’ are lowered disproportionately. These additional considerations expose serious weaknesses in the human capital model of education investment as a theory underpinning a loans-based support system.

Additionally, the human capital model completely disregards social location and social markers (Li, 2003; Kunz, Milan, & Schetagne, 2000; Beach & Worswick, 1993). The social

location of students can be detrimental as it has the capacity to lessen the return on PSE investments. For example, Anisef et al., (2003) found that the earnings of immigrant visible minorities, in all fields of study, are not equivalent to their education level(s), despite similar investments in education. Structural and institutional barriers and inequities such as labour market discrimination, racism, the gender wage gap, the racialized wage gap, the glass ceiling, etc. can compromise the economic well-being of students (Anisef et al., 2003; Bolaria, 1983; Das Gupta, 1996; Li, 1989). Hiebert (1997), argued that the human capital model neglects the disadvantaged effects of gender, class, and race, amongst others. The inability of market theory to account for immigrants' disadvantage in the labour market is seen in analyses that control for these structural factors (Li, 2003; Kunz, Milan, & Schetagne, 2000; Beach & Worswick, 1993). When taking the cost of discrimination and barriers into account, there is no universal value that can be applied to all PSE degrees. The social and economic costs and returns will always vary based on a student's social location. This blatant shortcoming of the human capital model makes it highly unreliable and inaccurate. Similarly, within the wider society, the labour market is neither colourblind nor gender-neutral; rather these axes of exclusion are part of a system that produces discrimination and perpetuates structured inequalities (Anisef et al., 2000; Bolaria, 1983; Das Gupta, 1996; Li, 1989).

Furthermore, Livingstone (1999) critiqued the HCT for its severed relationship with the labour market. He believed that the learning efforts (i.e., PSE, informal learning, knowledge and skills) of the prospective labour force were mismatched with labour market employment (Livingstone, 1999). The labour market conditions do not allow graduates to apply their employment-related knowledge in advanced industrial societies causing widespread underemployment (Livingstone, 1999). Thus, the HCT remains fixated on individual outcomes

and cannot effectively confront the ongoing issue of the underutilization of investment in learning (Livingstone, 1999).

A frail system

Recognizing the current context and its unique terrain not only provides a useful perspective on PSE cost and debt but also reveals the frail and damaged society that exists today. Situating PSE requires an understanding of the realities of everyday life. People across Ontario, and more generally, Canada, are struggling to cope with the ferocious demands of neoliberal capitalism (Tiessen, 2015). Over time, various economic paradigms have influenced public policy; systems have come and gone and many of the policies have led to engraved inequities. Keynesianism provided full-employment, balanced growth, social stability and facilitated growing real wages, but after a surge in inflation it was replaced by neoliberalism (Davidson-Harden & Majhanovich, 2004). Balanced budgets and low inflation were the main foci of neoliberal policies. However, the precarious labour market, the concentration of income gains in the hands of the top quintile, and progressively slowing growth widened the income and wealth gaps and produced political instability. Economic inequity and persistent poverty are permanent fixtures across Ontario and Canada.

Additionally, the cost of living in cities across Ontario has dramatically increased and meeting the requirements to sustain a decent life is no longer feasible for many. A report in 2015 revealed that in order to afford the basic necessities for a family of four – two adults and two children, in Toronto, each parent would be required to earn \$18.52 per hour and work 37.5 hours per week (Tiessen, 2015). These figures exclude important life expenses, such as children's PSE, and outstanding debt both personal and/or PSE-related. The Toronto living wage calculation,

which is linked to the national living wage framework, was used to determine these numbers (Tiessen, 2015).

Over the past 30 years, Canada has experienced both a growing income and wealth gap between the rich and the poor. According to recent reports, much of the increase (66%) in wealth has gone to the wealthiest 20%. The level of wealth inequality in Canada has reached such extremes that in 2012, according to figures derived from Canadian Business magazine, the 86 wealthiest Canadian-resident individuals (and families) held the same amount of wealth as the poorest 11.4 million Canadians combined. Income inequality has exhibited a similar trend. There are several key drivers that have intensified the levels of economic inequality in Canada: the shift in the labour market to a service/knowledge-based economy, the rise of precarious work, the dismantling of the welfare state and the disinvestment of social welfare programs (neoliberalism), the implementation of austerity policies, and the discrimination/segmentation in the labour market. These drivers have contributed to the economic inequality we see today in Ontario and Canada, and they will be explored in detail below.

Neoliberalism, austerity, and the welfare state

The rise of the neoliberal regime in Ontario, and more generally in Canada, can be directly linked to various drivers that have accelerated the current conditions; these drivers include austerity measures and the dismantlement of the welfare state. The 1970s were a pertinent time in the transformation of the Canadian welfare state (Bryant et al., 2020; Cleaver, 2000; Fanelli & Hurl, 2011; Karimi, 2017). The period of Keynesian economics came at a time when widening inequality gave rise to a renewed class struggle. During the post-war era in Canada, citizens were in need of an economic system that would yield more employment opportunities and financial stability. This led to the adoption of a more interventionist government and the creation of a

welfare state (McBride & Shields, 1997). Under Keynesian policies, the state took an active role in the welfare of its citizens, intervened in areas such as education, healthcare and social security, and aimed to achieve full employment (McBride & Shields, 1997). The investment in social provisions and a social safety net (such as unemployment insurance, cash assistance, maternity leave, pensions, universal healthcare, PSE, etc.) were intended to lessen the detrimental impacts of capitalism and redistribute resources when necessary (Cleaver, 2000; Fanelli & Hurl, 2011; McBride & Shields, 1997; McQuaig, 1993). This was a prosperous time for Western states as they experienced three consecutive decades of capitalist growth; however, this growth was not equally distributed or shared (Karimi, 2017). The racialized and gendered inequity during this period was profound, limiting the ability of all Canadians to thrive in the prosperous economy. When stagflation, the simultaneous rise in unemployment and inflation, emerged in the early-1970s, Keynesianism had difficulty coping, and neoliberalism gained significant momentum.

The capitalist class utilized neoliberalism as a tool to control and discipline the labour force, reverse the social provisions that had been gained over the past thirty years, and increase their profits (Fanelli & Hurl, 2011; McBride & Shields, 1997; McQuaig, 1993). This turbulent period of economic regression led to a deadly assault on the social welfare state as neoliberal advocates dubbed social provisions and investments as wasteful, unaffordable, and unnecessary (Burke et al., 2000; Sears, 2003). A leaner, more efficient state, which would rid itself of the responsibility of the collective good, was considered the logical solution (Burke et al., 2000; Sears, 2003). The implications of this attack can still be felt today. Many of the significant social provisions created to invest in the future of the population have been clawed back or completely eroded. Benefits designed to lift Canadians out of poverty or supplement incomes, as well as investments in education, including PSE, and healthcare, were widely reduced. The dismantlement

of the welfare state and many social provisions furthers the agenda of the ruling class; they already possess the wealth and resources to purchase these services from the private market and have no need for a collective good. The direct benefits that a welfare state offers are not justified by the costly fees collected from taxpayer dollars to maintain social programs. This makes a privatized system more desirable for the elite class (McQuaig, 1993). Collective principles such as full employment and national economic development are abandoned, while the use of monetarist shock therapy and regressive tax reforms are implemented.

Neoliberalism typically supports fiscal austerity, a set of political-economic policies that aim to lower government budget deficits through expenditure cuts, tax increases, or a blend of both (Paes-Sousa et al., 2019). These policies encourage “reducing public expenses and social investments, retracting the public service and substituting the private sector in lieu of the State to provide certain services tied to social policies” (Paes-Sousa et al., 2019, p.1). The outcomes of fiscal austerity disproportionately impact marginalized groups who have experienced a significant fall in living standards. The outcomes are felt and experienced differently based on social location; however, they continue to disadvantage the most marginalized groups. The dismantling of the social safety net that once protected Canadians now further entrenches inequalities. PSE has been violently attacked in the neoliberal era. Austerity measures have downloaded the cost of pursuing a PSE onto individual students, rather than governments. This will be expanded on in chapter 3, PSE Policy Landscape.

The 21st-Century Economy and Precarious Work

With the rise of neoliberalism and other significant changes, the Canadian labour market has undergone an extensive transformation in recent decades. The 21st-century economy has progressively evolved since the 1980s and has accelerated the possibility that recent graduates will

not find suitable and stable employment upon graduation. The current labour market conditions may compromise the ability of PSE students to repay their loans.

There has been a decline in the standard employment relationship (SER) and a simultaneous increase in precarious work since the mid-1970s (Pupo & Thomas, 2010). Precarious work, a key feature of the new 21st-century economy, is a fluid form of insecure and uncertain employment which can entail low wages, a lack of social benefits and legal protections, and can be structured as temporary, casual, seasonal, contract, or short-term (Cranford et al., 2003; Hewison, 2016; Kalleberg, 2000; Kalleberg & Hewison, 2013; Vosko, 2010). It exists on a continuum and has the ability to change course to meet the needs of the market. Currently, full-time, well-paid, and stable employment is much more challenging to attain than in the previous decade (Cranford et al., 2003). In addition to the rise of precarious work, scholars have begun discussing the ‘gig economy’, a concept not yet well-defined, and the ways in which it is changing how work is organized (Abraham et al., 2019; Jeon et al., 2019; Koutsimpogiorgos et al., 2020). Technological innovation continues to redefine the contours of working arrangements and types of work in the labour market. An increase in jobs accessed through online platforms (e.g., Uber), which allows consumers to purchase goods and services from workers through smartphone apps and other web-based applications, has developed (Koutsimpogiorgos et al., 2020). Although the amount of labour working through these online platforms is still rather small, there is a shared expectation that it will rapidly expand and account for a large part of the economy in the near future (De Stefano, 2015; Koutsimpogiorgos et al., 2020). This dissertation will not provide an in-depth analysis of the emerging gig economy; however, it will focus on precarious work and flexible working arrangements, prominent features of the current economy.

The belief that PSE will inevitably lead to the acquisition of a well-paid, stable, permanent employment position is one of the driving forces of its pursuit. Each year, students and their families invest in PSE with the hopes of securing long-term financial success as a result. This may have been the case, at least to some extent, for previous generations; however, the trends and structure of the 21st century labour market have severed the education-employment system. It is no longer a guarantee that PSE graduates will have access to employment that offers stability, benefits, and high wages. Neoliberalism and globalization have led to structural changes in the economy and workforce. In the 2016 Census, Statistics Canada revealed that less than one in two jobs in Canada is permanent (i.e., full-time and full-year); a severe shift from the Fordist era and welfare state where full-time permanent jobs were the backbone of the labour market (Martin & Lewchuk, 2018). In the contemporary labour market, full-time permanent employment is scarce, with the repercussions of this reality borne by the youth of today (Martin & Lewchuk, 2018).

In Ontario, between 2011-2017, total employment rose by 7% while unemployment rates decreased by 6.3%, with the Greater Toronto and Hamilton Area (GTHA) accounting for a substantial portion of the employment growth (12.4%) (Lewchuk, 2018). Full-time employment in the GTHA increased by 12% and part-time by 10.2% (Lewchuk, 2018). Regardless of these employment gains, data suggests that precarious employment continues to outpace secure employment in the region; for example, permanent employment increased by 10.4%, temporary employment by 18.8%, self-employment by 17.2%, and self-employment without paid help (i.e., freelancers or gig work) by 18.3% (Lewchuk, 2018). Wages struggled to keep up with the cost of living despite the employment growth and the increase in labour productivity during this period. Two Poverty and Employment Precarity in Southern Ontario (PEPSO) surveys conducted in 2011 (Lewchuk et al., 2013) and 2017 (Lewchuk, 2018) reveal that the consumer price index in the

Toronto census metropolitan areas (CMA) rose by 10.5%. In 2017, the real average weekly wage in the GTHA was only about 1% higher after accounting for cost-of-living increases (Lewchuk, 2018). Different fields in the labour market experienced more varying outcomes, for instance, employment sectors with a higher concentration of precarious work (i.e., health, education and community services, arts and culture, sales and service, trades and transport, and manufacturing and utilities) experienced an increase in average wages that were below the Ontario provincial average of 11.4% (Lewchuk, 2018). Simultaneously, employment sectors in management, business, and finance experienced increases in wages greater than the provincial average (Lewchuk, 2018).

Although some young adults have managed to attain full-time permanent employment that includes benefits and pensions (i.e., SER jobs), such full-time opportunities are increasingly difficult to obtain, and reflect the increasing polarization of employment and income within this generation (Martin & Lewchuk, 2018). Even with a workforce that contains high levels of PSE, only 44% of millennial workers in Canada have found permanent full-time employment in 2018 (Martin & Lewchuk, 2018). In addition to this figure, 47% are employed at jobs with varying levels of insecurity: one-third are freelancing, working short-term contracts, or are employed through a temporary employment agency (Martin & Lewchuk, 2018). Racialized workers, specifically, racialized women, are disproportionately impacted by these trends (Lewchuk et al., 2014; Martin & Lewchuk, 2018). Most troubling is that this generation has incurred a higher cost of PSE compared to previous generations and are carrying significant levels of debt upon graduation (Martin & Lewchuk, 2018). According to recent numbers from Statistics Canada (2014) and a PEPSO survey, 60% of workers between the ages of 25-65 in the GTHA, are employed with some degree of security (Lewchuk et al., 2014). Of this 60%, 48% are in full-time,

permanent jobs, and 8% are in part-time permanent employment (Lewchuk, 2018). Although SER jobs increased from 50% in 2011 to 56% in 2017, access was influenced by race and gender (Lewchuk, 2018). Controlling for race and gender, white men and women, and racialized men reported a statistically significant increase in SER jobs, while racialized women did not (Lewchuk, 2018). Despite racialized men experiencing the largest increase in SER jobs between 2011-2017, white men continue to have the highest odds of holding an SER position, 27% more likely than racialized men, and 8% more likely than white women (Lewchuk, 2018). In contrast to the gains made by those groups, racialized women were the only group to report a small decrease in permanent, full-time employment (Lewchuk, 2018).

If we exclusively focus on access to SER employment and university degree holders, it becomes apparent that PSE is not providing young adults with the assurance they need to thrive in the labour market. A study conducted by Frenette & Morissette (2014), on behalf of Statistics Canada, reveals the depreciation of the undergraduate degree in Canada. Frenette & Morissette (2014) indicate that the wage gap between individuals with an undergraduate degree and those with a high school diploma has decreased over time. However, this was not always the case as wage differences between bachelor's degree graduates and high school graduates employed in full-time jobs widened in Canada between 1980 to 2000 (Frenette & Morissette, 2014; Boudarbat et al., 2010). It was not until the 2000s that these differences subsequently narrowed for young workers (Frenette & Morissette, 2014; Morissette et al., 2013). In sum, "after rising from 1980 to 2000, cross-educational differences in the price of labour actually fell for young workers during the 2000s" (Frenette & Morissette, 2014, p.7). Social markers such as gender, race, and education levels (having a university degree) have a compounding effect on access to full-time, permanent employment. Between 2011 and 2017, white men and women with a university degree, and

racialized men with a university degree all had higher rates of SER employment (Lewchuk, 2018). Despite having PSE, racialized women were the only group with a university degree to not experience a rise in their rates of SER jobs (Lewchuk, 2018). For all those without university degrees, job security did not increase between 2011-2017, contributing to the plateau of workers without university degrees and racialized women with degrees (Lewchuk, 2018). In addition, periods of unemployment were least likely for white men and women with a university degree, while racialized men without a degree were most likely to face unemployment (Lewchuk, 2018). Racialized women without a degree did not fare any better as they were six times more likely than a white man with a degree to be low-income in 2017 (Lewchuk, 2018). This data illuminates the precarity of the labour market and the future of many young adults. Precarious employment has become an entrenched feature of the labour structure with no signs of slowing down. PSE acquisition does not equate to permanent, full-time employment, especially for racialized women. This sobering reality forces us to consider the price of PSE and the future well-being of our labour force.

On a national level, precarious employment currently dominates the insecure labour market in Canada, rising close to 50% in the last two decades (Premji, 2017). Full-time permanent employment declined from 67% of total employment in 1989 to 63% in 2005 in the Canadian labour market (Cranford et al., 2003; Noack & Vosko, 2012). Those most at risk of falling into precarious employment include racialized groups, women, and new immigrants (Fuller & Vosko, 2007; Teelucksingh & Galabuzi, 2005). The 1996-2001 census period revealed that, in comparison to non-minorities, BIPOC group members and new immigrants continue to sustain a double-digit income gap and a higher rate of unemployment (Teelucksingh & Galabuzi, 2005). More specifically, the racialized wage gap is evident among the university educated (median gap 14.6%)

as well as those without PSE (20.6%), which suggests a cross social class factor (Teelucksingh & Galabuzi, 2005). The labour market is embedded with inequalities; BIPOC groups are overrepresented in many precarious, low-paying occupations and are underrepresented in better-paying, more secure employment (Teelucksingh & Galabuzi, 2005). Moreover, women of colour have less access to employment, and high wages, than men of colour, and non-racialized men and women (Block et al., 2019; Block & Galabuzi, 2018). Visible minorities are overrepresented in families in the bottom half of the income distribution at 60%, while non-racialized individuals comprise 47% (Block et al., 2019; Block & Galabuzi, 2018).

Furthermore, recent graduates are more susceptible to precarious employment as they have little to no labour market experience and, as a result, are more willing to accept a precarious position. According to the CIBC, “a record high number of young people, once they leave school (22% of teens, 14% of non-students aged 20–24), are underemployed or only working part-time — and of these, 70% want to work full time. From the late 90s to the present, there has also been a significant increase in the number of young workers in temporary, insecure, or contract work, from 8% to almost 12% — a much greater increase than in the 25+ category” (CCPA, 2013). Kapsalis (2006) asserts that the ability of individuals to repay their loans in a timely manner is contingent upon their post-undergraduate income rather than the size of their student debt. This reality poses a significant threat to all Canadian workers, but especially to those who have just graduated from PSE with student debt. Precarious employment does little to ensure that those with PSE debt will have access to a regular living wage. With less promise of securing full-time employment with a respectable salary, recent graduates may encounter difficulties in managing and repaying their loans. Whether referring to PSE student debt or private/personal debt, debt is a burden to those in the repayment process.

Moreover, the unstable nature of precarious work has made it difficult for people to experience upwards social mobility in Canada. In other words, for those positioned in a particular class (i.e., working class, working poor), it has become harder to move into a higher earning class because of the precarity of employment and the low wages associated with this type of work. If the jobs that exist are not paying Canadians a sufficient living wage or giving them the promise of security and longevity, those who are employed in these positions will likely face high level of economic marginalization. If students have amassed large loans through enrollment in professional programs, precarious work can worsen their chances of paying off their loans in a timely manner. Moreover, racialized women, who are disproportionately concentrated in precarious, low-wage employment will likely encounter the most hardships. With research indicating that loan repayment difficulties are primarily contingent upon future earnings (Kapsalis, 2006), borrowers may experience more troubles in the repayment process.

Labour market discrimination and segmentation

The Canadian labour market is a driver of inequality as its inherent discriminatory barriers prevent some groups from accessing stable work. It continues to be a site of inequity for women and visible minorities among other groups. Poverty and economic exclusion are directly linked to the structure and organization of the labour market. If specific groups are being streamed into low-wage occupations, or if they are underemployed, they are likely to face economic oppression. As mentioned in the previous section, research has indicated that racialized men and women are concentrated in precarious work. The low wages attached to precarious work have pushed many women and racialized people into poverty and have held them there long term. In 2015, the OECD reported that “Canada is the country with the highest rate of poverty for non-standard workers among OECD countries (35%, compared to an OECD average of 22%)” (2015, p. 35). The

increasingly polarized labour market has become an ideal arena for persistent economic inequality. Additionally, labour market segmentation has streamed visible minorities and women into devalued and deskilled occupations. Research indicates that,

“the labour market is segmented along racial lines, with racialized group members over represented in many low paying occupations, with high levels of precariousness while they are underrepresented in the better paying, more secure jobs. Racialized groups were underrepresented in senior management (8.2%), professionals (13.8%), supervisors (12%), fire-fighters (2.0%), legislators (2.2%), oil and gas drilling (1.5%), farmers and farm managers (1.2%)” (Teelucksingh & Galabuzi, 2005, p.34).

In Ontario, racialized women are the most disadvantaged in the labour market. They continue to hold higher unemployment rates (9.6%) than all other Ontarians and are making approximately 59 cents for every dollar that a white male earns (Block & Galabuzi, 2018). This trend has only slightly improved over time - by just five cents since 2006 (Block & Galabuzi, 2018). In 2016, visible minorities had an unemployment rate of 9.2%, while white Canadians had a rate of 7.3% (Block & Galabuzi, 2018). Apart from women of colour, men of colour hold the highest unemployment rate at 8.8% and earn approximately 78 cents for every dollar earned by a white male (Block & Galabuzi, 2018). Labour market discrimination has undoubtedly marginalized certain groups of people. Since income is an essential component of overall economic welfare, those who experience structural discrimination are at risk of economic exclusion. This becomes especially problematic when considering the ways in which families cope with the increasing costs of PSE. If labour market discrimination is negatively impacting the financial well-being of minorities, their ability to pay for PSE is compromised. To fund their PSE pursuits, students from minority families will have to take on student loans, which can be very costly, especially if enrolled in a professional program.

Income Inequality

Income inequality in Canada serves as a strong indicator of overall economic inequality and poverty. The wide range of existing literature on stratification examines various measures of income inequality and its outcomes on the Canadian population. Since the 2008 recession and financial crisis, income inequality has become an area of concern in many OECD countries. One of the persistent themes is the increasing polarization of income; the unequal division of income between the rich and poor (Beach, 2016; Green et al., 2016; Macdonald, 2018; Osberg, 2019; Temmer, 2017). In Canada, we have witnessed the widening gap of incomes between the top earnings levels and all other earners over the past 20 years or so (Beach, 2016; Green et al., 2016; Klein and Yalnizyan, 2016; Osberg, 2019; Temmer, 2017). The distribution of income has become grossly unequal, with a concentration of income gains in the hands of the richest few while middle-class Canadian incomes have declined; this trend can be described as unbalanced growth (Osberg, 2019). For example, over the past three decades, the OECD estimates that those who comprise Canada's top 1% of income earners have amassed 37% of the total income growth (OECD, 2014). A report from the Canadian Center of Policy Alternatives (2010) reveals that "Canada's richest 1%— the 246,000 privileged few whose average income is \$405,000—took almost a third (32%) of all growth in incomes in the fastest growing decade in this generation, 1997 to 2007" (Yalnizyan, 2010, p.3). Much of the literature on income inequality in Canada paints a similar picture: that the current highest earners are claiming a larger share of economic growth than any previous generation in Canadian history. In fact, incomes today are as concentrated in the hands of the richest 1% as they were in the Roaring Twenties (Yalnizyan, 2010). Over the past 20 years, we have seen a trend where the gains from overall growth are being streamed almost exclusively to the highest-income individuals and households.

In 2020, the Gini coefficient for Canada was 0.310, slightly lower than the average for OECD countries, at 0.315 (OECD, 2020). However, the Nordic countries' Gini coefficient of about 0.270 reveals that income inequality is much lower in comparable countries and reminds us that Canada can be doing much more to minimize economic inequities (OECD, 2020). Between 1976 and 2011, the Gini coefficient for inequality in family market income rose from 0.365 to 0.446, a 22% increase (Green et al., 2016). Canada is a wealthy nation, yet we continue to see the share of the middle-class decline (those earning between \$30,000 and \$60,000 with inflation-adjusted) (Yalnizyan, 2010).

Examining income inequality through the after-tax Low-income Measure (LIM) reveals that poverty in Canada has been unpredictable over the past 20 years and is slowly increasing over time in most cities (Temmer, 2017). Between 1995 and 2015, the Canadian average increased slightly from 12.1% in 1995 to 14.2% in 2015 (Temmer, 2017). These statistics vary based on location as certain cities face elevated levels of poverty, for example, the growth rates of people with a low income increased by 70.8% in Toronto and by 37.8% in Winnipeg (Temmer, 2017). When examining the earnings of full-time Canadian workers between 1970-2015, it becomes apparent that there has been a large shift in the earnings shares of three groups (Beach, 2016). Middle-class earning shares of male workers and full-time female workers declined significantly, while the earning shares of high earners rose considerably with a very strong rise in top earnings levels (Beach, 2016). The drastic changes to the labour market and the increasing use of non-standard forms of employment have led to earnings insecurity for many Canadians (Beach, 2016). These results are consistent with the stratification literature in Canada which highlights the increasing polarization of wealth and the widening gap between top earnings levels and all other earners (through a shift of earnings from middle to higher earners). These figures expose the harsh

reality of the income polarization in Canada. With the decline of earnings for the middle-class and the rise for high earners, more Canadians are living in a state of economic precarity. Additionally, since the mid-1990s, the redistributive effects of taxes and transfers have not been able to successfully address income inequality. The changes made to the tax-and-transfer system have exacerbated, rather than offset, inequality (Green et al., 2016). Significant amounts of income inequality are known to have “negative consequences on everything from life expectancy and health to crime rates and social trust. More equal societies tend to be happier and healthier, and better at providing opportunities for low-income people to move up the income ladder” (Macdonald, 2018, p.7).

Wealth Inequality

Income inequality and wealth inequality are closely connected. Similarly, to income inequality, there is a massive wealth gap in Canada today: however, wealth inequality is much more severe (Macdonald, 2018). Relative wealth or net worth can be understood as “the sum of all individual or family assets (house, car, investments, etc.) minus all debts (mortgage, student loan, etc.)” (Macdonald, 2018, p.4). Wealth measures are used to understand and assess consumption; this refers to the ability to consume basic necessities or other items. Although income inequality exposes barriers in the labour market, wealth provides a snapshot of access to, and the accumulation of resources, over a given time. There are several measures which can be used to determine wealth inequality in Canada. The Market Basket Measure (MBM), Canada’s official poverty rate, reveals that in 2017, the MBM³ was 9.5% for all persons (Statistics Canada, 2020).

³ The MBM is not used to measure poverty on reserves or in the territories because these populations are not covered by the Canadian Income Survey

In comparison to Canada's income measures, the MBM was about 3 percentage points below the LIM rate (12.7%) and 2 percentage points above the LICO rate (7.8%) (Statistics Canada, 2020).

In addition to economic security, wealth provides endless opportunities such as the potential for entrepreneurship, funding for education, access to better neighbourhoods, cultural and social capital, and greater choice (Keister, 2000; Maroto, 2016; Spilerman 2000). Many groups, namely those who face forms of marginalization, do not have the opportunity to accumulate wealth the way others can in Canada. This has been known to negatively impact their well-being (Macdonald, 2018; Maoto, 2016). Those who can accumulate wealth begin a cycle of cumulative advantage where their assets continually increase over time. These assets can then be passed down to future generations preserving overall wealth. Groups who do not have access to wealth accumulation instead incur higher levels of debt, including student debt, and risk falling behind on payments (DiPrete & Eirich, 2006; Keister & Moller, 2000). Furthermore, "those with less education, those persons with disabilities present, and those who immigrated to Canada, have seen net worth disparities increase in comparison to other more advantaged groups, even though group disparities in home ownership, a key component of wealth, have declined over time" (Maroto, 2016, p. 153).

This cycle of wealth concentration is extremely problematic and can have long-term detrimental effects on economic inequality. Research in Canada has revealed an uneven distribution of wealth gains with those in the top quintile receiving most of the recent wealth (Maroto, 2016; Morissette and Zhang, 2006). Between 1984-2005, Canada's top quintile experienced a wealth increase of 84%, while those in the bottom quintile showed no improvement in average wealth (Maroto, 2016; Morissette & Zhang, 2006). In 2012, families in the top 20% received 66% of the gains in wealth (Maroto, 2016; Morissette & Zhang, 2006). Those in the bottom 60% of the distribution saw few increases in wealth during that same year (Macdonald, 2014; Maroto, 2016). According to a recent

study, the wealthiest 87 families in Canada have amassed close to 4,500 times more wealth than the average family (Macdonald, 2018). These 87 families have collectively accumulated the same amount of wealth as the lowest earning 12 million Canadians (Macdonald, 2018). Wealth trends can also be examined through homeownership. Some Canadians are far less likely to be homeowners in their lifetimes; these groups include Indigenous peoples, immigrants, single parents, and those with a disability (Maroto, 2016). This harsh reality reinforces the importance of group membership and the material consequences attached to social location/markers.

Racialization of Poverty

The current context reveals a stratified nation that suffers from high levels of economic inequality. It becomes essential to examine which groups are more likely to suffer from elevated levels of poverty. Poverty in Canada is both coloured and female (Hou et al., 2020). The feminization and racialization of poverty refer to the increasing tendency of women and visible minorities to experience poverty. Visible minorities have higher unemployment rates, lower incomes, and face employment segregation in the labour market (Block et al., 2019; Block & Galabuzi, 2018). Moreover, women of colour have less access to employment, and high wages, than men of colour, and non-racialized men and women (Block et al., 2019; Block & Galabuzi, 2018). Visible minorities are overrepresented in families in the bottom half of the income distribution at 60%, while non-racialized individuals comprise 47% (Block et al., 2019; Block & Galabuzi, 2018).

Visible minorities have suffered from high levels of poverty and are more likely to live in poverty than the White population (Hou et al., 2020). In 2016, while the poverty rate was 9.6%⁴ among the White population, Korean, Arab, and West Asian Canadians had poverty rates between

⁴ MBM

27% to 32%⁵ (Hou et al., 2020). Black and Chinese Canadians also experienced higher levels of poverty with a rate of 20%⁶ (Hou et al., 2020). Racialized new immigrants have a much higher likelihood of economic exclusion than long-term immigrants and those who are Canadian born (Hou et al., 2020). Disparities in the poverty rate between visible minorities and the White population remain large even after social markers (employment, education, immigration status, etc.) are considered (Hou et al., 2020). Previous research also indicates that immigrants and visible minorities have less wealth and are less likely to be homeowners than the White population (Hou et al., 2020; Maroto, 2016; Morissette et al., 2002). In addition, BIPOC peoples tend to obtain lower levels of education and earn lower wages than other groups (Gionet, 2009; Hou et al., 2020; Maroto, 2016). They are also incarcerated at disproportionate rates and have much worse health outcomes (Bauer et al., 2011; Gionet, 2009; Hou et al., 2020; Maroto, 2016). In 2015, the LIM for visible minorities was 20.8%, compared to 12.2% for non-racialized Canadians (Block & Galabuzi, 2018). All visible minorities, with the exception of those who identify as Filipino, had above-average poverty rates. Arabs, West Asians and Koreans had poverty rates almost three times higher than the majority group (Block & Galabuzi, 2018). The racialization of poverty is an enduring feature of the Canadian narrative. If PSE is an equalizer, BIPOC peoples should have the opportunity to lift themselves out of the vicious cycle of poverty through PSE attainment. However, if BIPOC students are being priced out of professional programs due to their high cost, or if they are taking on student loans to finance these programs, their existing social location may hinder their long-term financial success.

⁵ MBM

⁶ MBM

Feminization of poverty

Statistics on poverty indicate that women form the majority of the poor in Canada with more than 2.4 million living on a low income (Statistics Canada, 2016). There are many reasons why women continue to suffer from poverty. Countless structural inequalities exist which put women at a disadvantage when it comes to earning power and economic stability: the gender wage gap, lack of affordable housing, lack of subsidized or affordable childcare, unpaid domestic work, the motherhood penalty, the glass ceiling, occupational segregation, and pink-collar work, etc. These are just a few of the barriers women face that have led to their current conditions of economic marginalization and poverty. Some women experience more severe economic inequality than others, including Indigenous women, visible minority women, women with disabilities, immigrant women, single mothers, and senior women (Sharma, 2012). The gender wage gap has devalued the work women contribute to the labour market, earning them only 67 cents for every dollar non-racialized men earn (Block & Galabuzi, 2018). Women also form the majority of Canada's minimum-wage workers (Sharma, 2012). This has one-third of employed women making less than \$15 an hour (Sharma, 2012). Additionally, women are more likely to be working part-time (Sharma, 2012). Because women spend a large amount of time performing unpaid domestic labour and raising children, many must take on part-time employment. Having to juggle both home and work life forces women to sacrifice their career progression and long-term economic security. Although most of the women suffering from poverty in Canada are employed, precarious and part-time work does not provide the compensation needed to lift them out of poverty. The feminization and racialization of poverty poses a significant threat to economic equality. The damaging nature of these trends continue to harm visible minorities, and women and their children. Therefore, the higher cost of tuition and the potential accumulation of PSE debt puts

women, specifically racialized women, in a vulnerable position. Not only will it take women longer to pay off loans if they are earning less money than their male counterparts, but their chances of occupying powerful and higher-income positions are questionable.

Lifetime Income and Educational Attainment

The financial benefits of PSE have been long documented in Canada. The dominant narrative is that PSE will lead to more affluent and stable employment opportunities. Studies have shown that PSE attainment, both college certificates and bachelor's degrees, will yield more beneficial labour market outcomes and higher incomes in comparison to those with high school diplomas (Boudarbat et al., 2010; Frenette, 2014; Walters, 2015). In a recent study, the earnings premium associated with a bachelor's degree was approximately \$728,000 for men and \$442,000 for women over a 20-year period range (Frenette, 2014). Conversely, the premium for a college certificate was much lower over the same timeframe, approximately \$248,000 for men and \$180,000 for women (Frenette, 2014). Bachelor's degrees and college certificates can also lead to more years of coverage in employer-sponsored pension plans and fewer layoffs than high school diplomas (Frenette, 2014).

Moreover, some university degrees can lead to higher incomes than others. Literature on the earnings of graduates by field of study, generally conclude that graduates of professional programs, such as engineering, have higher earnings than those of liberal arts fields (Finnie, 2001; Finnie & Frenette, 2003; Frank, Frenette & Morissette, 2015; Frank & Walters, 2012; Ostrovsky & Frenette, 2014; Walters, 2004). The most valuable bachelor's degree is in management sciences and quantitative methods, with wages of \$130,547, or \$43,004 more than the average bachelor's degree graduate (Frenette & Frank, 2016). Other high-earning bachelor's degrees include chemical engineering (\$120,148), geological and earth sciences/geosciences (\$119,397), and

finance and financial management services (\$116, 473). Of the 13 programs with above-average earnings, first-degree professional programs accounted for the most (6 in engineering and 4 in business) (Frennette & Frank, 2016). The least valuable degree, vis-à-vis labour market earnings, are those from French literature (\$50,328), human development, family studies and related services (\$50,607), general human services (\$50,624), and special education and teaching (\$50,927), theological and ministerial studies (\$51,791), music (\$55,942), social work (\$56,407), and linguistics, comparative and related language studies and services (\$58,301) (Frennette & Frank, 2016). The lowest earning bachelor's degrees are all regulated programs. Regardless of degree, PSE attainment does have the potential to provide financial benefits to graduates. This pursuit is considered to be an investment in the long-term financial success and stability of students.

Conclusion

This chapter helps explore the current political economy context and conditions dominating contemporary Canadian society. It also provided the theoretical foundation for the dissertation. Through political economy, we probed the relationship between PSE, the reproduction of social class structures, and the accumulation of human capital. This framework captures the diverse perspectives by recognizing that PSE is not only valued for its production of a staple good, but also as a human capital investment, and as a mechanism for producing and reproducing social class structures. An in-depth exploration of the process of neoliberalization helps explain the current 21st-century economy, the rise of precarious work, and the widespread conditions of structural inequities. Given the dire state of the economy, investments in PSE, especially costly professional programs, may not provide students with the financial stability they require to repay loans or accumulate long-term financial health. The next chapter will focus on the PSE landscape and policies in Ontario.

Chapter 3: PSE Policy Landscape

This chapter provides an overview of PSE policies and structures. A detailed account of federal and provincial (Ontario) PSE funding mechanisms and policy changes over time will be disclosed and discussed. Examining the political economy of PSE funding helps us to understand the adoption of tuition deregulation and differentiation. The chapter contextualizes the changes to PSE by linking them to the broader political climate. Additionally, it illuminates the nuanced forms of neoliberalism that co-exist in diverse contexts in varying in degrees. Starting with a brief section on the history of PSE in Canada, we will trace its evolution from the Second World War to its current form paying close attention to the ideological changes that have had profound impacts. The chapter will end with a thorough account of the neoliberalization of PSE, identifying key features of this transformation (i.e., accountability, commodification, etc.) and the ways in which it connects to tuition differentiation.

Overview of University Education in Canada

The expansion of PSE in Canada can be traced back to the Second World War. Prior to WWII, PSE was an area dominated by elites, reinforcing the bourgeois culture traditionally associated with this endeavour. However, the expansion of PSE and its eventual extension to the wider population is historically rooted in the return of veterans to Canada (Veterans Affairs Canada, 2004). Veterans returning home from Europe in 1945 were searching for a better life; through the Veterans Charter, Canada was offering free PSE tuition (Veterans Affairs Canada, 2004). As a result, enrollment rates drastically increased in universities due to veteran participation, especially for female veterans. The mass enrollment of veterans in PSE led to the creation of new institutions such as Memorial University in Newfoundland and Labrador, and

Carleton University in Ottawa, to accommodate the growing demand (Harden, 2017). Through policy, the federal government implemented affordable tuition fees and grants to offset living costs which encouraged people from low- and middle-income families to pursue PSE. For the first time, PSE was no longer an exclusive space occupied by the elite. PSE in Canada would go on to transform into the complex system in place today. In 2019-20, there were approximately 1.34 million students enrolled in universities across Canada, with almost 481,000 in Ontario (Usher, 2020).

PSE Fiscal Policy in Canada

Examining PSE policy in a pan-Canadian context is challenging because of the large variances in tuition fee frameworks, student aid policies, and transfers across provinces. However, the first major changes to the PSE policy at the federal level began in the 1960s through policies aimed at expenditure reform. The Federal Provincial Fiscal Arrangements Act of 1967 created a 50-50 shared funding arrangement for PSE; students had funding support from both the federal and provincial governments during this time (CFS, 1997; Lightman & Connell, 2001). In 1977, a new policy was implemented, the Established Programs Financing Act (EPF), which transferred a lump sum of federal funds to the provinces designated for several different social welfare programs: PSE, medicare, and training (Lightman & Connell, 2001). This was an important turning point for the way PSE was financed and managed; through the EPF, the federal government no longer played a role in the direct transfer of funds for PSE. The provincial government of the day was given the autonomy to dictate the amount allocated to PSE. Although the funds had to be spent on these specific areas, there were no restrictions or requirements in the allocation (Lightman & Connell, 2001). Therefore, under the EPF, PSE was in direct competition for funds with other essential services. Until this period, PSE was rapidly expanding with students having access to

various forms of supports - grants, loans and low tuition fees. The average Canadian tuition fees in 1951 were \$230; approximately \$2,240 in 2016 dollars (CFS, 2013). Operating revenue for PSE institutions were mostly accounted for by government funding. In 1978, 83.2% of operating revenue was covered by government funding, while students were responsible for roughly 15% (MacDonald & Shaker, 2013).

The 1980s marked the decade of austerity cuts and an ideological shift towards neoliberalism (Cleaver, 2000; Fanelli & Hurl, 2011; McBride & Shields, 1997; McQuaig, 1993). Cuts to public services and the era of individual responsibility commenced (Pawlick, 2012). In 1986, the Mulroney government severely slashed the cash transfers made to provinces. These drastic cuts directly impacted the available funding for PSE as federal government transfers to the provinces had been a major source of revenue for provinces at the time (Pawlick, 2012). This was the first step towards divesting federal funds from PSE in Canada. Further cuts to transfer payments to provinces were made in 1989, which again impacted the funding available for PSE.

In 1996, this was taken a step further with the creation of the Canada Health and Social Transfer (CHST) which combined EPF funds with the Canada Assistance Plan (CAP) (CFS, 1997; Lightman & Connell, 2001). Broadly, they bundled the funding for the CAP, which covered financial assistance programs, homes for special care, some healthcare costs, child welfare, employment training and programs, with the EPE. To make matters worse, the CHST also decreased overall funding from the federal government to the provinces and territories from \$18.2 billion in 1995-1996 to \$12.5 billion in 1997-1998 – a \$7 billion cut from the total amount (CFS, 1997; Lightman & Connell, 2001). Once again, PSE was pitted against other essential services, such as healthcare, in the fight for funding. In 2004, the federal government made further changes as the CHST was replaced by the Canada Social Transfer (CST). This separated PSE from health-

related funding in order to increase transparency and accountability from the provinces. The CST currently supports federal transfers for PSE, social assistance, and social services such as childcare, and early learning/childhood development. In order to address the major austerity cuts to PSE, many provinces, including Ontario, transferred the cost of these cuts onto students through increased tuition fees. Federal funding for PSE has fallen from 0.5% of GDP in 1980 to 0.2% in 2014 (CFS, 2015; CAUT, 2014). Neoliberalism takes particular forms at various levels of government. As seen through this account of policy changes at the federal level, a crisis of a budgetary deficit is often cited as the culprit for cuts to PSE and other social welfare programs. Although the deficit is likely the result of irresponsible fiscal distribution by the federal government (i.e., higher tax breaks for the wealthy and corporations), it is commonly used to justify declining government support for PSE. Thus, commodification occurs which exploits students and their families by having to pay higher tuition fees.

Federal Expenditures on PSE

Although PSE is a provincial responsibility, transfers from the federal government – which are later allocated through operating grants from the provinces – remain the largest single source of funding in the PSE sector (Pakravan, 2006). PSE is funded in Canada through a joint venture between the federal and provincial governments (Pakravan, 2006). The most interesting feature, or perhaps alarming, feature is that there are no direct mechanisms that provide PSE institutions with funding from the federal government. The federal government provides the bulk funding to the provinces through various mechanisms; however, most of the power remains with the provincial government of the day. There are broadly four indirect mechanisms adopted by the Government of Canada for transferring money to PSE institutions:

1. Funds included in the Canada Social Transfer (CST) that are allotted to PSE

2. Research funding through granting councils; the Tri-Council agencies: the Canadian Institutes for Health Research (CIHR), the Natural Science and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC), and the Canada Foundation for Innovation (CFI)
3. Scientific agencies and government departments (e.g., Health Canada)
4. Special investments in capital spent on PSE institutions (i.e., the Knowledge Infrastructure Program of 2009-10 and the Strategic Infrastructure Fund of 2016-17)

The Canadian Social Transfer (CST)

Enacted in 2004, the CST is the federal government's block transfer which provides funding for select social welfare programs. These essential programs include PSE, social assistance, and social services, including early childhood development and early learning and childcare. Formerly known as the Canada Health and Social Transfer (CHST), it was made independent in 2004 and no longer competes for funding with health-related programs (Pakravan, 2006). However, this block transfer forces PSE, social assistance, and social services to be in direct competition with one another for funding each year. There are no mandatory requirements in terms of the ways in which funds are distributed, leaving PSE in a permanent state of precarity and at the mercy of the ruling provincial government in power. In 2007, the federal government provided an additional \$800 million to the CST specifically designated for PSE. Although this increase in funding was welcomed by the PSE sector, it remains difficult to trace the added funds through the specific actions by the provinces (Usher, 2020). The funding may notionally be 'reserved' for PSE, however, there is no way to verify whether the funds are spent on PSE by the provincial government. As of 2021, this transfer is an essential part of the overall federal expenditure on PSE; over 50% of federal funds for PSE are through the CST.

Research Funding through Granting Councils

Another mechanism for transferring funds to PSE institutions is through research funding. The four granting councils, the Tri-Council agencies: the Canadian Institutes for Health Research

(CIHR), the Natural Science and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC), and the Canada Foundation for Innovation (CFI), provide approximately \$2.5 billion in funding to PSE institutions every year (Pakravan, 2006; Usher, 2020). An estimated 99% of this funding goes to Canadian universities, rather than colleges. Since the nature of this funding is competitive, some institutions tend to monopolize the funding. Researchers who receive grants are likely to be employed at the wealthiest and most prestigious institutions in Canada. The top three institutions in Canada – The University of Toronto, The University of British Columbia, and McGill University – receive almost 25% of all council funding (Usher, 2020).

Scientific Agencies and Government Departments

Other federal funding for PSE is channelled through departmental budgets and allocations (Pakravan, 2006). For example, Health Canada supports universities with funds of up to \$25 million per year for a variety of services and programs (Usher, 2020). The Canada Research Chairs program is another large source of funding for universities, approximately \$275 million per year (Usher, 2020). Additionally, scientific agencies such as Brain Canada and Genome Canada provide yearly funds to universities.

Special Investments in Capital Spent on PSE Institutions

Occasionally, regional development agencies will provide funds to PSE institutions, but primarily for infrastructure-related projects. During periods of economic downturn, the Government of Canada will invest in the infrastructure of PSE institutions (Usher, 2020). This is done through one-time programs such as KIP (2009) and SIF (2016) (Usher, 2020). Although these investments in PSE infrastructure are meant to stimulate the construction industry, their impacts have allowed campuses to become larger and more modern.

PSE Policy in Ontario

PSE in Ontario has undergone a massive transformation since the 1990s. It has shifted from a once publicly funded and managed system to a more privatized, neoliberalized sector. As previously discussed, the post-war era supported students through grants and low tuition fees. This was achieved through a funding formula in the 1960s which implicitly controlled and regulated tuition fees at PSE institutions across Ontario (Rexe, 2015). In this framework, the provincial government set an annual cap on tuition fee increases (i.e., 5% annual cap) in which PSE institutions did not exceed. Although legally Ontario universities have the authority to set tuition fees at their desired price, government-imposed tuition caps function as disincentives to do so. Any institution found guilty of exceeding the annual tuition cap was charged an equal reduction in their operating grant (Smith et al., 1996; Rexe, 2015). This formula shielded students from high tuition fees through government regulation and simultaneously standardized tuition fees across Ontario irrespective of the institution or program (Boggs, 2009; Rexe, 2015). This framework would eventually be eroded by the neoliberal reconstruction of PSE in Ontario. With the federal government introducing austerity measures through cuts to cash transfers to provinces, PSE institutions were struggling to cope with the paradox of government divestment and increasing enrollment. As a result, PSE institutions began advocating for the ability to raise their tuition fees. The Progressive Conservative government of 1995 launched a series of attacks on PSE, including significant cuts to student grants and the subsequent deregulation of tuition fees for certain programs and international students. Pressure from PSE institutions to set their own tuition fees led to the creation of an Advisory Panel in 1996, the goal being to build a framework that would

redistribute the sharing of costs of PSE among students, the private sector, and government (Boggs, 2009).

In its report, the panel recommended a much greater role for universities and colleges to set their own tuition fees (Boggs, 2009). A memo from the Ministry of Training, Colleges and Universities (MTCU) in 1998 to universities and colleges introduced “a new paradigm for tuition policy in Ontario” (Boggs, 2009, p.75; MTCU, 1998). For the first time, tuition fees became deregulated for some undergraduate, graduate, select professional university programs, high demand, and post-diploma programs (MTCU, 1998). Individual institutions had obtained the power to set their own tuition fees outside of the government-imposed caps (MTCU, 1998). The programs that qualified for this new deregulated framework were referred to as Additional Cost Recovery (ACR) programs (MTCU, 1998). This will be further discussed in the section, ‘University Program Cost Recoveries’. In light of these policy changes, many first- and second-degree ACR programs (reclassified as professional programs in 2006) saw a significant increase in their tuition fees from 1998-2002 (Pardy, 2004).

In 2003, the newly elected provincial government implemented a tuition freeze for both regulated and ACR programs at the 2003–04 levels (Boggs, 2009). While the freeze took effect, the government was putting together a review of PSE in Ontario which was commissioned by Bob Rae. PSE institutions were unable to raise their tuition fees in any MTCU-funded program between 2004-2006 (Boggs, 2009). The looming threat of a reduction in their operating grants ensured that the institutions would follow these directions. However, to offset the losses of a tuition freeze, the provincial government provided approximately \$48 million in 2004-05 and \$115 million in 2005-06 in funding to PSE institutions (Mattis, 2009). Following the release of the Rae Report, it was recommended that an accessible, affordable, and quality system be created (Rae, 2005). This

proposed system would not require the 1998 tuition fee increases to be reversed, but rather “an effective student assistance program that promotes increased access to university education” (Rae, 2005, p.1). The commission suggested that the solution to PSE funding issues was to provide students and parents with more opportunities to take on larger loans to afford their higher education pursuits. In 2006, a new tuition framework was announced that re-regulated all ACR programs while allowing some degree of tuition flexibility (MTCU, 2006). Greater detail on this new tuition fee framework can be found in the section ‘University Program Cost Recoveries’. The *Reaching Higher: PSE Plan for Ontario* (2005) included a Student Access Guarantee (SAG) which asserted that every qualified student in Ontario, regardless of their socio-economic status, should have the opportunity to access PSE. Each institution was to provide funding through the SAG to students who did not qualify for enough funding through OSAP to attend university or college. SAG would be funded through increased tuition fee revenue; institutions were forced to set aside money to cover the cost of this program (Boggs, 2009; Mattis, 2009). Tuition fees were permitted to rise by 4.5% for regulated programs and 8% for deregulated programs. Essentially, students from middle and higher-income households would be subsidizing PSE for lower-income students. To qualify for SAG, students must be OSAP recipients, which requires both Ontario residency and credit checks (Mattis, 2009). This framework was in effect until 2010, when the Liberal government launched the ‘30% Off Tuition Grant’ (MacDonald & Shaker, 2012). This grant was eligible for students with parents who had a combined income of less than \$160,000. Students who qualified for this grant could not be out of high school for more than four years (MacDonald & Shaker, 2012).

In 2016, the liberal government introduced a new policy, which was referred to as ‘free tuition’ (Office of the Premier, 2016). This included an OSAP grant for students with parental

incomes of less than \$50,000 a year that would cover the annual average cost of tuition – the cost of an undergraduate Arts and Science program (Office of the Premier, 2016). A partial grant was also introduced, which was available to students whose families make up to \$150,000 a year (Office of the Premier, 2016). Important to note is that there were no additional funds invested in the student grant system at this time; rather, existing funds were redistributed to target lower-income students.

After 15 years of Liberal rule in Ontario, the Progressive Conservatives were elected in 2018. At the top of the PC agenda was a reduction in provincial expenditures. After scrapping the ‘free tuition’ grants for lower-income students, a 10% cut in regulated tuition fees across the province was announced. Additionally, the PC government made a \$600 million cut to the grants associated with OSAP and modified the needs assessment formula (MTCU, 2019a). On April 11, 2019, the PC government announced major changes to the ways in which Ontario’s PSE system would be funded. By the 2024–25 academic year, 60% of funding given to PSE institutions, including operation grants, would be performance-based (MTCU, 2019a). Performance Based Funding (PBF) differs from traditional funding formulas; rather than relying on input measures, such as student enrollments or instructional costs, funding is contingent on institutional outcomes. Therefore, 60% of provincial funding will be determined by an institution's performance outcomes such as graduation rates, student retention, transfers, and employment upon graduation etc. (MTCU, 2019a). This can be seen as an accountability-driven funding formula with funding overwhelmingly tied to effectiveness via measured outcomes.

Increasing Commodification of Education: Rising Tuition Rates

Over the past decade, PSE tuition fees have increased to become the single largest expense for university students in Canada. As discussed above, cuts to public funding for PSE by the federal

government and, to a somewhat lesser extent, provincial governments are responsible for the PSE tuition fee increases during this period. Tuition fees continue to function as one of the largest barriers that students face when attempting to access PSE in Canada. The current loans system in place has successfully shifted a larger proportion of the cost of PSE from the government to the students themselves (Shanahan & Jones, 2007). While tuition fees continue to increase, there has been a simultaneous decline in post-graduate earnings for years (Shanahan & Jones, 2007). As a result, these trends have perpetuated social inequalities, hindered the creativity and mobility of Ontario's youth, and compromised the ability of recent graduates to fully participate in the economy (Shanahan & Jones, 2007). In Ontario, PSE tuition fees have seen steady increases since the 1990s and do not show any signs of slowing down (as seen in Tables 1 & 3, also see Shaker & Macdonald, 2013). In Canada, the average undergraduate tuition fees have increased from \$1,464 in 1990-91 (MacDonald & Shaker, 2013), to \$5,767 in 2013-14 and rose to \$6,693 in 2021-2022 (see Tables 3 & 4).

Currently the one of the most expensive provinces to pursue PSE, Ontario had average regulated tuition fees of approximately \$7,024 in the 2018-2019 academic year (see Table 6). Moreover, first-degree professional program tuition fees were on average \$10,242 in the 2018-2019 academic year, with some programs costing upwards of \$11,000 (see Tables 1 & 6). When comparing regulated to professional programs tuition increases over time, the difference can be quite significant. For example, tuition fees for Humanities, a regulated program, have increased approximately 2.5%⁷ per year since 2006; an almost 37% rise between 2006-2022 (see Table 1). Engineering, a professional program, has seen a larger increase in tuition fees since 2006, approximately 4.5%⁸ per year or a 68% increase between 2006-2022 (see Table 1). Professional

⁷ Not accounting for inflation, which has risen close to an average of 2% per year since 1992-2020

⁸ Not accounting for inflation, which has risen close to an average of 2% per year since 1992-2020

program tuition fees are rising faster than those of regulated programs. Since 2006, regulated programs have increased approximately 3.8%⁹ per year; an almost 45.8% rise between 2006-2019 (see Table 6). Professional programs have seen a larger increase in tuition fees since 2006, approximately 5.2%¹⁰ per year or a 61.8% increase between 2006-2019 (see Table 6). Should professional program fees continue to rise long term, it may pose an issue for economically disadvantaged students.

Rising PSE tuition fees, alongside increases to student loan maximums, will further download the cost of PSE from the public/governments onto individual students, embedding the dangerous trend of the privatization of Ontario's PSE system. Tuition fees in the province of Ontario have increased annually from 2006 until 2019¹¹ (Tables 1 & 3). These increases are partially a result of the shift in ideologies from Keynesianism to neoliberalism (Davidson-Harden & Majhanovich, 2004). PSE, under Keynesian ideologies, was believed to be a public investment and social responsibility (Davidson-Harden & Majhanovich, 2004). With the rise in neoliberal policies and practices, this investment is now considered a private venture which individuals must fund on their own (Davidson-Harden & Majhanovich, 2004). The shift in ideologies from education as a public good has led to the increasing commodification of PSE in Canada and is consistent with the Human Capital approach to the education of an individual (see, Becker and Chiswick, 1966, for example).

⁹ Not accounting for inflation, which has risen close to an average of 2% per year since 1992-2020

¹⁰ Not accounting for inflation, which has risen close to an average of 2% per year since 1992-2020

¹¹ With the COVID-19 pandemic taking place in early 2020, a tuition freeze was implemented for the 2020-22 academic years (MTCU, 2019b; MTCU, 2022).

Table 1*Average Undergraduate Tuition Fees in Ontario by Field of Study between 2006-2022*

Geography	Ontario															
Field of study	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
	Current dollars															
Education	4,550	4,936	5,130	5,273	5,533	5,655	6,096	6,278	6,481	6,658	6,695	6,826	7,006	6,311	6,265	6,265
Visual and performing arts, and communications technologies	4,674	4,896	5,180	5,401	5,689	5,594	6,032	6,216	6,276	6,529	6,771	6,997	7,234	6,522	6,493	6,496
Humanities	4,431	4,616	4,775	4,986	5,209	5,448	5,688	5,865	6,048	6,234	6,422	6,603	6,754	6,085	6,083	6,083
Social and behavioural sciences, and legal studies	4,434	4,585	4,779	4,976	5,199	5,431	5,675	5,852	6,031	6,211	6,463	6,636	6,804	6,135	6,145	6,145
Business, management and public administration	5,264	6,083	6,419	6,911	7,317	8,448	8,469	8,780	8,994	9,218	9,577	10,131	10,552	9,413	9,405	9,406
Physical and life sciences and technologies	4,421	4,893	5,089	5,323	5,572	5,907	6,052	6,246	6,596	6,846	7,094	7,361	7,565	6,837	6,835	6,835

Mathematics, computer and information sciences	5,340	5,481	5,891	6,235	6,601	7,186	7,284	7,613	7,971	8,230	8,512	8,842	9,040	8,041	7,977	7,979
Engineering	6,768	6,983	7,326	7,766	8,335	9,197	9,376	9,975	10,399	11,003	11,583	11,907	12,539	11,301	11,336	11,338
Architecture	5,098	5,388	5,810	6,269	6,761	7,170	7,140	7,255	7,706	8,061	8,322	8,485	8,838	7,997	7,998	8,000
Agriculture, natural resources and conservation	4,386	4,542	4,969	5,284	5,385	5,645	5,778	5,971	6,146	6,323	6,438	6,648	6,830	6,162	6,157	6,161
Nursing	..	4,625	4,803	5,011	5,235	5,498	5,678	5,982	6,209	6,401	6,573	6,776	6,972	6,269	6,273	6,271

Note. Statistics Canada. Table 37-10-0003-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents and discusses tuition fees.

Table 2*Average Canadian Undergraduate Tuition Fees by Field of Study between 2006-2022*

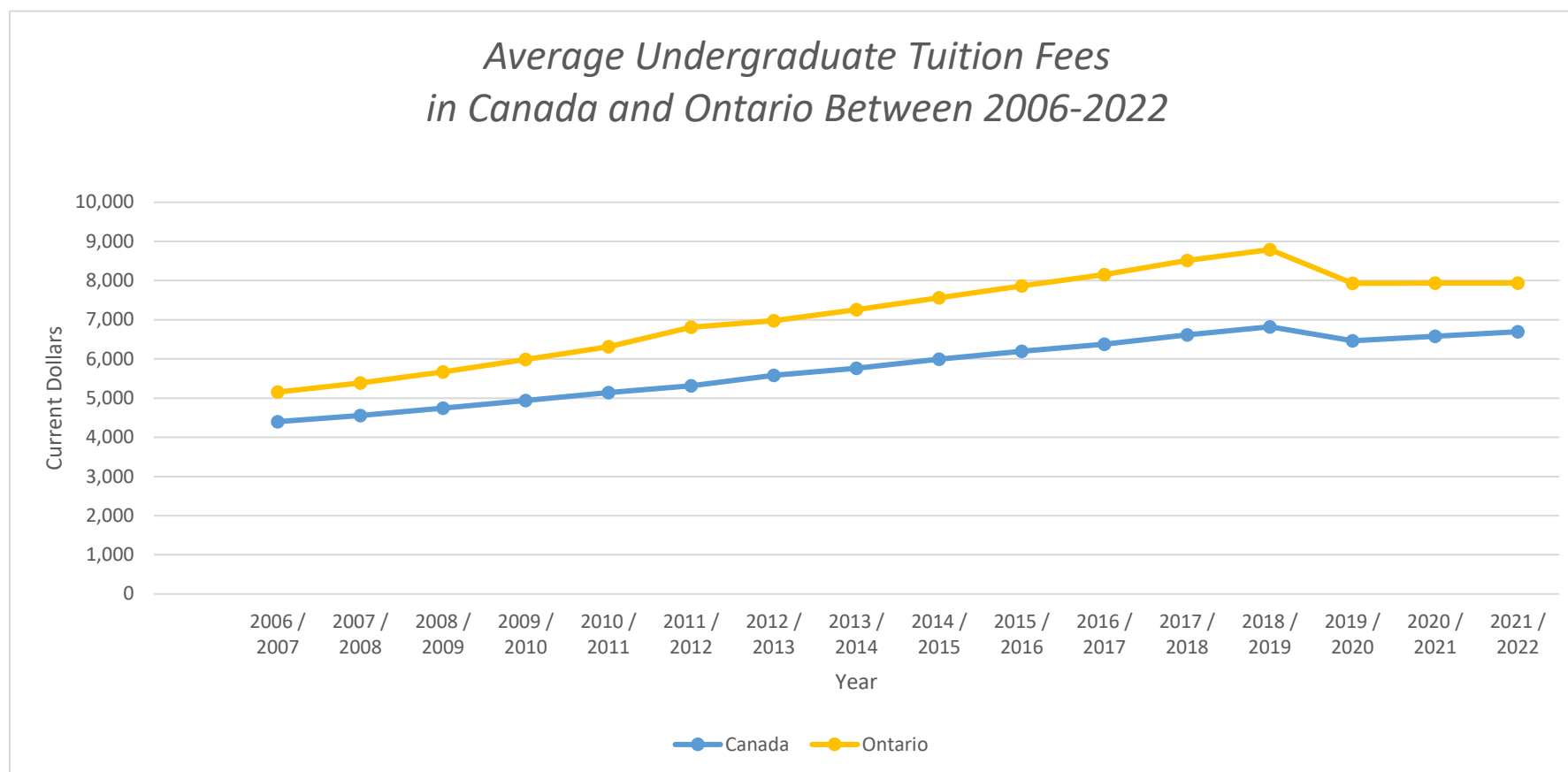
Geography	Canada															
Field of study	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
	Current dollars															
Education	3,373	3,545	3,652	3,739	3,850	3,804	4,273	4,394	4,482	4,514	4,571	4,423	4,732	4,648	4,801	4,947
Visual and performing arts, and communications technologies	3,991	4,239	4,377	4,592	4,748	4,591	5,002	5,138	5,211	5,464	5,680	5,857	6,131	5,789	5,843	5,926
Humanities	4,336	4,342	4,364	4,525	4,638	4,769	4,941	5,023	5,230	5,346	5,460	5,619	5,773	5,486	5,635	5,754
Social and behavioural sciences, and legal studies	4,041	4,165	4,251	4,431	4,586	4,656	4,966	5,116	5,294	5,424	5,573	5,739	5,902	5,555	5,639	5,725
Business, management and public administration	4,195	4,637	4,978	5,191	5,386	5,673	6,097	6,274	6,366	6,542	6,810	7,143	7,222	6,795	6,864	6,991

Physical and life sciences and technologies	4,270	4,534	4,679	4,885	5,049	5,247	5,335	5,481	5,701	5,884	6,022	6,206	6,397	6,068	6,149	6,246
Mathematics, computer and information sciences	4,650	4,746	4,987	5,299	5,526	5,781	6,051	6,245	6,565	6,753	6,911	7,157	7,320	6,814	6,861	6,953
Engineering	4,943	5,099	5,319	5,577	5,992	6,155	6,560	6,871	7,153	7,511	7,827	8,106	8,532	7,949	8,067	8,184
Architecture	3,839	3,999	4,503	4,826	5,179	4,788	5,340	5,495	5,985	6,346	6,810	6,610	6,967	6,470	6,462	6,519
Agriculture, natural resources and conservation	3,869	4,064	4,366	4,697	4,803	4,961	5,119	5,251	5,371	5,487	5,438	5,665	5,831	5,614	5,693	5,820
Nursing	..	4,267	4,422	4,558	4,662	4,731	4,985	5,140	5,308	5,401	5,507	5,636	5,763	5,583	5,685	5,822

Note. Statistics Canada. Table 37-10-0003-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents and discusses tuition fees.

Table 3

Average Undergraduate Tuition Fee Comparison between Canada and Ontario from 2006-2022



Note. Statistics Canada. Table 37-10-0003-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents and discusses tuition fees.

Table 4*Average Undergraduate Tuition Fees by Provinces and Territories between 2006-2022*

Geography	Canada															
Field of study	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
	Current dollars															
Education	3,373	3,545	3,652	3,739	3,850	3,804	4,273	4,394	4,482	4,514	4,571	4,423	4,732	4,648	4,801	4,947
Visual and performing arts, and communications technologies	3,991	4,239	4,377	4,592	4,748	4,591	5,002	5,138	5,211	5,464	5,680	5,857	6,131	5,789	5,843	5,926
Humanities	4,336	4,342	4,364	4,525	4,638	4,769	4,941	5,023	5,230	5,346	5,460	5,619	5,773	5,486	5,635	5,754
Social and behavioural sciences, and legal studies	4,041	4,165	4,251	4,431	4,586	4,656	4,966	5,116	5,294	5,424	5,573	5,739	5,902	5,555	5,639	5,725
Business, management and public administration	4,195	4,637	4,978	5,191	5,386	5,673	6,097	6,274	6,366	6,542	6,810	7,143	7,222	6,795	6,864	6,991
Physical and life sciences and technologies	4,270	4,534	4,679	4,885	5,049	5,247	5,335	5,481	5,701	5,884	6,022	6,206	6,397	6,068	6,149	6,246

Mathematics, computer and information sciences	4,650	4,746	4,987	5,299	5,526	5,781	6,051	6,245	6,565	6,753	6,911	7,157	7,320	6,814	6,861	6,953
Engineering	4,943	5,099	5,319	5,577	5,992	6,155	6,560	6,871	7,153	7,511	7,827	8,106	8,532	7,949	8,067	8,184
Architecture	3,839	3,999	4,503	4,826	5,179	4,788	5,340	5,495	5,985	6,346	6,810	6,610	6,967	6,470	6,462	6,519
Agriculture, natural resources and conservation	3,869	4,064	4,366	4,697	4,803	4,961	5,119	5,251	5,371	5,487	5,438	5,665	5,831	5,614	5,693	5,820
Nursing	..	4,267	4,422	4,558	4,662	4,731	4,985	5,140	5,308	5,401	5,507	5,636	5,763	5,583	5,685	5,822

Note. Statistics Canada. Table 37-10-0045-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents and discusses tuition fees.

Table 5

Average Undergraduate Tuition Fees by Provinces and Territories, and Field of Study in 2014-2015 (NGS reference year)

Geography	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Field of study	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015	2014/2015
Current dollars										
Education	2,550	5,520	5,821	5,958	2,410	6,481	3,352	5,795	5,286	4,891
Visual and performing arts, and communications technologies	2,550	5,520	5,734	6,692	2,945	6,276	3,626	5,909	4,980	4,403
Humanities	2,550	5,520	5,778	6,179	3,478	6,048	3,360	5,647	5,076	4,695
Social and behavioural sciences, and legal studies	2,550	5,520	5,893	6,135	2,836	6,031	3,360	5,607	5,165	4,952
Business, management and public administration	2,550	5,520	5,963	6,294	2,641	8,994	3,904	6,497	6,111	4,700
Physical and life sciences and technologies	2,550	5,520	6,457	6,649	2,975	6,596	3,736	5,847	5,320	4,880

Mathematics, computer and information sciences	2,550	5,520	6,438	6,255	2,646	7,971	3,724	5,933	5,259	4,894
Engineering	2,550	..	6,649	6,472	2,638	10,399	5,319	6,384	5,920	5,140
Architecture	..	..	6,501	..	2,683	7,706	4,048	..	..	4,890
Agriculture, natural resources and conservation	..	..	5,562	6,463	2,950	6,146	3,933	5,658	5,273	4,975
Nursing	2,550	5,520	6,307	5,980	2,424	6,209	4,076	6,211	5,725	4,379

Note. Statistics Canada. Table 37-10-0003-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents & discusses tuition fees.

Although most provinces in Canada have experienced similar PSE tuition hikes to Ontario, not all have followed this trend (see Table 3 and Table 5). In 2012, the Liberal government in Quebec planned to increase PSE tuition fees by 75 percent (CFS, 2013). Thousands of Quebec citizens responded by taking to the streets, as clashes between protesters and police lasted throughout the summer (CFS, 2013). Following large public protests, the planned 75 percent increase was eliminated, and tuitions fees in Quebec are now indexed to the cost of living. Historically, PSE tuition fees in Quebec have been lower than in other provinces in Canada (Fisher et al., 2009). In the NGS reference year, 2014/2015, it had some of the lowest fees in the country, see Table 4. This can partially be explained by their different schooling system, which requires Quebec students to attend Collège d'Enseignement Général et Professionnel (CEGEP) for two years if they plan on enrolling in a Canadian university (Fisher et al., 2009). The provincial government of Quebec tends to invest more of its resources into education than other provinces, due to strong public ideologies surrounding education as a right and public good (Fisher et al., 2009).

Table 6

Average Undergraduate Professional and Regulated Program Tuition Fees in Current Dollars in Ontario between 2006-2019

Year	Regulated Programs	Professional Programs
2006 / 2007	4,483	5,618
2007 / 2008	4,728	5,984
2008 / 2009	4,961	6,362
2009 / 2010	5,179	6,795

2010 / 2011	5,403	7,254
2011 / 2012	5,597	8,000
2012 / 2013	5,857	8,067
2013 / 2014	6,059	8,406
2014 / 2015	6,255	8,768
2015 / 2016	6,457	9,128
2016 / 2017	6,637	9,499
2017 / 2018	6,835	9,841
2018 / 2019	7,024	10,242

Note. Statistics Canada. Table 37-10-0003-01. Tuition fees are in current dollars, consistent with way Statistics Canada represents & discusses tuition fees.

Disparities in PSE tuition fees between provinces will continue to exist if Canada does not adopt a national framework for PSE (for example, students in Ontario pay over 2.5 times as much as students in Newfoundland and Labrador, see Table 4). The Canadian Federation of Student¹² (CFS, 2014) believes that the “lack of leadership at the federal level on PSE is undermining access and causing huge disparities in up-front costs between provinces. Most people agree that Canada's future socio-economic health depends on a well-funded, accessible system of PSE. The federal government needs to step in to stop the increases to this public service user-fee”. The creation of a PSE act in Canada will result in the production of much-needed guidelines for federal funding and will set an obligation to reduce tuition fees.

¹² The CFS is a national union of over one-half million students from more than 80 university and college students' unions across Canada. It provides students with an effective and united voice, provincially and nationally, and creates space and opportunity for students across the country and province to join together in creating change

Neoliberalism and PSE

The neoliberal influence on PSE has manifested itself in many different forms. Since the 1970s, the adoption of neoliberal political ideologies by the federal and provincial governments has led to extensive PSE reform, restructuring, and policy changes. It has become clear that “PSE policy is being used as an instrument for economic development” (Fisher et al., 2014, p.160). In Ontario, impacts such as the accountability, privatization/marketization, globalization, and corporatization of PSE are now prominent features of the system. Advocates of the privatization agenda, including governments, have been fighting to shift public PSE institutions towards the adoption of more “commercial models of knowledge, skills, curriculum, finance, accounting, and management organization” (Rigas & Kuchapski, 2016, p.52). Both federal and provincial governments have increasingly tied PSE funding models to the incorporation of commercial mechanisms (Levidow, 2007; Rigas & Kuchapski, 2016). Proponents of the neoliberal agenda have successfully controlled the discussions on public services as governments have implemented policies that transfer an increasing proportion of the cost of PSE to the individual, who is now considered a service user. PSE has been redefined as an individual pursuit rather than a public good or entitlement (Fanelli & Meades, 2011). Increasingly, PSE participation has become contingent on students’ ability to pay or willingness to take on debt; it is no longer awarded to members of society based on our collective rights.

As previously discussed, the neoliberal approach to governance strives to commodify public services such as PSE so that students must purchase these commodities at the price approaching market value, rather than having them offered by the state at a “discounted” rate (public cost). To legitimize and normalize this discourse, the notion that PSE simply constitutes another market commodity has been supported. Furthermore, the enforcement of neoliberal

policies on PSE has transformed the ways in which institutions are governed and operated. Treated as a traditional business, PSE faculty have become regarded as traditional workers, while students are considered customers (Saunders, 2010). The commercialization of PSE “is [now] normalised and its operational values and purposes have been encoded in the systems of all types of universities” (Lynch, 2006, p. 2). Scholars have long resisted the shift to the neoliberal university, which seeks to prioritize market needs, such as generating revenue, technical education, and job training, at the expense of civic engagement and democratic education (Saunders, 2010). It is believed that to some extent, universities are being vocationalized as a result of neoliberal policies in favour of economic rationality (Saunders, 2010). This is especially evident in Ontario, where provincial funding is now attached to an institution’s ability to excel in a specialized area of their choice (MTCU, 2019a).

The federal government’s reductions in transfer payments to the province of Ontario is a neoliberal strategy which aims to shift the burden of responsibility away from the state and towards individuals and the private sector. Between 1988-2006, the federal government reduced total transfer payments for PSE by 40 percent in 1998 dollars (Fisher et al., 2008). As the governments continue their assault on PSE, universities have adapted to the financial losses through various measures such as P3¹³ building projects, marketing on campuses, contracting out the teaching of courses, and the recruitment of international students (Fanelli & Meades, 2011). The globalization of PSE has created a new source of funding, – the exploitative system of international students. One of the leading strategies to cope with funding shortages in Canada, and especially Ontario, is the recruitment of international students.

¹³ Public-Private Partnerships are contracts between the public sector (university) and the private sector (developer) that outlines the provision of assets and the delivery of services.

In 2014, the Federal government revealed their plans to double the international student population to approximately 450,000 (CFSO, 2017). In Ontario, the number of international students in universities increased by 92 percent in 10 years between 2005-2015 (CFSO, 2017). International students pay astronomical amounts for their PSE as their tuition fees have been deregulated since 1996 (MTCU, 2019b). The cost of a general arts degree in Canada is approximately \$25,589.00 per year for an international student, almost four times more than domestic students (CFSO, 2021). These students leave their countries of origin, often countries from the global south without many PSE opportunities, in an attempt to receive an education that will lead to better employment and an improvement in their quality of life. Countries in the global south are also likely to have been coerced into adopting Structural Adjustment Programs (SAP) through conditional loans from the World Bank (WB) and International Monetary Fund (IMF) (Benería, 1999; Bradshaw & Huang, 1991). SAPs require countries to implement neoliberal policies that prohibit investments in social welfare programs such as PSE; underdeveloped PSE sectors leave international students vulnerable as they must travel to access PSE. A global hierarchy of PSE institutions has also formed with the increase of international students exploring the market of potential schools. This dissertation cannot discuss the exploitative system of international student tuition fees in great detail. Future research focusing solely on the globalization of PSE through the recruitment of international students is needed.

Cuts to PSE during the era of austerity were very costly; the CFS, reports a loss of \$8 billion in federal funding since the 1990s (1997). The implications of these cuts can still be felt today. There are several key transformations that can be identified: government funding per student has decreased, tuition fees have risen alongside student debt, class sizes have increased, and there has been a spike in the proportion of part-time professors (Glover, 2018). In 1990-1991,

the average undergraduate tuition fees in Canada were \$2,243, compared to \$6,693 in 2021-2022 (MacDonald and Shaker, 2012; Statistics Canada, 2022). Undergraduate enrollments in Canada have risen by 44% since 2000; enrollment in universities in Canada was estimated to be 2,048,019 in 2013-2014 (Statistics Canada, 2015). Between 1991-2016, there has been a 67% growth in PSE participation of Canadians between the ages of 25 and 34 (Canadian Council on Learning, 2006; Office of the Premier, 2016). However, the increases in tuition fees and enrollment levels have not been able to offset the drastic government funding cuts. As a result, the number of students per class has increased. We have also witnessed a rise in part-time faculty. The CFS (2012) now estimates the percentage of part-time faculty to be close to 50% for most institutions in Canada. Between 1990-2006, the ratio of students to full-time faculty increased by 40% (CFS, 2012).

Moreover, the need to produce commercially oriented rather than public-interest oriented professionals has become an expected objective of the neoliberal university. Lynch (2006) argues that “the danger with this advancing market individualism is that it will further weaken public interest values among those who are university educated” (p. 2). These changes have been propelled by the neoliberal policies being implemented in the PSE sector. The neoliberal effect has caused the blurring of boundaries between the corporate and PSE sectors. The corporate influence on campus is difficult to ignore. Buildings, classrooms and even programs of study are named after corporations or corporate leaders who sponsor them (Robertson, 2005; Schmidt, 1998). Robertson (1999) described the normalization of corporate presence on campus when he stated that “the path from the Xerox library through the Price Waterhouse seminar room to the Ernst and Young classroom to listen to a lecture from the Royal Bank Professor of Social Policy is taking the whole institution in a new direction” (p. 23). With the ongoing funding cuts to PSE by the federal and provincial governments, universities turned to private funding from corporate

partnerships and sponsorships. Corporate partnerships with PSE institutions have become widespread, risking the integrity of academic instruction. Some have argued that PSE is now an extension of the capitalist class agenda used as a training mechanism for the labour market under the neoliberal regime.

As neoliberalism spreads, so do the special interests of the capitalist class in the PSE sphere (Fanelli & Meades, 2011; Glover, 2018; Robertson, 2005). It is common to see overlapping memberships of university governance boards and corporate boards. This alarming feature has accorded corporations and elites a large portion of the decision-making process relating to PSE. A structural reorganization of the university is underway to satisfy the needs of the competitive market. Universities have transformed their course offerings and programs of study in order to cater to the labour market. For example, *People and Skills in the New Global Economy*, written by the Premier's Council, reflected a changing mission for Ontario universities where knowledge workers were pushed to obtain PSE in fields where the future labour market requires them.

In Ontario, the rise of ACR programs (now known as professional programs) is a prime example of the neoliberal reconstruction of PSE. Programs were created to meet the needs of the ever-changing market. Since these programs were practical and would likely lead to employment in the field of study (i.e., engineering), it was assumed that they would entail higher wages post-graduation. As a result, the MTCU (1998) deregulated the tuition fees of these programs in 1998. A hierarchy of programs based on labour market relevance was established, and the cost of these programs soared (Pardy, 2004). Although ACR programs were re-regulated in 2006 and reclassified as professional programs, they qualified for tuition differentiation – essentially a more discrete form of deregulation (MTCU, 2006). The government of Ontario justified the higher

tuition of these programs through their assumed large future incomes and high demand (MTCU, 2006).

Accountability through Performance-Based Funding (PBF)

The notion of accountability in the PSE context, another prominent feature of neoliberalism, has manifested itself through various mechanisms. In addition to the annual reports and Strategic Mandate Agreements (SMA) that the MTCU implemented to ensure that PSE institutions are more transparent and efficient with their funding, the rise of Performance-Based Funding (PBF) in Ontario has been one of the most significant forms of accountability. The fixation of accountability stems from the increasing importance of public entities to document the ways in which they spend public funds, and the outcomes achieved through those expenditures. The public is holding governments accountable for how they spend public funds. As a result, governments have implemented performance and accountability measures on their public institutions and services. This is exactly the case for PSE institutions and is a relatively new addition to the system. The traditional funding formula was established in the late 1960s and intended to determine the level of funding required to deliver quality PSE at each institution. The idea of tying an institution's performance to the amount of funding received through provincial transfers has been gaining popularity since the mid-1990s, a time that coincided with the rise of neoliberalism in Ontario policy (Fisher et al., 2014; Dougherty et al., 2014). Between 1998 and 2000, the government announced performance-based funding attached to indicators in two areas - accessibility and performance (Beach, 2019). Institutions could gain access to funding if they reached the benchmarked performance indicators (Beach, 2019). At the time, these indicators only accounted for approximately 2 percent of the provincial operating grant (Beach, 2019). However,

this was the first time in Canadian history that PSE funding was attached to performance indicators (Beach, 2019; Dougherty et al., 2014).

Basic funding formulas are student-centred and rely on input measures such as instructional costs and student enrollments (MTCU, 2019a). Basic Income Units (BIUs) are assigned through a formula in which enrollment is weighted by program and level of study. Under this formula, the provincial government determines the amount of funding each institution requires to operate (MTCU, 2019a). PBF severs ties with the traditional funding formula and instead replaces it with an accountability formula dependent on institutional outcomes. Funding is becoming increasingly connected to the performance of an institution rather than enrollments rates and program costs. The relevant government determines the funding given to each institution based on quantifiable performance outcomes such as post-graduation employment rates, student retention, the number of papers published per faculty member, graduation rates, total tri-council funding per faculty member, etc. (Dougherty et al., 2014). According to the MTCU (2019a),

“Performance metrics tied to funding are selected from sources that allow for improvements in data quality and follow predictable and regular reporting schedules that can be validated, replicated and verified. Metrics are balanced and broad enough to recognize the individual strengths and mandates of Ontario’s postsecondary institutions in serving local communities and economies” (p.12).

If PSE institutions do not meet their targets, the MTCU can withhold funding until outcomes are reached (MTCU, 2019a). Each year, the MTCU (2019a) “will assess each institution on its performance against targets associated with the SMA metrics. Evaluation for the purposes of funding will be conducted on an annual basis and results will be communicated through the SMA Annual Evaluation Report process” (MTCU, 2019a, p.17). Beginning in 2020, PBF will rise from 2 to 25 percent of overall funding. It will increase each subsequent year, accounting for 60 percent

in 2024-2025 (Beach, 2019; MTCU, 2019a). The strategy of increased surveillance and accountability is once again part of the larger neoliberal policy matrix.

Indebted to the system

Student debt is an essential feature of the neoliberal PSE system. As indicated in Table 6, more than 50% of students in Ontario rely on loans for their PSE in 2015 (NGS, 2018). The conversion of a system once based on grants to that of loans embodies the neoliberal ideals of privatization and individualization (Berlinski, 2008; George, 2005; Glover, 2018). Neoliberal ideologies have progressively altered the ways in which the public, the media, and our institutions define PSE. In the Keynesian era, PSE was recognized as a public good and was therefore subsidized through grants by the federal and provincial governments. Neoliberalism has successfully shifted the narrative of PSE to an individual endeavour rather than a collective good that is beneficial to society. This ideological reframing of PSE has had a profound impact on the student debt industry. So long as PSE is framed as an individual pursuit with personal benefits, the system of debt accumulation is legitimized.

To secure a chance of decent employment and a bright future, individuals must now take on large loans at a young age, embedding themselves in a state of indebtedness. Under the neoliberal regime, PSE is a commodity to be purchased by students in the market through loans. The accumulation of debt, especially student debt, is part of the larger neoliberal policy matrix where public assets are no longer a state responsibility (Berlinski, 2008; George, 20005; Glover, 2018). Thus, students are essentially preparing for a life of debt management (Chatterton, 2010). PSE has become consumption-oriented, whereby many students accrue debt through the consumption of the ‘university experience’ – housing, food, travel, and other essential expenses. Students are implicitly shaped to be consumers rather than taught to be critical thinkers (Ayers,

2011). The retrenchment of PSE by way of austerity measures is framed as an inevitable consequence of a struggling and fragile economy as if there is no alternative to neoliberalism (Berlinski, 2008; George, 2005; Glover, 2018). The neoliberalization of PSE produces an environment of dependency for low-income students. Society conditions individuals to believe that they can only succeed if they attain some form of PSE, yet those who cannot afford the cost become dependent on loans. If something so essential to upwards social mobility and financial security is too costly for some members of society, they have little choice but to engage in an exploitative arrangement through loans. This is especially troubling for students with large loans, see Table 7, and for those enrolled in professional programs (i.e., commerce) who can accumulate upwards of \$55,000 in student loans for their degree (U of T, 2021). This is an inherent feature of neoliberalism, whereby the modern-day bourgeois benefit greatly from a system that rewards those with a pre-existing abundance of resources while further entrenching inequities and solidifying class disparities. Students from high-income families have access to PSE without having the long-term disadvantages of accumulating interest and paying off large debts.

Table 7

Percentage of Undergraduates Owing Student Debt at Graduation in Ontario and Canada between 2000-2015

Year	Canada	Ontario
2000	45%	44%
2005	43%	40%
2010	39%	42%
2015	43%	51%

Note. Statistics Canada. Table 37-10-0036-01

PSE debt was a significant part of Friedman's (2009) neoliberal utopia. He firmly believed that university education should be competitive and open to market forces (Friedman, 2009). Since PSE has both an individual and community benefit, the government should not be responsible for subsidizing students' studies, nor should it tax the higher future incomes of PSE graduates (Friedman, 2009). Through this lens, the system functions harmoniously in that students pay for their own education but are not penalized through taxes when they become high earners (Friedman, 2009). Thus, student loans are imperative for the system to succeed. For those who cannot afford PSE out of pocket, loans would be available, and students would incrementally pay back these loans through a percentage of their future income (Friedman, 2009). The Income Contingent Loan Repayment Plan (ICLR) would allow low-income students to pay for their PSE through loans and then, by having a portion of their wages garnished, repay the loans post-graduation (Friedman, 2009). This would be "economically equivalent to the purchase of a share in an individual's earning capacity and thus to partial slavery" (Friedman, 2009, p. 103). Government subsidies for PSE were considered wasteful in Friedman's (2009) neoliberal haven. ICLRs would ensure that individuals bear the burden and reap the personal benefits of PSE. The neoliberal discourse in ICLRs leaves low-income students in a state of vulnerability. They are bound to the labour market because of their debt, solidifying the capitalist structure of unlimited labourers. Students from high-income and financially stable families would not be implicated in this system of indebtedness, as they would cover the cost of their studies upfront.

Table 8

Percentage of Undergraduates with Large Student Debt at Graduation (\$25,000 and over) in Ontario and Canada between 2000-2015

Year	Canada	Ontario
2000	32%	42%
2005	32%	33%
2010	39%	42%
2015	39%	43%

Note. Statistics Canada. Table 37-10-0036-01

In Canada, the neoliberal reconstruction of PSE is evident through the Canada Student Loan Program's (CSLP) adoption of the ICLR. Similar to the ICLR, the Repayment Assistance Program (RAP) determines an individual's repayment plan on the basis of income and family size while restricting payments to a maximum of 20 percent of their income (Berger, 2013; Government of Canada, 2021). The RAP is a contract effective for 15 years. If RAP eligibility is maintained, the balance of loans is paid off incrementally, and repayment requirements will not exceed 15 years upon graduation (Government of Canada, 2021). This adoption was influenced by the Rae Review (2005), Bob Rae's review of PSE in Ontario. A review filled with neoliberal discourse, Rae echoed Friedman's argument in support of students paying for PSE through loans. Rae (2005) states that "while there is unquestionably a significant social benefit to higher education that should be recognized by a stronger commitment to public funding, there is also an important private benefit to the student and the graduate. It is only reasonable for students to pay part of the cost" (p. 23). Ultimately, Rae (2005) recommended the expansion of the student debt industry and the creation of a parent debt plan, one that would enable parents to fully support their children's PSE.

The PSE system has undergone significant changes since its expansion in the post-WWII years. Policy serves as a valuable resource to trace and understand the ever-changing contours of PSE. The in-depth examination of PSE policy, both federally and provincially, allows us to situate the current system and its evolution. The complexities of PSE policy cannot be overstated. The system itself functions as a series of intertwining and autonomous components in a constant state of chaos. A political economy lens demonstrates the ways in which PSE is at the mercy of public policy and the dominant ideologies in any given period. PSE has a wide range of policies that not only limit its freedom but shape its identity. Studying the PSE system requires an exploration of several areas: federal transfers to provinces through operating grants via the Canada Social Transfer (CST); provincial tuition and ancillary fee frameworks; and federal and provincial student assistance programs. Focusing on one area while neglecting the other compromises the understanding of the complexities of PSE.

Conclusion

This chapter has provided a detailed account of PSE policy both federally and in Ontario. The drastic cuts to funding allocated to PSE are partially a result of the shift in ideologies from Keynesianism to neoliberalism (Davidson-Harden & Majhanovich, 2004). PSE, under Keynesian ideologies, was believed to be a public investment and social responsibility; however, with the rise in neoliberal policies and practices, this investment is now considered a private venture that individuals must fund out of pocket (Davidson-Harden & Majhanovich, 2004). The change in ideologies from education as a public good has led to the increasing commodification of PSE in Canada and is consistent with the human capital approach to the education of an individual (Becker & Chiswick, 1966). This chapter illuminated the nuances in neoliberal governments and governance. The degree of neoliberalism is transient, moving from one extreme to another across

time and space (i.e., over the years, in different provinces/territories, under varying governments). For example, the contemporary government of Ontario has adopted a strong neoliberal approach through the implementation of PBF. Although changes were made in the past that aligned with neoliberal doctrines, this conservative government was the first to sever ties with the traditional PSE funding model and move from a 2% to a 25% accountability attachment to funding. With all the cutbacks and austerity policies targeting PSE, the increase in the price of tuition has disproportionately fallen on the shoulders of students and their families. The following chapter, *University Program Cost Recoveries*, will further elaborate on professional programs and their high cost.

Chapter 4: University Program Cost Recoveries

This dissertation focuses on Additional Cost Recovery (ACR) programs and the shift to what are now known as professional programs. In this chapter, a policy analysis of ACR and its eventual change to tuition differentiation is discussed extensively below. Prior to this discussion, I will begin with a literature review on the sociology of education, followed by a review on the accessibility of PSE in Canada. This will allow me to situate my dissertation in the earlier literature on education, mobility, accessibility, and class and to discuss how this study contributes to and updates the literature with respect to the nuanced and intersectional approach developed. An overview of the history of tuition fee framework in Ontario since the inception of deregulation in 1997 until 2021 will proceed. Reviewing the annual changes to tuition fee frameworks helps to digest the complexities of the PSE system. Each year, a tuition fee framework is announced, which sets a tuition fee cap for a specified period of time. This framework informs universities and colleges in Ontario on how much they can increase their tuition fees by - a percentage for regulated programs, and a higher percentage for professional programs- or of a tuition freeze (MTCU 2019b). Tracing the changes over time illuminates the ever-shifting narratives surrounding PSE.

The Sociology of Education

Education has and continues to be an important area of concern in society. Issues of access, cost, employment, and poverty are linked to education and are regularly deliberated in politics and the media. It is widely regarded as the saviour of social problems due to its capacity to serve as the great equalizer. This has framed education as the ultimate investment to secure future financial stability and well-being, and social status. The sociology of education examines the ways in which

social structures influence education and its outcomes (Robson, 2013). It encourages scholars to keenly assess the role of social structures in the construction of educational institutions and the ways we have come to understand education. This area of sociology has been historically linked to social mobility theories and, specifically, the ability of education as an avenue of upward social mobility (Robson, 2013). Education and mobility, and its impact on class location, have been critical issues for sociologists of education for decades. Below is a review of the literature on the sociology of education. To fully understand the role of education in modern society, it is imperative to investigate its theoretical transformation from the early scholars of Durkheim, and Parsons to the later works of Wotherspoon and Livingstone.

One of the earliest scholars to consider the role of education in society was Émile Durkheim. His previous work on the importance of a collective moral code shaped his views on the role of education in society. He believed that education's main function was to engrain society's morals into the minds of youth (Durkheim, 1925; 2006). This is especially apparent in his work *Moral Education* (1925; 2006), which argued that education was the key agent in any given society to establish a set of common beliefs and values. Through education, these morals and beliefs would lead to the creation of a strong sense of community or nationhood (Durkheim, 1925; 2006). Moral education was more than practical knowledge as it socialized and prepared the young to become productive members of society. This process encouraged members of society to understand and value common morals. As a result of these teachings, moral codes would ultimately shape the lives of adults and hold society together (Durkheim, 1925; 2006). Durkheim's theoretical view of education is part of the larger structural functional understanding of society. A social system is built on different components that all function in unison to create social cohesion.

Educational institutions are one of the many critical sites in the structure: their role to engrain moral codes into the young is imperative to a future productive society.

Similar to Durkheim, Talcott Parsons (1985; 2017) viewed education as a space to socialize students. In the late 1950s, *The School Class as a Social System: Some of Its Functions in American Society* (2017), brought the work of Parsons into the discussion on the role of education. He argued that young children were first socialized by their families in the home prior to enrollment in school (Parsons, 1985; 2017). The family would initially transmit their values to their children; however, these values were family-specific. One could not judge the character relative to other children and schools were the bridge that merged individuals to society. Parsons (1985; 2017) believed that schools disregarded the social background characteristics of students and assessed them in a universal manner. This merit-based approach assumed that all children began the process of learning on a level playing field and were evaluated exclusively on their performance on a standardized set of goals irrespective of their social background (Parsons, 1985; 2017). This would ultimately prepare children for their roles as adults and members of society. The values embedded in American schools were those of achievement and equality of opportunity. To Parsons (1985; 2017), employment positions were a direct outcome of the achievement and success attained in school. The functional role of education is to link people to employment positions through the success, skills, and training acquired in school. Schools would therefore assign people to their roles based on merit and hard work. According to structural functionalists such as Parsons, inequality is inevitable in society because of its practical purpose. Those who failed in education are rightfully located in a lower socio-economic class as they were not capable of meeting the standards required for a higher placement (Parsons, 1985; 2017). The theories of structural functionalism regarding the role of education and schools were heavily criticized by many scholars. The approach is one-

dimensional and ignores intersectional social markers such as class, gender, and race in determining academic achievement and life outcomes (Robson, 2013). Furthermore, research has confirmed that education systems do not operate solely on a meritocratic basis (Robson, 2013). Although it may no longer be relevant, structural functionalism was a useful conceptual framework to explain the ways in which morality, shared values, and norms are distributed across society and the integral role of schools in the process.

Marxist scholarship has also taken on the topic of the role of education in society. Since ideas surrounding class and class relations are the foundation of Marxism, scholars have adopted some of the key themes and applied them to their analyses of education. Although much of Marx's work paid little attention to education, his ideas on the transferability of class relations to all aspects of social life have been used to discuss education (Marx & Engels, 1845). Under a Marxist framework, the institution of education functions to support and reproduce the economic systems of society. Institutions such as education are the products of the specific material conditions surrounding them (Marx & Engels, 1845). Analyses on Marxist social reproduction by Louis Althusser (2006), and Samuel Bowles and Herbert Gintis (2011) in the 1970s were key contributions to the sociology of education (Robson, 2013).

Louis Althusser (2006) considered ideology to be a key driver in the role of education. He believed that in a capitalist system, children were socialized into their subordinate statuses through ideologies (Althusser, 2006). Education, along with a plethora of other social structures (i.e., law, religion, media), reinforced this socialization by legitimizing and normalizing the ideology of the ruling class. The state ideological apparatus was the driving force of the social structures behind the reproduction of the social order (Althusser, 2006). Ideology functioned as “systems of meanings, representations and values embedded in the concrete practices that structure the

unconsciousness of students” (Arnowitz & Giroux, 2003, p.86). Althusser (2006) saw education as a mechanism of the reproduction of class positions. Furthermore, individuals were complicit in this system, by way of the unconscious acts that implicitly reproduced their class positions and students were largely unaware of these processes. The capitalist agenda ensured that the physical and cultural surroundings supported this ideology to naturalize and embed it into the fabrics of society. This very system was responsible for reproducing inequalities in social class.

Arguably the most prominent neo-Marxist work in the sociology of education, *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life* (1976), asserts that the primary purpose of education in capitalist societies is the reproduction of labour power. This piece, written by Bowles and Gintis (2011) in 1976, contends that the United States’ education system functions to reproduce the existing class system while simultaneously benefitting elites. Educational institutions were intentionally designed to simulate similar conditions to the workplace. Their critique of the education system has been linked to Althusser’s (2006) concept of ideology. Unlike functionalists such as Parsons, Bowles & Gintis (2011) reject the assertion that the education system is meritocratic; rather, they paint a picture of a system that reproduces social class inequality. A major theme in their work was the correspondence principle, the idea that the norms and values learned in schools correspond to those which will allow future capitalist employers to exploit the labour force (Bowles & Gintis, 2011). Thus, the education system caters to the class-based system and ensures that classes are reproduced. As a result, elites are able to maintain their positions through the generational reproduction of the class-based system. These arguments were supported by a quantitative analysis which revealed a positive association between intelligence and future earnings (Bowles & Gintis, 2011). This association was no longer significant when socioeconomic background was controlled, indicating that class origins, rather

than intelligence, determine future employment and incomes (Bowles & Gintis, 2011). Moreover, the hidden curriculum (i.e., values and norms taught despite not being part of the formal curriculum) embedded in schools covertly taught working-class students to be obedient, docile, and cooperative members of the class system (Bowles & Gintis, 2011). As previously mentioned, functionalists have also identified a hidden curriculum in education; however, they consider it to serve the beneficial purpose of teaching people the common norms and values of society. Conversely, Marxists such as Bowles & Gintis (2011) do not adopt this view and consider the system to solely reward the ruling class and capitalism.

Apple (1979) was critical of Bowles and Gintis in his work *Ideology and Curriculum*. He believed that they neglected the essential role of ideology and culture in the reproduction of systems of domination (Apple, 1979). Although he concurred that the reproduction of social classes (i.e., economic reproduction) was an effect of the education system, it cannot be exclusively attributed to economic aspects, he argued that social reproduction was also related to the ideological and cultural practices that were engrained in the education system. Through education, students were taught a particular type of knowledge, considered legitimate (Apple, 1979). This knowledge was a direct result of the ideologies and cultural practices of the ruling classes. The generational reproduction of this specific knowledge contributes to the overall social reproduction (Apple, 1979).

Although no longer the framework of choice for scholars in the field, the sociology of education was dominated by Marxist and neo-Marxist theory in the 1970s and 1980s (Robson, 2013). In Canada, a plethora of valuable work was developed using a Marxist/neo-Marxist lens, including that of Terry Wotherspoon (1984; 1987) and David Livingstone (1983; 1985). A major critique of the Marxist work is that it neglects significant social markers such as gender, race, and

ethnicity. This will be briefly discussed below and in greater detail in the section on the human capital theory.

In his work, *The Education/Jobs Gap*, Livingstone (2018) addressed the shortcomings of the human capital theory and dissected the misconception that on a collective level, investments in education will result in larger individual and societal economic benefits. Livingstone (1983; 1985; 1999) reveals that the distribution of benefit(s) is facilitated by the social location of the individual. Using data from U.S. and Canadian surveys of work and education experiences, Livingstone (1983; 1985; 1999) argues that the key issue in education-work relations is not education itself, but rather the mismatch between employment and employee. According to Livingstone (1983; 1985; 1999), since the 1970s, we have witnessed a decline in the number of employment opportunities that utilize the knowledge/education and skills of the labour force, especially in the industrial and service workforce. The pervasive societal problem of underemployment among workers with credentialed knowledge is largely ignored and overlooked. Additionally, he believes that there is an underutilization of investments in learning, both informal and formal, which further debunks the ‘learning-earning’ link (Livingstone, 1983; 1985; 1999). The capacity of the labour market to effectively apply the knowledge of workers, and to compensate them adequately is mismatched. Therefore, education is not the great equalizer in the eyes of Livingstone (1983; 1985; 1999).

Neo-Marxist approaches have explored other concepts in their scholarship such as critical pedagogy. Paulo Freire (1970) is cited as the founder of this movement in his work *Pedagogy of the Oppressed*. This concept focuses on eliminating inequalities that are often perpetuated in the classroom (Freire, 1970). Through the metaphor of “banking”, Freire (1970) illustrates the ways in which the education system is structured; students are considered empty banks and teachers

possess the knowledge to deposit into them. Freire (1970) is strongly opposed to this model, asserting that it dehumanizes the student and teacher through the assumption that the student has no previous knowledge and has nothing to offer to the teacher (i.e., a blank slate).

Moving from Marxist to Weberian and neo-Weberian approaches of education shifts the focus to credentialism (Robson, 2013). Much of the Weberian and neo-Weberian work examines the concept of credentialism, and the necessity to obtain specific qualifications to access particular groups. However, the knowledge and skills acquired through these credentials do not necessarily practically apply to employment. For example, entry-level office positions require new employees to have a university degree, despite the role not relating to the employee's degree (Robson, 2013). On the contrary, individuals without formal credentials, who may possess years of practical experience in a given field, will often be rejected from jobs or turned down for promotions. Randall Collins, a neo-Weberian sociologist of education, made a major contribution to the field with his work *The Credential Society* (1979). Credential inflation refers to the decrease in value over time in the assumed advantage of educational qualifications (Collins, 1979). His work centred around the depreciation of degrees and the lowered returns on investments.

Other prominent theories in the sociology of education include the cultural reproduction theory. This theory is often linked to poststructuralist Pierre Bourdieu (1977; 1984; 1986). Although Bourdieu was influenced by Marxism, he took issue with the notion of class and believed that social stratification was an outcome of a wide range of sources, such as the forms of capital. Bourdieu (1977; 1984; 1986) focused on the role of cultural reproduction in the education system. Cultural capital, a significant contribution to the sociology of education, is often difficult to define as Bourdieu himself referred to it in different ways throughout the literature (Robson, 2013). One of the most consistent explanations of cultural capital is that it is a form of high status cultural

knowledge that is amassed and retained by certain individuals (Bourdieu, 1977; 1984; 1986). This is something that individuals acquire through their lived experiences and familiarity with high status activities. These can include activities such as attending the theatre, ballet, opera, museums, having knowledge of the arts, classical music, literature and more. Bourdieu (1977; 1984; 1986) believes that this form of capital functions as an advantage for individuals as they are able to mingle in high status circles. When applied to education, Bourdieu (1977; 1984; 1986) argues that those in possession of cultural capital tend to be at an advantage in the education system. Students with high levels of cultural capital are evaluated more favourably by instructors in comparison to those not in possession of it (Bourdieu, 1977; 1984; 1986). Those with experience in literature can develop more articulate language skills over time which results in academic success. Therefore, cultural capital is a vessel in which the dominant culture is reproduced. It becomes a cycle wherein the upper-class rewards and recognizes individuals in possession of certain high status traits and knowledge (i.e., cultural capital), thus preserving and reproducing their power (Bourdieu, 1977; 1984; 1986). Bourdieu (1977; 1984; 1986) stressed that children with higher levels of cultural capital send implicit signals to their educators through the use of sophisticated language and knowledge associated with upper-class leisurely pursuits. These signals result in preferential treatment by educators and the school system in general (Bourdieu, 1977). Inequality is an outcome of the system of cultural reproduction as individuals without high levels of cultural capital are at a disadvantage and do not experience the same success as their peers. Similarly, to Bowles & Gintis (2011), and in opposition to Parsons (1985), his theory maintained that academic achievement was not based on merit and ability. In addition to cultural capital, Bourdieu (1986) wrote about other types of capital, such as economic capital (i.e., traits easily converted into money), and social capital (i.e., individual relationships and networks that can lead to access to

resources). Economic capital includes the attainment of credentials through education, job training, skills, and experience, which can translate to economic gains (Bourdieu, 1986). Social capital is often thought of as membership to a group (i.e., trade unions, political parties) or access to specific networks or social relations that can be used to improve the social position (Bourdieu, 1986). Important to note is that all forms of capital are fluid in the sense that they are linked to and influenced by one another.

The forms of capital vis-à-vis education have been useful concepts over time and continue to be applied to the sociology of education today. Although Bourdieu incorporated various forms of capital in his analyses of education, other theorists have exclusively focused on social capital and its link to educational outcomes. For instance, James Coleman (1988) used social capital to explain the higher dropout rates of public school children compared to Catholic and private high schools (both of which are privatized in the United States) when parental socioeconomic characteristics were controlled for. Coleman (1988) asserted that the difference in dropout rates could be explained by the social capital in the Catholic and private high school students' communities and families. Their social ties were much stronger and thus parental and community interests in the educational achievement of children ultimately propelled them to academic success (Coleman, 1988). The intimate bonds between parents, children, and community were reproduced intergenerationally, resulting in social control and the surveillance of children (Coleman, 1988). Unlike Bourdieu, Coleman's (1988) work was influenced by rational choice theory. This theory adopts the view that actions are the outcomes of reason-based decisions. Coleman (1988) viewed social capital as a public good whose benefits could be extended to the wider community and all members of the social structure, rather than an individual possession. For instance, involvement in a parent-teacher association can be beneficial for the children of those involved; however, it can

also function to increase community bonds which can positively impact the lives of all members (an unintended consequence). Social capital can be attained by individuals but can also reinforce the social structure (Coleman, 1988). Through rational choice theory, Coleman (1988) views the actions made by parents as reason-based (i.e., to improve their children's educational attainment), while the public good aspect becomes an unintentional outcome of their individual and self-serving acts. Unlike Bourdieu (1977) who maintained that social capital was concentrated amongst the privileged elite, Coleman (1988) believed that it was available to all members of the social structure.

Other dominant approaches within the sociology of education include those of social mobility. Research utilizing social mobility approaches to education examine the ways in which social class positions impact the educational attainment and success of individuals (Robson, 2013). A plethora of research, much of which is discussed in the section on the accessibility of education, has revealed that socioeconomic class is a predictor of educational achievement and attainment. Social mobility theories in education illuminate the difficulties in achieving upwards social mobility for marginalized youth. Due to a variety of factors, movement out of class of origin can be rather challenging. Through this lens, Raymond Boudon (1973) identified the primary and secondary effects of class disparities regarding educational achievement. Primary effects were defined as the class-based differences in educational attainment linked to academic performance and success (i.e., working class children faring poorer on standardized tests than their higher-class peers) (Boudon, 1973). They are dependent on attributes such as wealth, family, material conditions, and socialization (Boudon, 1973). Secondary effects, on the other hand, refer to the disparities between classes and educational achievement relating to educational choices regardless of performance (Boudon, 1973). For example, if two students, from different social classes were

experiencing similar academic success and the lower-class student opted to pursue the trades, while the middle- or upper-class student went to university, this would be considered a secondary effect (Boudon, 1973). In contrast to primary effects, secondary effects are solely determined by the choices made by individuals and their families.

Many researchers have concurred that even when working-class students perform at similar levels to middle- and upper-class students, they tend to hold fewer educational ambitions (Jackson et al., 2007). Boudon (1973) speculated that secondary effects are the result of the ways in which lower social class students are socialized. Middle- and upper-class families influence their children to pursue high levels of education to maintain their status. Conversely, children from the working class are not necessarily encouraged to the same degree because the requirements to maintain the same social class are lower than that of higher classes (Boudon, 1973). Since Boudon's (1973) concepts have been developed, scholars have long explored their impact on the academic achievement of children. In the Canadian context, Nash (2005) demonstrated that secondary effects were prevalent among high school students as those with higher academic aspirations had a greater likelihood of having high grades and were more likely to come from middle- and upper-class families. Primary effects, however, were more significant than these secondary effects on school achievement (Nash, 2005).

Critical race theory (CRT) has also been explored in the sociology of education, using race as the central point of departure in the analysis of educational disadvantage (Robson, 2013). As previously mentioned, CRT stems from legal scholarship in the United States and has been adapted to examine the ways in which race is entrenched in the social fabric of education. It argues that racialized students are often disadvantaged due to the informal cultural baseline to which they are evaluated. In Canada, "Whiteness" is the dominant culture and is considered the norm and

deviations from that are seen as weak and inferior. Scholars in CRT affirm that the inequities embedded in the education system cannot be exclusively be explained through class- and gender-based theories; rather, race and racialized play a role in the stratification of social life, including the domain of education (Robson, 2013). Race alone cannot account for the differences in academic success and achievement; they are influenced by other axes of exclusion such as gender and class. In the U.S. context, despite race and gender accounting for the disparities in educational attainment, middle-class African Americans had considerably lower educational achievement than their White American counterparts (Ladson-Billings & Tate, 1995).

In Canada, there has been a great deal of contributions made to the sociology of education from scholars such as Paul Anisef and Robert Sweet, Karen Robson, Michael Apple, David Livingstone, James Cote, William Carroll, Janice Newson, Harvey Krahn, Terry Wotherspoon, among others. Much of the scholarship takes a critical and intersectional approach to the sociology of education. Topics of interest in the Canadian context include: Indigenous exclusion in the education system (Wotherspoon & Schissel, 1998); visible minority educational aspirations and achievements (Krahn, et al., 2000; Krahn & Taylor, 2005); educational credentials and labour market integration (Anisef & Sweet, 2003); the corporatization of universities (Carroll & Beaton, 2000; Côté & Allahar, 2007; Newson, 1998); and PSE access and trajectories (Robson et al., 2019).

The work of Anisef and Sweet (2003) takes an intersectional approach to examine the links between field of study, cultural capital, and access to higher earnings in the labour market. They believe that racialized immigrants with degrees that lead to higher incomes (i.e., STEM degrees) require the possession of cultural capital to secure suitable employment (Anisef & Sweet, 2003). Social codes and customs of Canadian society were essential in the attainment of higher-wage positions. Research indicates that the wages of racialized immigrants, especially women, in

Canada do not equate with their education levels (Adamuti-Trache, Anisef, & Sweet, 2013; Anisef & Sweet, 2003; Anisef, Sweet, & Adamuti-Trache, 2010). Similarly, the work of Harvey Krahn (2000; 2005) focused on social mobility, education credentials, and the labour market. He examined access to high-status occupations in the Canadian labour market among immigrants and refugees who held high levels of education and prestigious occupations in their countries of origin (Krahn, et al., 2000). Data revealed that despite refugees' high levels of education, they experience disproportionate rates of unemployment, part-time employment, and temporary employment in comparison to those born in Canada (Krahn, et al., 2000). The downward social mobility experienced by these refugees is the result of structural factors operating in a segmented Canadian labour market (Krahn, et al., 2000). These results illuminate that the acquisition of education credentials, especially foreign credentials, may not lead to upwards social mobility in Canada (Krahn, et al., 2000).

Other intersectional Canadian scholars include Karen Robson (2018; 2019) and Terry Wotherspoon (1998; 2020). Robson's (2018; 2019) work has investigated PSE accessibility and social location. The transition from high school to PSE is probed, with a special focus on social markers such as race, gender, and class (Robson et al., 2018; 2019). Findings in her work include the importance of cultural and social capital to ensure a smooth transition from high school to PSE (i.e., the assumed knowledge including entrance conditions, funding options, deadlines), and that issues of race, class, gender and disability are significant determinants of PSE access (i.e., Black males have drastically lower university participation rates in compared to other groups) (Robson et al., 2018; 2019). Terry Wotherspoon (1998; 2020) has focused on Indigenous education and oppressive policies. Overall levels of PSE participation rates among Indigenous peoples are substantially lower than those of Canadians (Wotherspoon, 2014). Wotherspoon (1998; 2020) has

maintained that education for Indigenous peoples must encompass and preserve Indigenous cultures while simultaneously preparing students for success in contemporary society. The horrors of residential schools and colonialism have excluded Indigenous populations from the education system and hindered their overall well-being (Wotherspoon 1998; 2020). For example, Wotherspoon (2015) highlights the importance of informal learning for Indigenous peoples and their communities, which have been subordinated and devalued through systems associated with colonization. Government policies and public discourses continue to exclude and undermine Indigenous rights despite constitutional recognition (Wotherspoon, 2015). A holistic reform of the education system is needed to confront the historical oppression of Indigenous peoples through education.

Departing from the intersectional approach, a new body of research in Canadian sociology of education scholarship has emerged. A growing body of research, with contributions from Janice Newson (1998), James Côté (2007), and William Carroll (2000; 2010), is currently examining the corporatization of universities in Canada. Carroll & Beaton (2000) observed the ways in which PSE institutions are becoming key ancillaries of production. Corporate capital has embedded itself into the academy through practices of governance, teaching, funding, and research (Carroll & Beaton, 2000; 2010). Much of his recent work illuminates the “changing architecture of capitalist-class power in the field of higher education” (Carroll & Beaton, 2000, p.71). Moreover, Côté & Allahar (2007) explore the changing landscape of universities and their altered mission and objectives. The corporatization of universities is linked to an array of critical issues within PSE, from the devaluation and decline of Humanities, Social Sciences, and Natural Sciences instruction, to academic disengagement (Côté & Allahar, 2007). Additionally, Newson (1998) studied the ways in which scientific and research funding organizations were responsible for the new direction

Canadian universities were taking. This new direction, the corporate agenda, was described as a new age of collaboration between universities and the corporate sector (Newson, 1998). These expanding relations between Canadian universities and corporations are changing the structure and the purpose of the PSE system (Newson, 1998). Issues discussed are the market-oriented tuition schemes and the privatization of universities. Newson (1998) has exposed the transformation of the university from a public, social institution to a business corporation in response to financial difficulties. Through the adoption of corporate strategies, universities have become the replicas of their corporate partners (Newson, 1998)

As discussed, the sociology of education has a rich history and continues to incorporate a wide range of theoretical innovations. Sociologists studying education have focused on its changing role and purpose in society. Early on, the discipline was centred around the ways in which students were socialized in schools to accept their class position and primed for their appropriate place within the labour market. Shortly after, we witnessed the growth of issues surrounding education and mobility, its contribution as an equalizer, its impact on class location, and its link to the labour market. The new sociologists of education have implemented a critical lens on education and its reproduction of the social order by exposing the ways in which upper-class students fit into the system whereas lower-class students struggle to adopt the values and curricula that do not fit their reality or their perspective. Critical theorists have argued that the major goal of education has been to reproduce the social and economic inequities embedded in the economic order, all the while maintaining the façade that education is a vehicle of upward social mobility and the great equalizer. Intersectional and CRT analyses of education have demonstrated that the outcomes of PSE attainment are not evenly distributed amongst students; rather, the social location of individuals can impact their return on investments.

This dissertation is influenced by multiple theories and approaches emerging from the sociology of education literature. Throughout the analysis, concepts such as social and cultural capital, secondary effects, social mobility, and the corporatization of universities are explored. Additionally, the research questions of this dissertation can be located in a neo-Marxist framework. Influenced by the work of Bowles & Gintis (2011) and their theory of social reproduction through education, this dissertation seeks to explore the social reproduction of the dominant system and inequities through professional programs at the undergraduate level in Ontario. It also takes a critical approach to the PSE system as a meritocracy and explores the ways in which existing forms of capital, both social and cultural (Bourdieu, 1977), and secondary effects (Boudon, 1973) may dictate field of study and educational aspirations. I will depart from and add to the existing literature by implementing an intersectional approach to the neo-Marxist framework. Class alone cannot account for the differences in academic success and achievement, they are influenced by other axes of exclusion such as race, gender, citizenship, parental education, and source of funding. This will guide the research questions and analysis throughout the dissertation.

PSE and Accessibility

The literature on PSE accessibility (Barr-Telford et al., 2003; Bouchard & Zhao, 2000; Bowlby & McMullen, 2002; Christofides et al., 2001; Corak, et al., 2003; Dooley et al., 2009; Drolet, 2005; Finnie et al., 2008; Frenette, 2005, 2008; Pardy, 2004; Tomkiewicz & Bushnik, 2003) is abundant. Thus far, the consensus in this literature indicates that there is a link between family background (socio-economic status or parental education) and PSE participation. However, when we take a closer look at research that specifically examines first-degree professional programs (undergraduate), the data becomes limited. As aforementioned, the provincial government announced the deregulation of tuition fees for first- and second-degree professional programs in

1998 (Pardy, 2004). They were re-regulated in 2006 under a new policy that allowed for tuition differentiation (MTCU, 2006). The initial deregulation vastly affected the cost of tuition as this was the first time individual schools were granted the authority to set tuition rates free from government-imposed caps (Frenette, 2005, 2008). In light of all the cuts made to PSE in the 1990s, many first- and second-degree professional programs saw a significant increase in their tuition fees from 1998-2002 (Pardy, 2004). Scholars became concerned with the impact of these increases on accessibility. Of particular interest was the demographic characteristics of students in deregulated second-degree professional programs (i.e., law school, medical school, MBA programs). Research began to develop with a focus on who was represented in these costly programs and whether there was a change in this composition since the deregulation policy took effect in 1998-1999 (Frenette, 2005, 2008; Finnie et al., 2008).

As aforementioned, the PSE literature on accessibility is filled with research that examines the relationship between socio-economic status (income) or parental education and participation in PSE (Barr-Telford et al., 2003; Bouchard & Zhao, 2000; Bowlby & McMullen, 2002; Christofides et al., 2001; Corak, et al., 2003; Dooley et al., 2009; Drolet, 2005; Finnie et al., 2008; Tomkiewicz & Bushnik, 2003). The literature reveals that there is a link between family background (socio-economic status or parental education) and PSE participation (Barr-Telford et al., 2003; Bouchard & Zhao, 2000; Bowlby & McMullen, 2002; Christofides et al., 2001; Dooley et al., 2009; Finnie et al., 2008; Frenette, 2005, 2008; Pardy, 2004; Tomkiewicz & Bushnik, 2003). Much of the research has illuminated that those from more affluent families are more likely to participate in PSE than those from low-income families or those with low levels of parental education (Dooley et al., 2009; Finnie et al., 2008; Frenette, 2005, 2008; Pardy, 2004). However, some studies indicate otherwise. For example, although Finnie et al. (2004) discovered that the

relationship between PSE enrollment and parental education strengthened over the 1990s (note that tuition deregulation took place during this time), Corak et al. (2004) and Drolet (2005) found no such evidence of this relationship. Perhaps this can be attributed to the different measures and databases used by these scholars. Corak et al. (2004) and Drolet (2005) examined parental income and socio-economic status in relation to PSE participation but did not include parental education in their analysis. Furthermore, these studies incorporated the data of all Canadian youth combined, rather than separating the youth by province. This can be misleading as Ontario deregulated tuition fees at the time of their studies, while other provinces were implementing tuition freezes.

High levels of parental education have been coupled with the acquisition of greater social and cultural capital (Childs, Finnie, & Mueller, 2010). The possession of such capital can lead to increased expectations of success; higher-SES students may have heightened aspirations regarding their educational and occupational attainment (Andres, Adamuti-Trache, Yoon, Pidgeon, & Thomsen, 2007; Christofides, Hoy, Li, & Stengos, 2008; Finnie, Wismer, & Mueller, 2015). Conversely, high-school students with low-SES have been linked to lower educational aspirations and are less likely to participate in PSE (Krahn & Andres, 1999). Other studies have also found that a student's family background can be an important determinant of PSE participation. Tomkiewicz and Bushnik (2003) found that entrance to PSE upon high school completion, delayed entry into PSE, and not pursuing PSE are associated with family background. The impacts of family background, both directly and indirectly, are said to be highly significant in PSE enrollment (Finnie, Lascelles, & Sweetman, 2005).

Similarly, Christofides et al. (2001) examined the link between tuition fees and enrollment by parental income and found no difference across income groups. This study was conducted prior to the deregulation of tuition fees and is therefore missing an important piece of the puzzle.

Additionally, the authors grouped university and college enrollment together and only included youth still living with their parents in the analysis. Many of the discrepancies on access to PSE can be attributed to data variations and limitations. For example, different samples of youth were being used (i.e., children living with parents, children living alone, exclusion of specific provinces). Another potential factor to the varying results may be the different proxies used for parental socioeconomic status. Some studies exclusively worked with income levels (Christofides et al., 2001; Corak et al., 2004; Drolet, 2005; Neill, 2006), while others focused on parental education (Dooley et al., 2009; Finnie et al., 2008; Frenette, 2005, 2008; Pardy, 2004). A plethora of research now concurs that parental education is one of the most important independent variables when examining PSE access and participation (Finnie et al., 2008; Frenette, 2005, 2008). Additionally, variations in the data used for analysis cause further confusion amongst the comparability of many studies. For example, the Labour Force Survey (LFS) only has measures of parental education and young adults still living with their parents. The General Social Survey (GSS) has select measures of socio-economic status, (parental education and occupation), but not income. The School Leavers Survey (SLS) and Youth in Transition Survey (YITS) only contain information on parental education. When different surveys are used for data, it compromises the ability to confidently make connections across studies.

Studies have also found that for those who do not participate in PSE, the most common factor is lack of interest, rather than the cost of tuition (Finnie & Laporte, 2003; Foley, 2001). For those that are interested in pursuing PSE and have not, the cost has been identified as a barrier (Finnie & Laporte, 2003; Foley, 2001). Overall, individuals from more affluent families -either higher SES or parental education levels – are more likely to participate in PSE (Finnie & Laporte,

2003; Foley, 2001). Studies have found that more affluent students are also more likely to graduate from their programs and take less time to complete them (Andres & Adamuti-Trache, 2008).

Furthermore, there is a large body of literature on accessibility that examines the relationship between tuition increases and enrollment (Collins, 2004; Finnie et al., 2012; Hu & Miao, 2010; Johnson, 2008; Rivard & Raymond, 2004). There has been less success in this literature in finding any definite link between increased PSE tuition and enrollment rates. Most studies reveal that regardless of tuition fee increases, enrollment in PSE remains high (Collins, 2004; Finnie et al., 2012; Johnson, 2008; Rivard & Raymond, 2004). David Johnson (2008) asserts that despite the astronomical tuition hikes witnessed in recent years, student access and persistence has largely remained unchanged. If these trends persist, we can assume that the tuition differentiation of first- and second-degree professional programs should not impact enrollment rates or drastically alter the demographic characteristics of students in these programs. There has not been a great deal of literature devoted to this topic; rather, the relationship between higher tuition fees for first-degree professional programs (business, engineering, computer science, etc.) and access remains underexplored. Most of the literature above focuses on tuition increases in general, but few focus exclusively on fees for first-degree professional programs (undergraduate).

The research that has been conducted on the tuition deregulation/differentiation of professional programs in Ontario largely focuses on second-degree professional programs such as law and medical schools (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). The general themes in many of the studies are fundamentally similar. They discuss the significant government cuts (especially in the 1990s) made to PSE and the ways in which universities had to make up this lost revenue by increasing their tuition fees and enrollments (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et

al., 2018). When deregulation occurred, all professional programs classified as first- and second-degrees became much more expensive in a short period of time (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). When these changes were made, scholars and advocates became concerned with the impact of deregulated fees on accessibility, particularly for lower-income and marginalized peoples (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). They began conducting research on diversity and the representation of low-income students in these programs (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). The focus of the literature on deregulated programs is limited to second-degree programs (graduate studies) such as pharmacy, dentistry, law, business (MBA), etc. and not to first-degree programs (undergraduate programs) (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018).

Most of the research takes a comparative approach to this topic and analyzes student characteristic demographics during the pre-and post-deregulation periods (1996-1997 to 2000+) (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Norrie & Zhao, 2011). In addition, studies have compared Ontario programs to other Canadian provinces that did not undergo tuition deregulation during that same period (i.e., Quebec was often used as a comparative province). The data used for several studies come from the National Graduates Survey and the Youth in Transition Survey (Frenette, 2005, 2008; King et al., 2004; Norrie & Zhao, 2011).

Frenette (2005, 2008) devoted a great deal of his research to exploring the connections between enrollment in second-degree professional programs and socio-economic background. Frenette (2005, 2008) revealed that in the years following tuition deregulation of second-degree professional programs in Ontario, enrollment patterns by socio-economic status altered

considerably. Although his studies were exclusive to law, dentistry, and medicine (second-degree professional programs), these results indicate that the deregulation of tuition fees may affect participation for certain groups (Frenette, 2005, 2008). Using parental education as a proxy for socio-economic status in his analyses, results indicate that enrollment in these programs rose among Ontario students whose parents held a graduate or professional degree (Frenette, 2005, 2008). Conversely, enrollment also rose for students with no parental education but declined for students whose parents had postsecondary qualifications below the graduate or professional level (Frenette, 2005, 2008). There were several reasons given to account for these results. One of those reasons was that at the time of tuition deregulation, student aid was adjusted to ease the burden for low-income students (Frenette, 2005, 2008).

These findings complement those of King et al. (2004) who examined whether the demographic characteristics of law students had changed since tuition deregulation policies took effect. Perhaps the most comprehensive study to date, their results also reveal that law schools in Ontario are predominantly comprised of students from affluent backgrounds (King et al., 2004). Parental income for these students was high as “two-thirds of law students come from the top 40 percent of the family income distribution and about 10 percent from the bottom 40 percent of the distribution” (King et al., 2004, pp.163-164). In the years following the deregulation, King et al. (2004) reveal an increase of 4.7% in students with parental incomes in the top 40% of the average family income distribution for Canada. Furthermore, a decrease in the proportion of students with parental incomes in the middle 20% of the distribution was also discovered (King et al., 2004).

Kwong et al. (2002) also found that following the deregulation of tuition in Ontario, there was a drastic change in the characteristic demographics of students in medical schools. In 2000, the proportion of Ontario medical students from families earning less than \$40,000 dropped from

“22.6% to 15%, compared to just a 0.2% decrease in other provinces that had not experienced tuition deregulation” (Kwong et al., 2002, p.1026). However, this study relied upon self-reported incomes by students for their data which may compromise the accuracy of the results. Sayed et al. (2018) and CMA (2009) echoed these results in their work. Pardy (2004) examined the prospect of higher upfront costs to law school post-deregulation and its link to low-income and marginalized group participation. Pardy (2004) indicates that high up-front tuition fees are a burden to many students and a complete barrier to specific groups. When students are applying to law school, many have spent years at university rather than in full-time employment. These foregone wages may work to disadvantage students without affluent parents or other sources to finance their education. Therefore, the prospect of heavy debt accumulation may deter some qualified applicants from applying to or attending law school (Pardy, 2004).

What remains to be explored is whether this trend of deregulated fees as barriers for second-degree professional program participation is similar for first-degree professional programs (undergraduate degrees). From this literature, one can reason that rising tuition can only exacerbate these disparities. However, there has been no research conducted on the demographic characteristics of Ontario students in professional programs at the undergraduate level to date. It is essential to investigate this question as the literature has not yet considered the potential deterrence higher fees may have on marginalized groups (i.e., those with low parental education, immigrants, racialized students). I intend to address this gap in my research to contribute to the understanding of the link between high tuition fees and participation.

Overview of tuition fee framework in Ontario: 1997-2021

The era of deregulation and tuition differentiation began in the late 1990s. As represented in Table 8, its evolution over time we can observe the particular ways that neoliberalism impacted

tuition policies. A one-year policy was established in 1997-98, which allowed tuition fees to increase up to 20% over the previous year's level, with a maximum average increase of 10% (MTCU, 1998; MTCU, 2019b).¹⁴ In 1998, Additional Cost Recovery (ACR) programs were created by the ministry. Programs that qualified as ACR would have deregulated tuition fees, meaning universities had the authority to set tuition fees for these programs at levels they considered reasonable (MTCU, 1998). This change came along with a two-year policy, from 1998-2000, that increased the maximum average regulated tuition fee by 10% each year of the two-year policy (MTCU, 1998; MTCU, 2019b). ACR program tuition fees could not exceed 20% for an upper-year student until "such time as the student could reasonably be expected to complete his or her program" (MTCU, 1998; MTCU, 2019b, p. 9). Moreover, a tuition fee set-aside policy was implemented that would require universities to set aside a portion of tuition fee revenue generated from increases in tuition fees (MTCU, 1998; MTCU, 2019b). These funds would be used to assist Ontario students in financial need. In some capacity, this policy is still in effect.

A five-year tuition fee policy was put into effect during the 2000-01 academic year (MTCU, 2019b). Regulated tuition fees could be increased each year by 2% until the 2004-05 academic year, but were not required to do so (MTCU, 2019b). By 2004-05, the last remaining year of the policy, the maximum average tuition fees for regulated and ACR programs were not permitted to have risen by more than 10% of their respective fees in 1999–2000 (MTCU, 2019b). Once again, tuition fees could not exceed 20% for upper-year students until "such time as the student could reasonably be expected to complete his or her program" (MTCU, 2019b, p. 9). Tuition fee set-aside policies were also in effect.

¹⁴ Both part-time and full-time international students would experience an astronomical increase in tuition fees as they were deregulated in 1996–97 (MTCU, 2019b).

The previous five-year tuition fee policy was terminated in 2004, one year earlier than expected (MTCU, 2019b). In 2004, the Ministry enforced a two-year tuition fee freeze while developing a new funding framework (MTCU, 2019b). As a result, ACR and regulated programs were frozen at their 2003-04 levels. The tuition fee set-aside policy was still in effect during the freeze.

A new regulated tuition framework for all publicly funded programs was released in 2006 and was in place until 2010 (MTCU, 2019b). This policy re-regulated former ACR programs but introduced tuition fee differentiation, which allowed tuition fees to vary based on program and year of study, a similar feature to ACR (MTCU, 2019b). The framework maintained that “some high demand programs may support a higher tuition fee” (MTCU, 2019b, p.11). Regulated programs were given a maximum allowable increase of 4.5% for the first year of study and a 4% maximum allowable increase for subsequent years of study. Profession and graduate programs had a maximum allowable increase of 8% for the first year and 4% for subsequent years of study. The average maximum allowable tuition fee increase for all years of study and programs was capped at 5%, and all increases were to be justified through quality improvements and the Student Access Guarantee (MTCU, 2019b). Each institution was required to commit to accountability agreements that ensured student access and quality improvements would be maintained (MTCU, 2019b). Tuition set-aside policy remained in effect but was frozen at 2005-06 levels (MTCU, 2019b).

The tuition fee framework implemented in 2006-07 was extended for two years (MTCU, 2019b). Therefore, the academic years of 2010-11 and 2011-12 would have the same framework as the previous year, with the exception of a few changes to the tuition set-aside policy (MTCU, 2019b). It would be “set at the previous year’s tuition fee set-aside levels plus 10% of the additional fees resulting from tuition fee increases in the current year” (MTCU, 2019b, p. 13).

Again, in 2012, the tuition fee framework was extended for the 2012-13 academic year (MTCU, 2019b). The only change to the framework was the addition of a moratorium on deferral fees; new deferral fees and increases to existing ones were prohibited (MTCU, 2019b). There were no changes made to the tuition fee set-aside policy (MTCU, 2019b). A new four-year tuition fee framework was announced in 2013. Regulated program tuition fees were capped at 3%, while professional programs at 5% (MTCU, 2013). Additionally, total institutional increases were capped at 3%. The tuition set-aside policy remained effective, as did the Student Access Guarantee (MTCU, 2013).

The existing tuition fee framework was extended for an additional two years in 2016 (MAESD, 2016). It would remain in place until the 2018-19 academic year (MAESD, 2016).

10% Tuition fee reduction: 2019-21 In 2019, tuition fees for all programs, both regulated and professional, were reduced by 10% (MTCU, 2019b). Furthermore, a tuition freeze was implemented for the 2020-21 academic year, meaning tuition fees must remain unchanged for each program and program year paid in 2019-20 (MTCU, 2019b). The tuition fee set-aside policy remains in place (MTCU, 2019b).

Table 9*Tuition fee framework in Ontario between 1997-2021*

Years	Increase	Decrease	Freeze
1997-1998	Up to 20%		
1998-2000	Regulated by 10%, ACR programs up to 20%		
2000-2004	Regulated by 2%, ACR programs deregulated		
2004-2006			Regulated and ACR programs
2006-2010	Regulated by 4.5% for first year of study and 4% for subsequent years. Profession and graduate programs by 8% for first year and 4% for subsequent years		
2010-2012	Regulated by 4.5% for first year of study and 4% for subsequent years. Profession and graduate programs by 8% for first year and 4% for subsequent years		
2012-2013	Regulated by 4.5% for first year of study and 4% for subsequent years. Profession and graduate programs by 8% for first year and		

	4% for subsequent years	
2013-2017	Regulated by 3%, and professional programs by 5%	
2017-2019	Regulated by 3%, and professional programs by 5%	
2019-2020		Regulated and professional programs by 10%
2020-2022		Regulated and professional programs

Additional Cost Recovery (ACR) to Professional Programs

As discussed, tuition fee framework underwent a massive transformation in 1998. On May 6th, 1998, the Minister of Finance sent a memo¹⁵ to PSE institutions in Ontario outlining the new framework which allowed “universities to enhance the quality of their programs while providing more funding for student assistance and greater accountability to the university community for the use of tuition fee revenue” (MTCU, 1998, p. 2). After years of pressure from PSE institutions, the provincial government deregulated tuition fees for select first- and second-degree programs (Frenette, 2005, 2008; MTCU, 1998). Graduate, some undergraduate and professional programs would be classified as ‘Additional Cost Recovery’ (ACR) programs¹⁶ (MTCU, 1998; Pardy, 2004). Under this policy, PSE institutions were given the autonomy to set their own tuition fees

¹⁵ See Appendix 1

¹⁶ See Appendix 2

for all ACR programs; those considered costly to operate, were in high demand, and/or assumed to provide a high-earning employment post-graduation (MTCU, 1998). However, the MTCU (1998) ultimately determined which programs qualified as ACR, and limited them to the following:

1. graduate programs (including master's, doctoral, graduate diploma and medical/dental residency programs)
2. undergraduate professional programs in Business/Commerce (second-entry programs only), Dentistry, Law, Medicine, Optometry, Pharmacy and Veterinary Medicine; and
3. undergraduate engineering and/or computer science programs, following the approval by the Minister of Education and Training of a plan from the university to double the number of entry-level spaces in computer science and/or high-demand engineering fields of electrical engineering, computer and software engineering and communications engineering by September 2000, with the expectation of doubling total enrolment in these programs by 2003-04.

University programs not included in the ACR list continued to have regulated tuition (MTCU, 1998). Tuition fees were permitted to rise by 5% in 1998-99 and an additional 5% in 1999-2000 (MTCU, 1998). If universities opted to raise their tuition fees, they were required to produce an annual Quality Improvement Plan detailing the benefits of these increases to students (MTCU, 1998). Universities could not exceed an annual maximum tuition increase of 20% for any single program (MTCU, 1998). Under this framework, some undergraduate programs, such as business/commerce, computer science, and engineering, would now be priced at a higher rate. Many became concerned with the impact of these tuition fee increases on accessibility. Of particular interest was the demographic characteristics of students in ACR programs.

Additionally, the ACR framework resulted in considerable tuition differentiation across universities in Ontario for ACR programs (Boggs, 2009). This policy officially severed the tie between tuition fee setting and the formula fee. Market forces and the mandatory institutional student aid provisions would be the only influences on ACR tuition fees.

Reaching Higher Plan

In 2003, the newly elected provincial government in Ontario honoured their platform commitment by instituting a tuition freeze during which a review of Ontario's higher education would be conducted. While the review took place, the provincial government enforced a tuition freeze in which universities could not raise fees for MTCU-funded programs between 2004-06 (MTCU, 2006). Regulated and ACR program tuition fees were frozen at their 2003-04 levels (MTCU, 2006). Any university refusing to cooperate would be subject to an equal reduction in its operating grants (MTCU, 2006). This freeze embedded differential tuition fees stemming from ACR programs. The wide range of differing tuition fees for ACR programs was locked in. To offset the losses of this tuition freeze, the provincial government provided approximately \$48 million in 2004-05 and \$115 million in 2005-06 in funding to PSE institutions (Mattis, 2009). In 2006, a new tuition framework was announced through the *Guidelines for Implementation of the Tuition Fee Policy For Publicly-Assisted Universities, 2006-07 to 2009-10*¹⁷ (MTCU, 2006). This policy document allowed tuition flexibility to persist, but eliminated deregulated tuition fees for ACR programs (MTCU, 2006). In effect, as of 2006-07, former ACR programs were re-regulated and their tuition fees would be subject to an annual government-imposed cap (MTCU, 2006). The tuition fees charged for each ACR program in the 2003-04 academic year would serve as the new base rate and all future increases to program fees would be based on that particular fee (MTCU,

¹⁷ See Appendix 3

2006). Although re-regulated, ACR program tuition fees were not decreased to their pre-1998 levels, solidifying their higher cost (MTCU, 2006).

These changes maintained the policy of tuition differentiation between groups of programs. The MTCU (2006) created new groups which designated all former ACR programs as ‘professional/graduate/high demand’ and all other programs as ‘undergraduate/first-entry’. These categories would prove to be important distinctions as tuition caps varied for undergraduate/first-entry and professional/graduate/high demand (MTCU, 2006). Programs classified as undergraduate/first-entry were set to see a maximum increase of 4.5%, while those under professional/graduate/high demand programs would see a maximum 8% increase over the previous year’s tuition fees (MTCU, 2006). Universities were not permitted to raise overall tuition fees by more than a weighted average of 5% in any given year without the risk of financial penalties (MTCU, 2006). This framework was marketed as a return to regulated PSE tuition fees; however, maintaining the distinction of former ACR programs by labelling them as professional/graduate/high demand programs and assigning them special rates reveals a new, reconstructed version of deregulation. The uneven process of neoliberalization is evident in this change. The sector was not uniformly impacted as not all programs experienced an increase in their tuition fees. In addition, there were differential effects across programs as some programs were selected as professional while others were not. There was also some unevenness as fee increases were followed by freezes, etc. Professional/graduate/high demand programs will inevitably be priced higher than regulated undergraduate/first-entry programs, potentially compromising accessibility for certain students and leading to much larger post-graduation student debts. The government of Ontario made it clear that this new era of PSE would require students to make a larger contribution to the cost, stating:

The government policy seeks an additional contribution from students to meet the quality goals of the Reaching Higher Plan. The student contribution will come from a regulated tuition framework. Increases will be capped, predictable and linked to improvements in quality and access. Institutions will have more flexibility to set fees, but only within this capped, regulated and predictable framework (MTCU, 2006, p.1).

As of 2022, these groupings remain intact, and tuition fees continue to differ between professional/graduate/high demand programs and undergraduate/first-entry programs.

Professional Programs: The Policy Issue

While preparing for the quantitative analysis, there were a number of issues discovered with the ACR/professional programs policies. Key tuition fee documents were requested and received from the MTCU (1998; 2006; 2013; 2016) and thoroughly reviewed. Although a detailed examination of the documents took place, there appeared to be ambiguous information and potential loopholes in the policy. Perhaps the most jarring issue was the absence of an official definition of professional programs. The MTCU (1998; 2006; 2013) has provided a list of programs (updated in 2013) categorized as professional; however, missing in all policy documents obtained is an explicit definition of what professional programs entail. Based on the MTCU (1998; 2006; 2013) list, the assumptions that these programs tend to lead to lucrative professions and low levels of unemployment can be drawn. Yet, without a clear definition, it becomes difficult to understand how programs are designated as such and what they must include to qualify.

In the 2013 policy document, *Tuition Fee Framework and Ancillary Fee Guidelines for Publicly-Assisted Universities 2013-14 to 2016-17*, the most up-to-date appendix contained the names of programs that were labelled as professional (MTCU, 2013). However, upon further examination, it was discovered that universities across Ontario might not be implementing the policy, specifically relating to the regulation of professional program tuition fees. While attempting to construct a list of professional programs from the Classification of Instructional

Programs (CIP), several university websites were consulted for their tuition fees. The University of Toronto (U of T), for example, states on its website that various first-degree undergraduate programs are deregulated¹⁸ and therefore have augmented tuition fees. The same programs classified as deregulated appear on the MTCU's (1998; 2006; 2013) list of professional programs, which are regulated (U of T, 2021). With tuition fees for programs such as commerce priced close to \$16,000¹⁹ per year at U of T (2021), it would seem that deregulated fees may be at play. This is especially problematic given that U of T is the most enrolled university in Ontario (OCUL, 2021). If tuition fees for some undergraduate professional programs are deregulated, many students may be facing financial barriers to these programs and/or large student debts upon graduation. Moreover, the University of Waterloo has referred to some of its professional programs as high-fee programs²⁰ (University of Waterloo, 2021). Whether these programs are professional programs with regulated tuition fees or a different type of program with deregulated fees remains unclear.

These ambiguities contradict the policy, which clearly states that all programs listed as professional are regulated (MTCU, 2006; 2013). Perhaps certain programs are no longer being categorized as professional but rather as second-entry, full-cost recovery or self-funded. If programs are somehow classified as those options, they will be ineligible for government operation grants, permitting them to adopt deregulated fees.²¹

¹⁸ See appendix 5

¹⁹ See appendix 6

²⁰ See appendix 6

²¹ See appendix 7

Several attempts were made to the Ministry inquiring about a policy or memo that may allow first-degree undergraduate programs to adopt deregulated fees or to be re-classified as second-entry, full-cost recovery or self-funded programs. Unfortunately, the Ministry did not reply to the formal requests made; instead, they insisted that someone in the department was “looking at your questions and are working on some responses” (e-mail communication, 2021). Since the initial inquiry was made, it has been over six months, and no response has yet been received.

Application of Policy

An updated list of professional programs has not been published since the policy was extended in 2013. To further complicate matters, the list of professional programs in the 2013 policy document (and the previous ones) only contain general fields of study rather than specific program names (MTCU, 2006). The inclusion of overarching subjects, such as commerce and business administration, makes it difficult to verify whether specific programs are indeed professional or regulated. In addition, there are large discrepancies between the groupings of programs across institutions in Ontario. Some institutions group professional programs under a Bachelor of Science or Bachelor of Arts. For example, the University of Waterloo's (2021) Global Business and Digital Arts program is listed as a Bachelor of Arts.²² According to the tuition differentiation policy, Arts and Science programs are considered regulated; yet this particular program is professional (MTCU, 2006). When corresponding tuition fees are not provided on university websites, it becomes even more subjective to determine whether the program is regulated or professional. Without a more refined and detailed list of professional programs, it is difficult to distinguish between professional and regulated with certainty. This proves to be a significant barrier in policy application and interpretation when conducting research on the matter.

Conclusion

In this chapter, a literature review of the sociology of education and PSE accessibility were produced. This dissertation is influenced by multiple theories and approaches in this field of sociology. Concepts such as social and cultural capital, secondary effects, social mobility, and the corporatization of universities are all linked to the primary research question regarding the accessibility of professional programs and the potential reproduction of class disparities through

²² See appendix 8

PSE. Additionally, the research questions of this dissertation can be located in an intersectional neo-Marxist framework. Influenced by the work of Bowles & Gintis (2011) and their theory of social reproduction through education, this dissertation seeks to explore the social reproduction of the dominant system and inequities through professional programs at the undergraduate level in Ontario. It also takes a critical approach to the PSE system as a meritocracy and explores the ways in which existing forms of capital, both social and cultural (Bourdieu, 1977), and secondary effects (Boudon, 1973) may dictate field of study and educational aspirations. This chapter also laid the groundwork for understanding and unpacking the transformative tuition fee framework in Ontario and its eventual adoption of tuition differentiation (formerly known as ACR), the first deregulation PSE policy in Ontario. Tuition differentiation is an inconsistent and unevenly applied neoliberal policy. Full of unknowns, this policy leaves many questions unanswered. The inconsistencies across institutions further demonstrate the unpredictable and chaotic process of neoliberalization. The large tuition increases resulting from tuition differentiation policy put many economically disadvantaged students at risk of accruing large debts to acquire PSE. The next chapter will explore student debt at great lengths.

Chapter 5: Student Debt

Many students rely on government loans to pay for their PSE. Ontario's current context helps explain the importance of PSE attainment amidst an increasingly precarious environment. Over the past few decades, we have witnessed several defining trends that have transformed the landscape of society. These are largely responsible for the contemporary fragility and turbulent nature of our system. The demise of the welfare state and the shift to the neoliberal regime cannot be overlooked in the PSE discourse. Moreover, the 21st-century economy and the birth of precarious employment have greatly influenced the purpose and value of PSE. The rise of PSE tuition fees and the simultaneous nationwide student debt problem are symptoms of these larger systemic issues. Building off the previous discussions on the role of education, the neoliberalization of PSE, and the precarious nature of the 21st-century economy, this chapter will examine the evolution of the student debt system in Ontario. A neoliberal agenda with minimal state intervention, the privatization of public goods, and a focus on individual responsibility have resulted in major changes to PSE, including the erosion of the grants system to the current system of loans. Exploring the history of student debt and its transformation to an industry will take place below. Tracing the different eras in student debt policy helps uncover the PSE debt industry.

University and college student debt from the 1990s-2021

While few would dispute that student loans can assist individuals from low-income families gain access to PSE, they are also a financial burden placed on those already in a state of economic marginalization. Increasing tuition fees combined with the dominant system of loan-based financial assistance have propelled PSE student debt to historic levels in Canada (CFS, 2013; 2017). As Canadians continue to make sacrifices to prepare themselves for the ever-evolving

workforce, the policy and funding decisions made by the federal and provincial governments are forcing students to take on more education-related debt than any previous generation (CFS, 2013). In 2013, an estimated 425,000 students took on student loans to finance their PSE (CFS, 2013). In Ontario alone, close to 67% of current students and recent graduates are OSAP recipients (CFS, 2019). Furthermore, an actuarial report in 2010 indicated that the legislated student debt ceiling of \$15 billion, set by the Canada Student Financial Assistance Act, would be reached in 2013 (CFS, 2013). In order to accommodate more loans, the federal government increased the legal ceiling to \$19 billion in 2012 (CFS, 2013). To add to these financial woes, the amount of PSE (university and college) student loans owed to the Government of Canada exceeded \$19 billion dollars in 2017 (CFS, 2017). Unfortunately for Canadians, the figure of \$19 billion did not include “additional billion[s] in provincial student debt or personal debts such as credit cards, lines of credit, and family loans” (CFS, 2013). As of 2017, the total student debt in Canada is approximately \$28 billion (CFS, 2017). It will take many students half of their working lives to repay their debt (CFS, 2011).

The price of a university degree can be costly in the contemporary Canadian context. Tuition/compulsory fees alone comprise a large sum, and when essentials such as books, living expenses and transportation costs are added to the equation, the cost of a four-year PSE degree is expected to reach over \$80,000. Of that, residence is predicted to account for \$31,000 (MacLaren, 2014). In Ontario, between 1990 and 2014, tuition fees have risen 180% above inflation while the basic cost of living has surged and median incomes declined (Brownell, 2017; Burley & Awad, 2015; Feige & Yen, 2021; Schwartz & Finnie, 2002). Given these dramatic costs, PSE student debt is a growing concern for Canadians alike.

Canada Student Loans Program

The Canada Student Loans Program (CSLP), formally known as the Dominion-Provincial Student Loan Program, was created in 1964 with the intention of improving access to PSE for all Canadians by providing financial resources. The program's main purpose is to "ensure that all Canadians, regardless of their social background and family income, [have] the financial means to attend college or university" (Finnie, 2002, p. 155). The CSLP, an initiative funded by the federal government, works in conjunction with provinces to distribute PSE funding to students. Nine provinces and the Yukon Territory currently participate in the program, while Quebec, the Northwest Territories and Nunavut have alternative provincial/territorial assistance programs and do not directly participate in the CSLP (Kapsalis, 2006). The CSLP is heavily relied upon by students to finance their PSE; currently, it serves one-third of all full-time studies in participating regions (Kapsalis, 2006). Despite the federal government's central role in the CSLP, it is the provincial programs that ultimately determine an individual's loan eligibility and funding offer. As it currently stands, under the 60/40 formula, the federal government provides 60 percent of a student's financial aid (based on their assessed need), while the provincial governments are required to cover the remaining 40 percent (Government of Ontario, 2021). Each province determines an individual's financial need by comparing their estimated educational costs (tuition, books, living costs, related expenses, etc.) to their personal financial standing (estimated summer income, scholarships, bursaries, parental income, etc.). If financial assistance is needed due to a lack of adequate resources, a financial support package will be made to the student, pending proof of enrollment. Unlike bank loans, the eligibility process ensures "equal access to the student loan system...to all individuals who [qualify] without regard to expected future earnings, family background, or any other factor that a bank would normally take into consideration when deciding

whether to issue a loan” (Finnie, 2002, p.157). One of the main benefits of the program is that during the period that students are completing their PSE, the federal government pays the interest on their loans. Once students have graduated, they will be required to consolidate their loans and begin the repayment process.

Furthermore, the CSLP has undergone many changes since its implementation in 1964. Prior to 1995, the federal government guaranteed all Canadian student loans issued and covered all defaults (Finnie, 2002). Between 1995 and 2000, changes were made to the program, as banks carried the default risks in exchange for a 5 percent upfront payment of the value of all loans consolidated in a given year (Finnie, 2002). In 2000, important policy changes were made that no longer saw the government share the possible risk of defaulted loans with financial institutions (Finnie, 2002). The CSLP now finances all new loans and holds those debts directly (Finnie, 2002). As a result, “the government is, therefore, not only the gatekeeper for student loans (as before), but also provides the funds, manages repayment (through an agency it has hired into existence for these purposes), and assumes the risk of default” (Finnie, 2002, p.157).

In addition to offering financial support packages, the CSLP has a number of programs designed to assist students who have graduated and are experiencing financial difficulties during the repayment stages. Prior to 2009, these programs included Interest Relief, which temporarily suspended the requirement for students to pay the interest on their PSE student debt, while the provincial/federal government covered the costs (Government of Canada, 2014). The objective of this program was to aid students who were facing unemployment or low income to meet their repayment obligations (Government of Canada, 2014). Based on an individual’s need, the program was granted for periods of six months, reaching a maximum of 30 months (Government of Canada, 2014). If additional support was required, students could qualify for the Extended Interest Relief

program which provided an additional 24 months of interest-free support (Government of Canada, 2014). The Debt Reduction in Repayment program lowered the principal loan of students with financial burdens, resulting in a lower/manageable monthly payment (Government of Canada, 2014). During their lifetime, a student could receive up to three reductions (a maximum of \$26 000) if eligible (Government of Canada, 2014). Other assistance programs included a Revision of Terms feature as well as a Permanent Disability Benefit.

In August of 2009, the programs designed to assist students experiencing financial difficulties during the repayment stages were replaced by the Repayment Assistance Plan (RAP) (Government of Canada, 2014). Following public debate and a strong push for policy change, the federal government began recognizing the difficulties recent graduates encountered in repaying their PSE loans and as a result, created RAP (Government of Canada, 2014). The RAP, effective November 2010, differs from previous legislation by capping the repayment period to 15 years, determining an individual's payment on the basis of income and family size, and restricting payments to a maximum of 20 percent of their income (Berger, 2013; Government of Canada, 2021). In addition, those participating in the RAP qualify to have their interest covered by the federal government for a period of up to ten years (Berger, 2013). This provides those with student debt the opportunity to make direct payments to their loan principal, rather than to the interest (Berger, 2013). If eligible and accepted into RAP, the Government of Canada will pay the interest owing that revised payments do not cover (Government of Canada, 2021). After 60 months of RAP or 10 years after graduation, whichever comes first, the governments will begin to cover both the principal and interest that exceeds reduced monthly payments (Government of Canada, 2021). If RAP eligibility is maintained, the balance of loans are paid off incrementally, and repayment requirements will not exceed 15 years upon graduation (Government of Canada, 2021).

Ontario Student Assistance Program

The Ontario Student Assistance Program (OSAP) is a financial aid program funded by both the governments of Ontario and Canada (Government of Ontario, 2014). Eligible PSE students in Ontario, who require financial assistance with their educational pursuit, are required to apply to the program. As previously mentioned, the government of Ontario determines an individual's financial need by comparing estimated educational costs to personal financial standing. Once an assessment has been made and information has been verified, a financial package including repayable loans, non-repayable grants, bursaries and/or scholarships will be offered (Government of Ontario, 2021). PSE students with large financial barriers can receive a loan from the CSLP and the OSAP, as well as additional grant eligibility. In order to qualify for the OSAP, students must be Ontario residents who are Canadian citizens, permanent residents or protected persons (Government of Ontario, 2021). Furthermore, to determine eligibility, the government considers a plethora of factors such as status (married or dependent student), school, program of study, course load (full-time or part-time), study period (fall/winter term, summer term), academic progress, education expenses and financial contribution (personal and family contribution) (Government of Ontario, 2021). Individuals who have defaulted on a student loan, failed a credit check, declared bankruptcy or are international students may not be eligible for the program (Government of Ontario, 2021).

The Grant Era: Pre-1994

The financing of PSE in Canada has shifted dramatically since the 1990s. As previously discussed, a pursuit once heavily subsidized by government grants has progressively shifted to a system contingent upon both federal and provincial/territorial loans. Prior to the changes made to the CSLP in 1994, the cost of PSE did not overwhelmingly fall upon the students themselves

(Schwartz & Finnie, 2001). Various factors such as increasing tuition fees, a rise in enrollment rates, and budget cuts led to a PSE system primarily financed by students (Schwartz & Finnie, 2001). The majority of universities in Canada are publicly funded, relying on tuition fees and government grants to form a large portion of their revenue (Schwartz & Finnie, 2001). Prior to 1994, government grants to university operating funds were the dominant form of operating revenues for universities, while tuition fees contributed only a miniscule portion. Schwartz & Finnie (2001) recall that “in 1979, the situation was different — government grants [to university operating funds] comprised 83.8 percent of operating revenues and tuition fees only 13.3 percent” (p. 497). The percentage gap began decreasing throughout the 1990s as seen in 1998, when government grants to university operating funds accounted for 64.5 percent of operating revenues while tuition fees rose to 30.6 percent (Schwartz & Finnie, 2001).

The financing of PSE was much more manageable prior to the policy changes of 1994. The majority of university students were able to afford their education without direct government assistance in the 1980s due to relatively low tuition costs (Schwartz & Finnie, 2001). Those from families with a low socioeconomic status that required financial support were awarded available grants (to subsidize education expenses) from provincial programs (Schwartz & Finnie, 2001). Between 1979 and 1989, enrollment rates for full-time students increased by 38 percent, creating the need for increased university operating expenditures (Schwartz & Finnie, 2001). Real government grants did not keep pace, rising by just 11 percent. As a result, the harmonious system of low tuition fees and generous government grants was compromised. It was later revealed that,

...in an effort to cover the growing gap between operating expenditures and government grants, universities raised tuition fees, over this period, by 7 percent more than the Consumer Price Index. These trends continued into the 1990s. Overall university enrolments, on a full-time equivalent basis, grew by just under 4 percent in the 1990-1998 period. At the same time, large federal and provincial budget deficits affected the level of real government grants. In fiscal 1989, those grants were \$3.9 billion in 1986

dollars and hit a peak of \$4.3 billion in fiscal 1993. By fiscal 1997, government grants had fallen to \$3.6 billion, below their 1989 level (Schwartz & Finnie, 2001, p. 498).

As tuition fees continued to rise alongside large federal and provincial budget deficits, limiting the number of available grants, PSE students were increasingly in need of financial assistance. Although tuition fees were steadily rising for a ten-year period between 1984 and 1994, the maximum amount of financial assistance available from the CSLP was held constant (Schwartz & Finnie, 2001). However, this system was unsustainable, and as a result, in 1994, the CSLP increased the maximum amount of money a PSE student could borrow by more than 50 percent (Schwartz & Finnie, 2001). Provinces followed the trend by replacing provincial grant programs with provincial loan programs and ultimately put an end to the grant era in PSE in Canada (Schwartz & Finnie, 2001).

The Loan Era: 1994-2005

The CSLP was completely restructured in 1994 with the passage of the *Canada Student Financial Assistance Act* (Schwartz & Finnie, 2001). The federal government budget deficit, alongside an increase in neoliberal practices, led to heavy clawbacks in social/universal programs, including resources for PSE. PSE in Canada was heavily subsidized by government grants prior to the policy changes of 1994, and since then, has progressively shifted to a system founded upon both federal and provincial/territorial loans. In 1994, the CSLP increased the maximum amount of funds a PSE student could borrow by more than 50 percent (Schwartz & Finnie, 2001). Provinces followed the trend by replacing grant programs with provincial loan programs and ultimately put an end to the grant era in PSE in Canada. This transition occurred for various reasons, such as enrollment increases, but none more so than the federal and provincial budget cuts. In addition, a neoliberal agenda comprising of minimal state intervention, the privatization of public goods, and individual responsibility were in the process of implementation into the wider Canadian economy.

As funding could not keep up with growing enrollments, “government spending as a share of university operating revenue between 1994 and 2004 declined in all provinces. The decrease was most pronounced in Ontario where the share went from 73% to 49%” (Shanahan & Jones, 2007, p. 38)

As previously stated, the federal government is required to make transfer payments to the provinces in order to support PSE (Shanahan & Jones, 2007). In 1995, the federal government under Liberal Prime Minister Jean Chretien released a budget which significantly decreased financial transfers to the provinces (by \$14 billion) for health, education and welfare in order to reduce the federal deficit (Shanahan & Jones, 2007). Shortly thereafter, a new system, the Canada Health and Social Transfer (a system implemented in 1996/1997 and terminated in 2004/2005), was created to transfer the funds (Shanahan & Jones, 2007). Similar to its predecessor in both its objective and outcome, the program was designed to cut the federal government’s spending/deficit and resulted in a \$6 billion loss to provinces for investment in health, PSE and social welfare (Shanahan & Jones, 2007). Ultimately, in April of 2004, the Canada Health and Social Transfer was split into two separate transfers: the Canada Health Transfer and the Canada Social Transfer (which covers PSE and welfare) (Shanahan & Jones, 2007). If funds devoted to PSE were not already scarce, PSE and welfare were awarded a mere 38% of the transfer, while health accounted for 62% of the transfer funds (Shanahan & Jones, 2007). Provincial governments responded to these clawbacks by either reducing grants or increasing tuition fees (Shanahan & Jones, 2007). Moreover, during the mid to late nineties, federal and provincial/territorial loans became the most dominant form of financial assistance relied upon by Canadian students. Grants, comprising 94% of all non-repayable assistance in 1991–92, declined to only 51% in 1997–98 (and to 38% in the 1999–2000 year), before rebounding to 75% in 2002–03 (Berger, 2013). In addition, the rise in

PSE student loans in the nineties saw borrowing increase from \$1.5 billion in 1990–91 to just over \$3.75 billion in 1996–97 (Berger, 2013).

However, PSE student loans decreased since their peak in the mid to late nineties. Reasons for this slight decrease include the “tightening of eligibility and contribution criteria (in Quebec and Ontario), tighter restrictions on loans to students at private vocational institutions (in particular in Newfoundland and Labrador and Ontario), [and] changes to the definition of an independent student” (Government of Ontario, 2014). Additionally, as PSE student debt accumulated for many young students in Ontario, the provincial government implemented a new grant to subsidize education expenses which capped the amount of debt a student can accumulate per two-term academic year to \$7,500 and three-term academic year to \$11,250 (Government of Ontario, 2021a).

The Capped Era: Post-2006

The capped era represents the effort to undo some of the damage caused by funding cuts in the 1990s. In 2006, as a response to the public backlash stemming from the severe funding cuts during the loans era, the provincial government of Ontario set an annual cap on the amount a PSE student can incur during a two-term and three-term academic year. The Ontario Student Opportunities Grant caps the amount of PSE debt a student can accumulate per two-term academic year to \$7,300 (currently \$7,500) and three-term academic year to \$10,500 (currently \$11,250) (Government of Ontario, 2021). In addition to this grant, the ‘30% off Ontario tuition’ grant, was implemented in 2012 (Government of Ontario, 2014). This era represents the attempt to reinvest in public PSE, as well as a means to assist individuals in managing their large and burdensome PSE student debts. Although tuition fees continue to increase and loans are becoming larger in

size, governments have made a ‘promise’ to the public to invest further in PSE and the future generation of Canada.

Student Debt and Access to PSE

Research on PSE student debt conducted during the grant era (pre-1994) generally indicates that although individuals experienced some difficulties in managing their PSE student debt, they were not widespread or extremely onerous. For example, Schwartz & Finnie (2001) examine the repayment experience of graduates of the class of 1990, as well as identify the groups of borrowers who were most burdened by their loan repayment. Schwartz & Finnie (2001) report the results of an econometric analysis of the borrowing and repayment patterns of recent Canadian bachelor’s level university graduates. Relying on data from the National Graduate Survey²³, Schwartz & Finnie (2001) trace the trends and difficulties experienced by graduates with PSE student debts. Schwartz & Finnie (2001) indicate that “over 20 percent of the NGS Bachelors’ graduates reported repaying their loans in full within two years of graduation... [while] that the proportion of all bachelor’s graduates who experienced difficulties with the repayment of student loans was in the range of 7-8 percent” (p. 506). Results further indicate that rising tuition rates lead to concerns of access to university, especially for those from middle and lower-income families (Schwartz & Finnie, 2001). Moreover, among both women and men, graduates with low current earnings and those in fields likely to have low lifetime earnings (fine arts, humanities, social sciences) reported significantly greater problems with repayments (Schwartz & Finnie, 2001). Women also reported more difficulty in repayment than men (Schwartz & Finnie, 2001).

²³ A Statistics Canada survey designed to collect details on topics such as: i) the extent to which graduates of postsecondary programs have been successful in obtaining employment since graduation; ii) the relationship between the graduates' program of study and the employment subsequently obtained; iii) the type of employment obtained and qualification requirements; iv) sources of funding for postsecondary education; and v) government-sponsored student loans and other sources of student debt.

Additional studies which examine PSE student debt in the grant era produce similar results to those of Schwartz & Finnie (2001). MacLaren (2014) also claims that although some students experience difficulties in the repayment process of their post-secondary student loans, a large portion were able to pay back their entire PSE loans (within two years), or were currently in the repayment process, with few difficulties. Those who report experiencing difficulties are those with larger amounts of PSE student debt at graduation (individuals who borrow more and come from lower socioeconomic families), students who graduate from low-earning fields of study (fine arts, humanities, social sciences) and women (Schwartz & Finnie, 2001). Important to note is that during the grant era, post-secondary graduates had not yet accumulated massive amounts of student debt since a larger portion of PSE was subsidized by the government through grants (to students to subsidize education expenses) in comparison to the current context, and therefore the repayment of their loans was much more manageable.

The loans era (1994-2005) exposes a different side to the manageability of PSE debt in Canada. As previously mentioned, rising tuition fees as well as draconian cuts to PSE funding by both the federal and provincial governments translated into a new system which saw significant increases in loans, rather than grants (to students to subsidize education expenses). As students began to accumulate more PSE student debt, new experiences as well as difficulties emerged.

Kapsalis (2006) explores the factors affecting the repayment of student loans at the university level in Canada. Specifically, the factors that affect the ability of students to repay their loans obtained under the CSLP. To pursue this research, Kapsalis (2006) analyzes a new database created by linking CSLP records to income tax records from the Statistics Canada Longitudinal Administrative Database (LAD). The analysis examines the financial situation of students in 2003 who consolidated their loans in the loan year 1994-1995. Results indicate that, in 2003 (nine years

after consolidation), 39% of individuals with PSE student debt had repaid their loans in full, 30% were still making payments, while the remaining 31% of those with debt were in default (Kapsalis, 2006). The main reason cited for the difference in the ability to manage PSE student debt is income size, rather than the total amount of debt (Kapsalis, 2006). The average debt size for those who graduated in 1995 is \$12,200, including both federal and provincial loans (Kapsalis, 2006). Moreover, between 1995 and 1997, individuals who defaulted on their PSE student debt in the first three years had an average income in current dollars of \$13,800, while those who paid off their loan in full had an average income of \$24,200 (Kapsalis, 2006). This suggests that the income of students post-graduation is much more significant than the actual amount of the loan (Kapsalis, 2006). On the contrary, the amount of a loan is a significant barrier only when the loan size is very large (Kapsalis, 2006). Most students with PSE student debt graduate with similarly sized debts, but receive different wages in the labour market, suggesting that income is a more important factor (Kapsalis, 2006). Kapsalis (2006) claims that,

...for the most part, the amount of the loan makes little difference. The only exception is for very large amounts. Within any given income bracket, the default rate is the same for loans up to about \$20,000 (only federal loans). Above that loan level, the default rate jumps up by about 20 percentage points, except for those with incomes above \$40,000. However, only a very small proportion of debtors (2%) had a CSLP debt (federal component) above \$20,000 in 1994-95 (p. 11).

Findings in the loans era suggest that the ability of students to repay their loans heavily depends on their future earnings (Schwartz & Finnie, 2001). Additionally, future earnings are directly linked to the type of education (field of study) an individual possesses. These findings highlight the importance of access to full-time, full-year (steady, living wage income) employment in order for recent graduates to repay their student loans.

Similarly, Schwartz (1999) examines the financial well-being of Canadian post-secondary graduates with student debt in the loan year of 1997. Results highlight the increasing difficulties

individuals face in managing their student debt. Many PSE graduate with substantial amounts of student debt (Schwartz, 1999). Schwartz (1999) recalls that, “increased student loan borrowing began in the first half of the 1990s; as the borrowers leave school in the second half of the decade, the increased burden of repayment is becoming clearer” (p. 337). These difficulties are well documented, as

“even among borrowers who are post-secondary graduates, the proportion of those reporting significant hardship in repaying their loans is fairly high (between 20–30 per cent of borrowers). Loss rates, prior to the 1995 decision to shift the default risk to lenders, were in the 10-12 per cent range. The rise in the number and proportion of Canadians declaring bankruptcy with student loans among their debts was also a clear danger signal” (Schwartz, 1999, p. 338).

The aforementioned trends in the loans era exemplify the increasing difficulties individuals face in managing their PSE student debts.

Furthermore, the capped era (post-2006) reveals a more contemporary account of the difficulties individuals face in managing their PSE student debts. As post-secondary students in both Ontario and Canada accumulated large amounts of student debt during the loans era, many provinces, including Ontario, implemented policies designed to improve the financial situation of students in the capped era. Specifically, the government of Ontario created the Ontario Student Opportunities Grant in 2005, which capped the amount of debt a student can accumulate per two-term academic year to \$7,000 (increased and currently \$7,300) and three-term academic year to \$10,500 (increased and currently \$10,950). The Ontario Student Opportunities Grant, alongside the 30% off Ontario tuition grant (implemented in 2012) are attempts to reinvest in public PSE while assisting individuals in managing their PSE student debts. With increasing precariousness within the Canadian labour market, individuals are facing more difficulties in managing their PSE student debts.

Berger et al. (2007) explore PSE student debt, highlighting its trends and evolutions over the past decade in Canada and Ontario. They focus on the fiscal well-being of university students and investigate whether or not the repayment of student debt is feasible for many Canadian graduates. Through the statistical analysis of data from the NGS and the Graduating Students Survey, Berger et al. (2007) are able to trace the trends/increases in PSE student debt between the years of 2000-2009. In 2006, PSE student debt increased by \$781 and later, in 2009, those graduating with debt owed an average of \$25,778 in Ontario (Berger et al., 2007). While the average amount of PSE student debt in Ontario did not increase dramatically between the years of 2000 and 2009 (practically due to the Ontario Student Opportunities Grant), debt became a more common occurrence in the province during this decade (Berger et al., 2007). Berger et al. (2007) claim that “in 2000, 56 percent of respondents in the CUSC Graduating Students Survey reported having accumulated debt in Ontario. The rate grew to 57 percent in 2003, 58 percent in 2006 and 64 percent in 2009” (p. 12). This growth in the participation of post-secondary student loans can be accounted for by the high upfront costs of such a pursuit. PSE, not only in Ontario, but across the country (with the exception of Quebec and Newfoundland & Labrador), is no longer financially achievable for many middle and lower-income families.

Similar to trends in the loans era, the ability to repay one’s PSE student debt, is contingent upon the access to stable, well-paid, permanent employment upon graduation. Burdman (2005) emphasizes that, “students’ ability to repay their loans after they leave school depends on their being able to obtain a well-paying job, which depends in part on economic conditions when they finish their education. The uncertainties surrounding the ability to meet repayment obligations are a particular problem for students whose academic success is uncertain or whose families lack the resources to help them financially if they have difficulty repaying their loans” (p. 4) The ability to

manage a post-secondary student loan is heavily compromised if a graduate does not possess a well-paying job. As this scenario is common in the contemporary Canadian context, many post-secondary graduates must rely on financial assistance from their families in order to manage their loans. The inability to secure employment providing financial stability has further marginalized those who cannot rely on their families for financial assistance.

A study conducted by Lochner et al. (2013), using survey and administrative data from the Canada Student Loan Program, reveals that a great deal of post-secondary graduates earning incomes above \$40,000 are able to make standard loan payments, while repayment problems are common among graduates with annual incomes less than \$20,000. For those who suffer from unemployment, underemployment or who are concentrated in low-wage employment (which is disproportionately young people, visible minorities and women), savings and family assistance are relied upon in order to make standard loan payments (Lochner et al., 2013). Lochner et al. (2013) elaborate by adding that,

“Altogether, these results suggest that savings and family assistance serve as very important sources of ‘insurance’ for borrowers in the event that they experience periods of low income or unemployment. Borrowers with low income and no access to additional – resources (from savings or family) are more likely than not to experience some form of – repayment problem. At the opposite extreme, high income borrowers with access to modest savings *or* family support are very unlikely to experience repayment problems, as are low-income borrowers with modest savings *and* family support. Access to some form of financial resources – from work, savings, or family – is critical in determining which – borrowers experience repayment difficulties (p. 17).

Conclusion

As mentioned above, precarious labour and the precarious economy of the 21st-century function as severe barriers for PSE graduates in the process of repaying their student loans. With the likelihood of recent post-secondary graduates experiencing unemployment, underemployment or low-wage employment becoming more common, the new trend of external assistance from

families or savings in order to meet loan repayment obligations emerges. This is particularly alarming as those who take on PSE loans are, prior to this investment, economically marginalized, and therefore assistance from family members or savings is unlikely. The primary questions of this research are whether higher tuition fees for professional programs are barriers to enrollment for disadvantaged students and how student debt can reproduce class disparities given the precarious nature of the 21st-century economy. The Methods and Survey Data section in Chapter 6 that follows will describe how these questions will be addressed.

Chapter 6: Survey Data & Methods

The following chapter describes survey data and methods used for the analysis. A description of the National Graduates Survey (NGS), the survey participants, data issues and resolutions, weighting of the data, hypotheses, and limitations of the survey are presented. An in-depth explanation of hypotheses 1-5, including the rationale behind the choice of variables also occurs. Through hypotheses 1-2, I will predict the student demographics of professional and regulated programs. Furthermore, hypotheses 3-5 focus on the predictors of student debt and the long-term struggles of large debt accumulation. These models will help to understand whether PSE, through professional programs and debt, is functioning as a site of class reproduction. Since class is often entangled with other social markers, an intersectional analysis is adopted. It is crucial to investigate the outcomes of the neoliberalization process of PSE, especially after the implementation of tuition differentiation. The commodification of PSE through policies such as tuition differentiation has meant that PSE does not serve as a great equalizer; instead, through neoliberalization processes PSE reproduces inequalities in social class. Even when PSE is attained, the outcomes of the investment are not distributed equally. Especially in the context of the precarious 21st century economy, debt can be detrimental to the long-term financial health and overall well-being of specific groups.

Sampling Frame

The target population consisted of all students who graduated from their program in 2015 from a recognized public post-secondary Canadian institution and who were living in Canada at the time of the survey. This included graduates from programs in specialized certificates or diplomas, and bachelor's, master's or doctoral degrees. Those from the Colleges of Applied Arts

and Technology (CAAT), Collèges d'enseignement général et professionnel (Technical CEGEP in Quebec), community colleges, technical schools or similar institutions, skilled trades from PSE institutions (i.e., community colleges and technical institutes that offer certificates or diplomas at the trade level) were also included in the NGS. Graduates excluded from the NGS were those from private PSE institutions (i.e., computer training and commercial secretarial schools), continuing education courses at universities and colleges (unless they led to a degree or diploma), and apprenticeship programs. Graduates from all Canadian provinces and territories were included in the study. Table 6 presents the data collection results for the 2018 NGS. The following two types of response rates are presented in Table 9.

Table 9

NGS Response Rate by Province / Territory – Unweighted

Province/Territory	Master File	Share File
Newfoundland and Labrador	63.7%	57.9%
Prince Edward Island	58.7%	52.7%
Nova Scotia	62.6%	57.2%
New Brunswick	63.9%	57.1%
Quebec	68.2%	60.4%
Ontario	60.0%	52.2%
Manitoba	65.6%	57.1%
Saskatchewan	63.5%	55.1%
Alberta	63.5%	56.2%
British Columbia	58.1%	49.9%

Yukon	57.9%	43.1%
Northwest Territories	60.7%	42.6%
Nunavut	30.6%	27.1%
Canada	62.8%	55.4%

Note. Statistics Canada, National Graduate Survey 2018 PUMF User Guide

Data Collection Methods

The 2018 NGS data collection period was approximately five-months long, running from Thursday, June 7, 2018, to Friday, November 9, 2018 (NGS, 2018). The first phase of data collection was conducted exclusively online by respondents through a self-completion survey (NGS, 2018). Participants were recruited in early June 2018 through paper invitation letters (mailed) and electronic invitation emails (NGS, 2018). Reminders, three paper reminder letters and four electronic reminder emails, were sent to participants during the five-month collection period (NGS, 2018). Follow-up data collection began in early July through interviewer-administered Computer Assisted Telephone Interviewing (CATI) (NGS, 2018). Proxy responses were not included in the survey (NGS, 2018). If the timing of the interviewer's call was inconvenient, the appointment was rescheduled to accommodate the participant (NGS, 2018). Call backs were made when there was no answer (NGS, 2018). Various tracing methods were used when participants could not be reached through the contact information (NGS, 2018). For those who refused to take part, a paper letter detailing the importance of the survey and the value of the data was mailed (NGS, 2018). The interviewer then made one last phone attempt. The 2018 NGS

had a response rate of 63%, with close to 2/3 of the response cases self-completed online by participants (NGS, 2018).

Weights

For the analysis, the NGS data were weighted using the weight variable provided by Statistics Canada. For the estimates produced by the NGS to be representative of the target population, rather than solely the sample, survey weights were incorporated (NGS, 2018). As indicated by Statistics Canada, it is difficult to yield a perfect sample that is an accurate representation of the number of graduates in the target population.²⁴ With imperfect frames, the weight can yield biased estimates. For the NGS (2018), various weight adjustments techniques were used to compensate for different imperfect frames. The final weights were generated by adjusting the weights that were acquired after the non-response adjustment to the survey frame within post-stratification groups (NGS, 2018).

Although the debate of weighting versus not weighting has various, and at times, conflicting opinions, it was advised, through Statistics Canada to apply the weights. Statistics Canada communicated that using the weights would make the data representative of the postsecondary graduates of 2015 for the Canadian population.

Survey Description

The data are drawn from the 2015 class of the National Graduates Survey (NGS). The NGS is a voluntary Statistics Canada survey of graduates from publicly funded post-secondary institutions in Canada.²⁵ Conducted every five years, the 2018 NGS is the most recent at the time

²⁴ Non-responsive effects were reported for graduate students (not included in this research) and students from Yukon, Northwest Territories, and Nunavut. Those in the Territories account for less than 0.323 of the population. Unfortunately, it was not possible to exclude them from the study due to the nature of the NGS, however, Statistics Canada

²⁵ All ten provinces and three territories

of this study. Participants completed an online questionnaire three years following graduation (i.e., 2018) which included detailed information on demographics, source of funding (i.e., student loans, savings, etc.), and program of study completed in the reference year. It is a cross-sectional sample survey with a stratified simple random sample design. Location of institution (province or territory of the institution) and level of study (college, bachelor's, master's, doctorate) were the two variables used for stratification. The 2018 NGS had a response rate of 63% and a sample size of 59,795. Survey weights were added to the analysis to allow estimates produced from survey data to be representative of the target population. Historically, those participating in the NGS completed the survey by telephone with a Statistics Canada interviewer through a computer-assisted telephone interview (CATI). For the first time in 2018, NGS participants were able to self-complete the online survey, which included 234 questions.

Although the NGS has many questions regarding social markers and demographics, it contains no information on family income; it does, however, include the highest level of parental education at a detailed level. The use of parental education as a proxy for family income has become more popular in the accessibility literature in recent years. Various studies conclude that parental education is more strongly associated with PSE access than family income (Drolet, 2005; Finnie et al. 2008; Frenette, 2005, 2008; Knighton and Mirza, 2002).

The following information was weighted and filtered for Ontario, bachelor's degree, full-time students. Of the 72,669 participants, most in the survey were female (62.7%), able-bodied students. The majority (58%) did not self-identify as a member of a visible minority group and were more likely to be Canadian citizens by birth than not. Participants were generally single, divorced, widowed, or separated. Upon entering their 2015 programs, the majority of participants were students (i.e., high school), however, many of them were employed during their program in

some capacity. While most students did not have work placements in their programs, a large portion did. Overall levels of parental education, both mother's and father's, were lower than a bachelor's degree for most participants.

Generally, those who participated in the survey had high overall grade averages of As and Bs. Students tended to select their institution based on the availability of the program, the proximity to their home, or the reputation of the institution. Many selected their 2015 program based on personal or professional interest, while a small minority was motivated by employment opportunities. If given the opportunity to select the same field of study/specialization again, most would, while a small minority would not. For those who would select a different program, the reasons varied from not enough jobs available in the field, to change of interest, to field of study did not provide job skills needed. Regarding program enrollment, a small majority of students, 25%, were enrolled in a social and behavioural sciences and law program. The remaining students were enrolled in a variety of different programs: 15% in business, management and public administration, 14% in agriculture, natural resources and conservation, 10% in physical and life sciences and technologies, 9% in education, 8% in architecture, engineering, and related technologies, 6% in humanities, 5% in visual and performing arts, and communications technologies, 4% in mathematics, computer and information sciences, and 3% in "other".

During their studies, most students applied for a government-student loan program (see Table 10). For those with loans, the majority expected to have them paid off within 4 to 6 years. For students without government loans, the majority used employment earnings or savings, or parents, family, and friends as a source of funding. The three main sources of funding used by students were employment earnings or savings, government student loans, and parents, family, or friends.

Table 10*Government-sponsored Student Loans Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43964	60.5	60.6	60.6
	No	28598	39.4	39.4	100.0
	Total	72562	99.9	100.0	
Missing	Not stated	106	.1		
Total		72669	100.0		

Most, 60%, received government-sponsored student loans. Of these students, the majority had government-sponsored student loans between \$10,000 to more than \$25,000 at the time of graduation. By the time the survey was conducted, most participants had either paid off all their student loans or had between \$10,000 to more than \$25,000 remaining.

Most participants attained permanent, full-time jobs post-graduation. Although not all graduates were working in a job related to their 2015 programs, most were to some degree. They held occupations in many different sectors: 23% were in education, law, social, community and government services; 23% were in business, finance and administration; 15% were in sales and service; 15% were in natural and applied sciences and related; and 13% were in health. They were making an annual wage or salary between \$39,999 to \$69,999 and had a total personal income between less than \$10,000 to \$59,999 in 2017. Since graduating in 2015, most of the participants have not pursued further education.

Hypotheses

There are five hypotheses guiding this analysis. All five were formulated by drawing from a combination of existing data in the area of PSE accessibility (previous studies and their results), theoretical frameworks from the sociology of education, and developments arising from

neoliberalization processes. The individual rationale behind each hypothesis is explained below. Critical theorists in the sociology of education have argued that the major goal of education has been to reproduce the social and economic inequities embedded in the economic order, all while maintaining the façade that education is a vehicle of upward social mobility and the great equalizer. These hypotheses are influenced by this framework and aim to investigate whether enrollment in professional programs is reproducing the social order by excluding disadvantaged groups. Additionally, it seeks to explore the ways in which accumulation of student debt can hinder the ability of upward social mobility and PSE's role as the great equalizer.

Program Choice Hypotheses

H1: Enrollment in regulated or professional programs is a function of source of funding, parental education, gender, minority status, citizenship, and region of the institution (Ontario).²⁶

H1 Rationale

The first hypothesis was selected to determine whether axes of exclusion (i.e., SES, gender, race, status) are operating as potential barriers to enrollment in professional programs in Canada and Ontario. This model will reveal the student demographics of professional programs in Canada and Ontario. Both source of funding²⁷ and parental education²⁸ (used as a proxy for socioeconomic status) were selected as variables to explore the possibility of professional programs reproducing class disparities. Theories in the sociology of education (Althusser, 2006; Bowles & Gintis, 2011) have long documented education as a mechanism of the reproduction of class positions. Existing forms of capital, both social and cultural (Bourdieu, 1977), and secondary effects (Boudon, 1973)

²⁶ Regulated_professional_program = f(main_source_of_funding; mother's_edu; father's_edu; minority_status; gender; status_in_Canada_at_time_of_interview; region_of_institution) + e

²⁷ Loans or self-funded

²⁸ Mother's and father's education

may dictate field of study and educational aspirations. Those from lower-SES backgrounds, presumably those who must take on student loans to pay for their PSE, and those from families with low levels of parental education, may not possess enough capital²⁹ to pursue enrollment in professional programs. Various studies have documented a strong association between students' participation rates and parental education. Much of the research has revealed that those from more affluent families are more likely to participate in PSE than those from low-income families or those with low levels of parental education (Dooley et al., 2009; Finnie et al., 2008; Frenette, 2005, 2008; Pardy, 2004). Additionally, with the higher tuition of professional programs, students relying on loans may find the augmented cost to be a deterrent to enrollment.

The variable gender was selected in order to explore the gendered outcomes of PSE. As discussed in Chapter 2 in the section on FPE and intersectionality, gender is linked to class and is an integral part of its analysis. If class is being reproduced through professional program enrollment, the gendered implications can be severe. Research has already confirmed that women tend to be more educated³⁰ than men but are also less likely to be enrolled in science, technology, engineering, and mathematics and computer science programs (STEM), many of which are classified as professional programs (Wall, 2019). If this trend persists in professional program enrollment, the implications can be detrimental to women as they are overrepresented in poverty. Moreover, minority status is also included in the model because of its link to class and previous data that identifies it as a strong predictor of PSE participation (Robson et al., 2018). Racialized students tend to be underrepresented in PSE which can lead to future economic and social disparities (Robson et al., 2018). Furthermore, racialized people disproportionately suffer from poverty, and are more likely to come from lower SES backgrounds further compromising their

²⁹ Social and cultural

³⁰ Have higher levels of PSE

likelihood to PSE in general and their potential enrollment in professional programs. However, they are also reported to have higher rates of participation in STEM programs (science, technology, engineering, and mathematics and computer science) which are predominantly professional programs (Finnie & Childs, 2018).

The inclusion of status in Canada as a variable was determined by the literature on PSE accessibility that demonstrates that immigrants³¹ are more likely to pursue PSE than non-immigrants (Finnie, 2011; Finnie & Mueller, 2008; Vaccaro, 2012). With that being said, exploring the likelihood of immigrants in professional programs will help determine whether citizenship can be an axis of exclusion. Lastly region of institution was applied to investigate the process of neoliberalization across space (i.e., provinces). Professional programs are an outcome of the commodification of PSE. The variegation of neoliberalism, the ability to transform to meet the needs and demands of the geoinstitutional context, is arguable its greatest feature. It has the ability to morph into various shapes, forms, and stages depending on the pre-existing conditions and structures in place. Comparing the difference between Ontario and the rest of Canada will allow us to see the different levels or degrees of neoliberalism in practice. Is PSE being commodified in the same way across Canada, or is it a spatial feature of Ontario? Additionally, the political economy of provinces (i.e., PSE policies, tuition fee frameworks, structure of the labour market, and funding at the provincial level) can influence the program of choice. Ontario has implemented a series of neoliberalized policies that emphasize the importance of developing practical and employable skills through PSE (i.e., PBF³²). Tuition differentiation and the creation of professional programs are an example of this push. However, it is unknown whether other provinces have followed suit and to what extent. It is beyond the scope of this dissertation to

³¹ Not Canadian-born

³² Performance-based funding

perform a comparative policy analysis by province; however, it is still valuable to compare Ontario to the rest of Canada. Important to note is that in 2015, the year the NGS explores, Ontario had the highest tuition fees in Canada. Taking an intersectional approach, I hypothesize that students that are self-funded, have high levels of parental education,³³ are male gender, non-visible minority, Canadian-born, and reside in Ontario, are more likely to be enrolled in professional programs.

*H2: Enrollment in regulated or professional programs is a function of source of funding, parental education, gender, minority status, citizenship.*³⁴

H2 Rationale

The second hypothesis is almost identical to the first; however it only focuses on students in Ontario. The rationale for the variables included in the model are the same as above. This model will allow us to explore the social markers and demographics of students enrolled in professional programs in Ontario. As this dissertation is focused on PSE policy in Ontario, the results of this model can be explained and interpreted by the political economic climate. I hypothesize that students that are self-funded, have high levels of parental education,³⁵ are male gender, non-visible minority, and Canadian-born are more likely to be enrolled in professional programs.

Debt Hypotheses

*H3: Student debt size at graduation is a function of regulated or professional programs, parental education, gender, minority status, citizenship.*³⁶

³³ Bachelor's degree or higher

³⁴ $\text{Regulated_professional_program} = f(\text{main_source_of_funding}; \text{mother's_edu}; \text{father's_edu}; \text{gender}; \text{minority_status}; \text{status_in_Canada_at_time_of_interview}) + e$

³⁵ Bachelor's degree or higher

³⁶ $\text{Debt_size_gov_student_loans_at_graduation} = f(\text{regulated_professional}; \text{mother's_edu}; \text{father's_edu}; \text{minority_status}; \text{gender}; \text{status_in_Canada_at_time_of_interview}) + e$

H3 Rationale

The third model focuses on student debt. It will demonstrate the link between the amount of debt accrued at the time of graduation and program of choice (i.e., professional or regulated program). Since professional programs are more expensive, they can account for larger debts; however, this assumes that those taking on debt (who are coming from low-income families) are enrolling in professional programs. Given that professional programs are competitive, have strict eligibility requirements and are considered to be more valuable and desirable vis-à-vis the labour market, it may be difficult for marginalized students to enroll. This model also takes into account social markers known to be important predictors of student loans. As discussed in Chapter 5, student debt is influenced by one's social location. Those positioned in lower SES must take on loans to pay for their PSE, hence the inclusion of parental education in the model. Additionally, as aforementioned in H1, taking an intersectional approach to class by accounting for race and gender ensures that they are not treated as independent categories, but rather as interconnected and historically situated. The literature on student debt³⁷ has revealed that the ability to repay one's PSE student debt, is contingent upon the access to stable, well-paid, permanent employment upon graduation. Since those who suffer from unemployment, underemployment or who are concentrated in precarious employment, even with university degrees (see discussion in Chapter 2) are disproportionately racialized women and immigrants, including them³⁸ in the model was essential. I hypothesize that students with large loans at the time of graduation will be enrolled in regulated programs, have low levels of parental education,³⁹ are female gender, visible minority, and not Canadian-born.

³⁷ As discussed in Chapter #5

³⁸ Gender, minority status, citizenship

³⁹ Bachelor's degree or higher

H4: Long-term student debt size is a function of regulated or professional programs, parental education, gender, minority status, citizenship and annual wages or salaries.⁴⁰

H4 Rationale

The fourth hypothesis is similar to the third, however it examines long-term student debt rather than debt at the time of graduation. The rationale for the variables included in the model are the same as above in H3 with the addition of annual wages and salaries. Through this model, we can explore the social location of students with long-term student debt in the labour market. As discussed in Chapter #5, the effects of long-term debt are detrimental to the lives of those burdened with it. Understanding who is more likely to suffer from it is critical. Additionally, under the HCM, investments in PSE are seen as an avenue to upwards social mobility through higher-wage positions. This model will reveal who has likely found employment that allows for the repayment of loans and who has not. I hypothesize that students with long-term student debt will be enrolled in regulated programs, have low levels of parental education,⁴¹ have annual wages or salaries of less than \$70,000, are female gender, visible minority, and not Canadian-born.

H5: Student loan repayment difficulties (Repayment Assistance Program) is a function of regulated or professional programs, parental education, gender, minority status, citizenship, student debt size, and annual wages or salaries.⁴²

H5 Rationale

The fifth hypothesis is similar to the third and forth; however it examines student debt repayment difficulties through the Repayment Assistance Program (RAP) and various social

⁴⁰ $\text{Debt_size_gov_student_loans_at_interview} = f(\text{regulated_professional}; \text{mother's_edu}; \text{father's_edu}; \text{minority_status}; \text{gender}; \text{status_in_Canada_at_time_of_interview}; \text{annual_wages_or_salaries}) + e$

⁴¹ Bachelor's degree or higher

⁴² $\text{Received_government_assistance_through_Repayment_Assistance_Program} = f(\text{regulated_professional}; \text{mother's_edu}; \text{father's_edu}; \text{minority_status}; \text{gender}; \text{status_in_Canada_at_time_of_interview}; \text{debt_size_gov_student_loans_at_interview}; \text{annual_wage_or_salary}) + e$

markers. In addition to the same markers seen in hypotheses 1-4, long-term debt size and annual wage or salary are included in H5. Having a large debt after graduation has been linked to repayment struggles as discussed in Chapter 5. Additionally, Chapter 5 also indicated the importance of income on repayment ability. Therefore, the inclusion of these variables will help to examine which groups of students will struggle to repay and require assistance through the RAP. The rationale for the variables professional or regulated program, parental education, minority status, gender, and status in Canada are the same as aforementioned in hypotheses 1-4. I hypothesize that students with loan repayment difficulties (RAP) will be enrolled in regulated programs, have low levels of parental education,⁴³ are female gender, visible minority, not Canadian-born, have large student debts, and low annual wages or salaries.

Variables

Several variables in the NGS public use microdata file (PUMF) were recoded and aggregated to better reflect the nature of this project before the final models were constructed and tested. A research decision was made to aggregate all the independent variables into binary categories to explore whether they had an effect or not through a 0 and 1 coding. This design choice allowed me to make inferences more confidently. Through the use of binary categories, the distinctions within variables were as strong as possible. Although information was lost as a result of aggregation, this strategy allowed for easier interpretation of results. It also served as a simpler approach to making inferences and in linking the results to theory. Future research on the data analytics can be more specific.

⁴³ Bachelor's degree or higher

Regulated or Professional Program (name of 2015 program)

The dependent variable representing the name of the 2015 major field of study or specialization was both aggregated and recoded. The NGS used the Classification of Instructional Programs (CIP) Canada 2016⁴⁴ to group fields of study. Unfortunately, the CIP combines multiple areas of study into a singular category. This process compromised the purity of the regulated and professional categories (*see Table 11) as some one group contained both regulated and professional programs. The primary grouping, 07 Mathematics, computer and information sciences, is a mix of professional (computer and information sciences) and regulated (mathematics) programs. After careful consideration, the mixed grouping was added to the professional programs category. The rationale behind this decision was that the most enrolled programs in the mixed group were professional (i.e., computer and information sciences have higher enrollments than mathematics). Additionally, the category ‘other’ was excluded from the study as many of the programs listed were part of the trades or at the college level. The final variable included three fields of study in the professional programs category and six in the regulated category. The breakdown of programs can be found in Table 12. After careful consideration, a decision was made to aggregate this variable into two categories, *regulated* and *professional*.

⁴⁴ See appendix 9

Table 11*2015 Program of Study Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Education	6656	9.2	9.2	9.2
	Visual and performing arts, and communications technologies	3563	4.9	4.9	14.1
	Humanities	4591	6.3	6.3	20.4
	Social and behavioural sciences and law	18278	25.2	25.2	45.6
	Business, management and public administration	11030	15.2	15.2	60.8
	Physical and life sciences and technologies	7343	10.1	10.1	70.9
	Mathematics, computer and information sciences	2613	3.6	3.6	74.5
	Architecture, engineering, and related technologies	6129	8.4	8.4	82.9
	Agriculture, natural resources and conservation	10200	14.0	14.0	97.0
	Other	2211	3.0	3.0	100.0
	Total	72614	99.9	100.0	
Missing	Not stated	54	.1		
Total		72669	100.0		

Table 12*Professional and Regulated Program Classification*

Professional Programs	Regulated Programs
Business, Management and Public Administration	Education
Mathematics, Computer and Information Sciences	Visual and Performing Arts, and Communications Technologies
Architecture, Engineering, and Related Technologies	Humanities
	Social and Behavioral Sciences and Law
	Physical and Life Sciences and Technologies
	Agriculture, Natural Resources, and Conservation

All responses missing, not valid, or skipped, were excluded from the model.

0= Regulated programs: Education + Visual and Performing Arts, and Communications Technologies + Humanities + Social and Behavioral Sciences and Law + Physical and Life + Sciences and Technologies + Agriculture, Natural Resources, and Conservation

1= Professional programs: Business, Management and Public Administration + Mathematics, Computer and Information Sciences + Architecture, Engineering, and Related Technologies

Main Source of Funding: Loans or Self-Funded

The independent variable, *main source of funding: loans or self-funded*, was used to describe whether students mainly relied on government-sponsored student loans to pay for their tuition or if they were self-funded (used their savings, received funding through their parents/family/friends, etc.). The variable was created by combining 11 individual variables, which all contained

information on the main source of funding for PSE. Below is a list of the 12 original NGS variables on main source of funding.

1. Main source of funding postsecondary: gov student loans
2. Main source of funding postsecondary: RESP
3. Main source of funding postsecondary: gov grants or bursaries
4. Main source of funding postsecondary: nongov grants or bursaries
5. Main source of funding postsecondary: scholarships or grants
6. Main source of funding postsecondary: employment earnings or savings
7. Main source of funding postsecondary: RAship or TAsip
8. Main source of funding postsecondary: parents, family, friends
9. Main source of funding postsecondary: bank or institution loans
10. Main source of funding postsecondary: credit cards
11. Main source of funding postsecondary: employer
12. Main source of funding postsecondary: other

All the variables, with the exception of, #12 *main source of funding postsecondary: other*, were aggregated and divided into 2 larger categories, *loans or self-funded*. The variable, #12 *main source of funding postsecondary: other*, was excluded from the study because the responses (yes or no) were too vague and ambiguous to merge into the categories *loans or self-funded*. A decision was made to aggregate all categories that were related to ‘financial need/assistance’, i.e., that required students to either borrow money or to receive grants/scholarships based on financial need or academic achievement into the *loans* category. The category *self-funded* combined employment earnings or savings and family. The rationale behind this aggregation was to combine all funds that were not borrowed. All responses missing, not valid, or skipped, were excluded from the model. The breakdown of the final variable can be seen in Table 13.

0= Loans: government student loans + gov grants or bursaries + nongov grants or bursaries + scholarships or grants + bank or institution loans + credit cards

1= Self-funded: RESP + parents, family, friends + employment earnings or savings + RAship or TAsip+ employer

Table 13*Source of Funding Frequency**Regulated professional programs*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	regulated	50631	69.7	71.9	71.9
	professional	19772	27.2	28.1	100.0
	Total	70403	96.9	100.0	
Missing	System	2266	3.1		
Total		72669	100.0		

Mother's Education

The independent variable, mother's education, was used as a proxy for socio-economic status. The variable was aggregated and recoded. As indicated in Figure 2, the original variable had six categories, which were combined into two larger groups, *less than university* and *university education or higher*. The decision to combine the categories into the two larger groups, *less than university* and *university education or higher*, was made to create a clear distinction between mothers with university education and mothers without. Research on PSE and access has indicated that individuals from high socio-economic status families, measured by either family income or parental education, are more likely to be enrolled in and graduate from PSE (Andres & Adamuti-Trache, 2008). Furthermore, students from low-income families are less likely to attend college or university, especially university (Drolet, 2005; Frenette, 2005). The literature on second-degree professional programs in Ontario, such as law, medicine, dentistry, etc., also reveals that the majority of students enrolled in these programs come from affluent backgrounds (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004). The decision to divide mother's education as higher levels (*university education or higher*) and lower levels (*less than university*)

was influenced by the literature. All responses missing, not valid, or skipped, were excluded from the model. A detailed breakdown of the final variable is seen in Table 14.

0= Less than university: less than high school diploma or its equivalent + high school diploma or a high school equivalency certificate + trade certificate or diploma + college/CEGEP/other non-university certificate or diploma

1= University education or higher: university below Bachelor's/Bachelor's + university above Bachelor's/Master's/Doctorate

Table 14

Mother's Education Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than university	37474	51.6	53.6	53.6
	University education or higher	32488	44.7	46.4	100.0
	Total	69962	96.3	100.0	
Missing	System	2707	3.7		
Total		72669	100.0		

Father's Education

The independent variable, father's education, was used as a proxy for socio-economic status. The variable was aggregated and recoded. As shown in Figure 3, the original variable had six categories, which were combined into two larger groups, *less than university* and *university education or higher*. The decision to combine the categories into the two larger groups, *less than university* and *university education or higher*, was made to create a clear distinction between mothers with university education and fathers without. Research on PSE and access has indicated that individuals from high socio-economic status families, measured by either family income or parental education, are more likely to be enrolled in and graduate from PSE (Andres & Adamuti-

Trache, 2008). Furthermore, students from low-income families are less likely to attend college or university, especially university (Drolet, 2005; Frenette, 2005). The literature on second-degree professional programs in Ontario, such as law, medicine, dentistry, etc., also reveals that the majority of students enrolled in these programs come from affluent backgrounds (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004). The decision to divide father's education as higher levels (*university education or higher*) and lower levels (*less than university*) was influenced by the literature. All responses missing, not valid, or skipped, were excluded from the model. A detailed breakdown of the final variable is seen in Table 15.

0= Less than university: less than high school diploma or its equivalent + high school diploma or a high school equivalency certificate + trade certificate or diploma + college/CEGEP/other non-university certificate or diploma

1= University education or higher: university below Bachelor's/Bachelor's + university above Bachelor's/Master's/Doctorate

Table 15

Father's Education Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than university	34546	47.5	50.3	50.3
	University education or higher	34120	47.0	49.7	100.0
	Total	68666	94.5	100.0	
Missing	System	4003	5.5		
Total		72669	100.0		

Minority Status

The independent variable, minority status, was recoded, but not aggregated. As displayed in Figure 4, the original variable, *self identified as member of visible minority*, was categorical and coded as 'yes or no'. It was recoded with the categories, minority status, and non minority status. All

responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 16.

0= Minority status: yes

1= Non-minority status: no

Table 16

Minority Status Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Minority status	27604	38.0	39.6	39.6
	Not minority status	42177	58.0	60.4	100.0
	Total	69781	96.0	100.0	
Missing	System	2888	4.0		
Total		72669	100.0		

Gender

The independent variable, gender, was not aggregated or recoded. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 17.

0= Female

1= Male

Table 17

Gender Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	45555	62.7	62.7	62.7
	Male	27114	37.3	37.3	100.0
	Total	72669	100.0	100.0	

Status in Canada

The independent variable, *Status in Canada*, was aggregated and recoded. As seen in Figure 5, the original variable contained three categories: *Canadian citizen by birth*, *Canadian citizen by naturalization*, and *landed immigrant*. Upon careful consideration, the decision was made to aggregate the categories into two larger groups; *Not Canadian citizen by birth*, and *Canadian citizen by birth*. The categories *Canadian citizen by naturalization* and *Landed immigrant* were combined to form *Not Canadian citizen by birth*. The small number of participants in the *landed immigrant* category suggests that adding it to *Canadian citizen by naturalization* will be more impactful. In order to accurately study the implications and privileges of being a Canadian citizen by birth, it was essential to separate students who were born in Canada from those who were not. Previous research indicates that Canadian citizens by naturalization (i.e., those who were not born in Canada, but have Canadian citizenship/were a permanent resident before they became a citizen) and landed immigrants (permanent residents, including former asylum seekers and refugees) suffer from high levels of economic marginalization, income and wealth disparities, poverty rates, and labour market segmentation (Hou et al., 2020; Maroto, 2016; Morissette et al., 2002). Moreover, certain groups within the immigrant category are more vulnerable than others. Specifically, racialized new immigrants have a much higher likelihood of economic exclusion than long-term immigrants and those who are Canadian born (Hou et al., 2020). It's important to examine whether these disadvantages are reflected at the PSE level. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 18.

0= Not Canadian citizen by birth: *Canadian citizen by naturalization + landed immigrant*

1= Canadian citizen by birth: *Canadian citizen by birth*

Table 18*Status in Canada Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Canadian citizen by birth	16368	22.5	23.4	23.4
	Canadian citizen by birth	53714	73.9	76.6	100.0
	Total	70082	96.4	100.0	
Missing	System	2587	3.6		
Total		72669	100.0		

Region of Institution

The independent variable, *region of institution*, was recoded and aggregated. As displayed in Figure 6, the original variable had four categories, *Atlantic provinces*, *Quebec*, *Ontario*, and *Western provinces and territories*. The decision was made to aggregate the variables into two larger categories, *Ontario*, and *Not Ontario*. All non-Ontario provinces/territories were combined into the category, *Not Ontario*. This aggregation was made in order to observe the differences in PSE trends between Ontario and the rest of Canada. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 19.

0= Not Ontario: *Atlantic provinces, Quebec, Ontario, and Western provinces and territories*

1= Ontario: Ontario

Table 19*Region of Institution Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Ontario	93095	56.2	56.2	56.2
	Ontario	72669	43.8	43.8	100.0
	Total	165764	100.0	100.0	

Debt Size at Graduation

The dependent variable, *debt size at graduation*, was recoded and aggregated. As seen in Figure 7, the variable had five categories: \$0, *less than \$5,000*, *\$5,000 to less than \$10,000*, *\$10,000 to less than \$25,000*, *\$25,000 or more*. The categories were aggregated to form two new groupings, *less than \$25,000*, and *more than \$25,000*. This was done to examine the profile of those with the largest loans at the time of graduation. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 20.

0= Less than \$25,000: *\$0, less than \$5,000, \$5,000 to less than \$10,000, \$10,000 to less than \$25,000*

1= More than \$25,000: *more than \$25,000*

Table 20

Debt Size at Graduation Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$25,000	25145	34.6	59.3	59.3
	More than \$25,000	17229	23.7	40.7	100.0
	Total	42374	58.3	100.0	
Missing	System	30295	41.7		
Total		72669	100.0		

Debt Size at Interview (three years post-graduation)

The dependent variable, *debt size at interview (three years post-graduation)*, was recoded and aggregated. As indicated in Figure 8, the variable had 5 categories: \$0, *less than \$5,000*, *\$5,000 to*

less than \$10,000, \$10,000 to less than \$25,000, \$25,000 or more. The categories were aggregated to form two new groupings, *less than \$25,000*, and *more than \$25,000*. This was done to examine the profile of those with the largest loans three months after graduating. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 21.

0= Less than \$25,000: *\$0, less than \$5,000, \$5,000 to less than \$10,000, \$10,000 to less than \$25,000*

1= More than \$25,000: *more than \$25,000*

Table 21

Debt Size at Interview Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$25,000	31165	42.9	73.1	73.1
	More than \$25,000	11448	15.8	26.9	100.0
	Total	42612	58.6	100.0	
Missing	System	30056	41.4		
Total		72669	100.0		

Received Government Assistance through the Repayment Assistance Program (RAP)

The dependent variable, *received government assistance through the Repayment Assistance Program*, was unchanged. All responses missing, not valid, or skipped, were excluded from the model. The details can be seen in Table 22.

0= No

1= Yes

Table 22*Received Government Assistance through the Repayment Assistance Program (RAP) Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No RAP	26620	36.6	71.1	71.1
	Yes RAP	10839	14.9	28.9	100.0
	Total	37459	51.5	100.0	
Missing	System	35210	48.5		
Total		72669	100.0		

Annual Wage or Salary

The independent variable, *annual wage or salary*, was recoded and aggregated. The original variable had ten categories: *Less than \$10,000*, *\$10,000 to \$19,999*, *\$20,000 to \$29,999*, *\$30,000 to \$39,999*, *\$40,000 to \$49,999*, *\$50,000 to \$59,999*, *\$60,000 to \$69,999*, *\$70,000 to \$79,999*, *\$80,000 to \$89,999*, *\$90,000 or more*. The categories were aggregated to form two new groupings, *less than \$70,000* and *more than \$70,000*. This was done to examine the profile of those in the larger income earning group after graduating. All responses missing, not valid, or skipped, were excluded from the model. There were approximately 27% of missing data for this variable; for reasons unknown, a large portion of students surveyed in the NGS chose not to disclose this information. Since some students withheld this information, they were analytically excluded from the analysis. Given that this is a weighted dataset, to my knowledge, the results were not affected. Further details can be seen in Table 23.

0= Less than \$70,000: *less than \$10,000, \$10,000 to \$19,999, \$20,000 to \$29,999, \$30,000 to \$39,999, \$40,000 to \$49,999, \$50,000 to \$59,999, \$60,000 to \$69,999*

1= More than \$70,000: *\$70,000 to \$79,999, \$80,000 to \$89,999, \$90,000 or more*

Table 23*Annual Wage or Salary Frequency*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$70,000	43871	60.4	83.1	83.1
	More than \$70,000	8930	12.3	16.9	100.0
	Total	52801	72.7	100.0	
Missing	System	19868	27.3		
Total		72669	100.0		

Limitations of the Survey

Due to the nature of the NGS, there are limitations to this study. Although the NGS includes a wide range of important variables, there are issues within the survey that must be mentioned. The survey itself has been organized in a way where all survey responses (datum) are categorical. Traditionally continuous variables, i.e., student debt, earnings, income, and age, were collected as categorical variables, and most were aggregated into a smaller number of categories.

Additionally, there are several variables that were coded to include two or more categories. For example, the ‘main source of funding’ variable was coded to include the two main sources of funding used by students, rather than the primary source. The NGS did not include a variable that focused exclusively on the one main source of funding used to pay for PSE. Therefore, when attempting to focus solely on the student loans category, there was a possibility that other forms of funding, such as savings or financial assistance from parents, were embedded in the responses. A recoding of the variable ‘main source of funding’ was conducted to provide more transparency within the categories.

Furthermore, the classification of programs was also coded in a way that aggregated multiple areas of study. As aforementioned, a recoding of this variable into two categories,

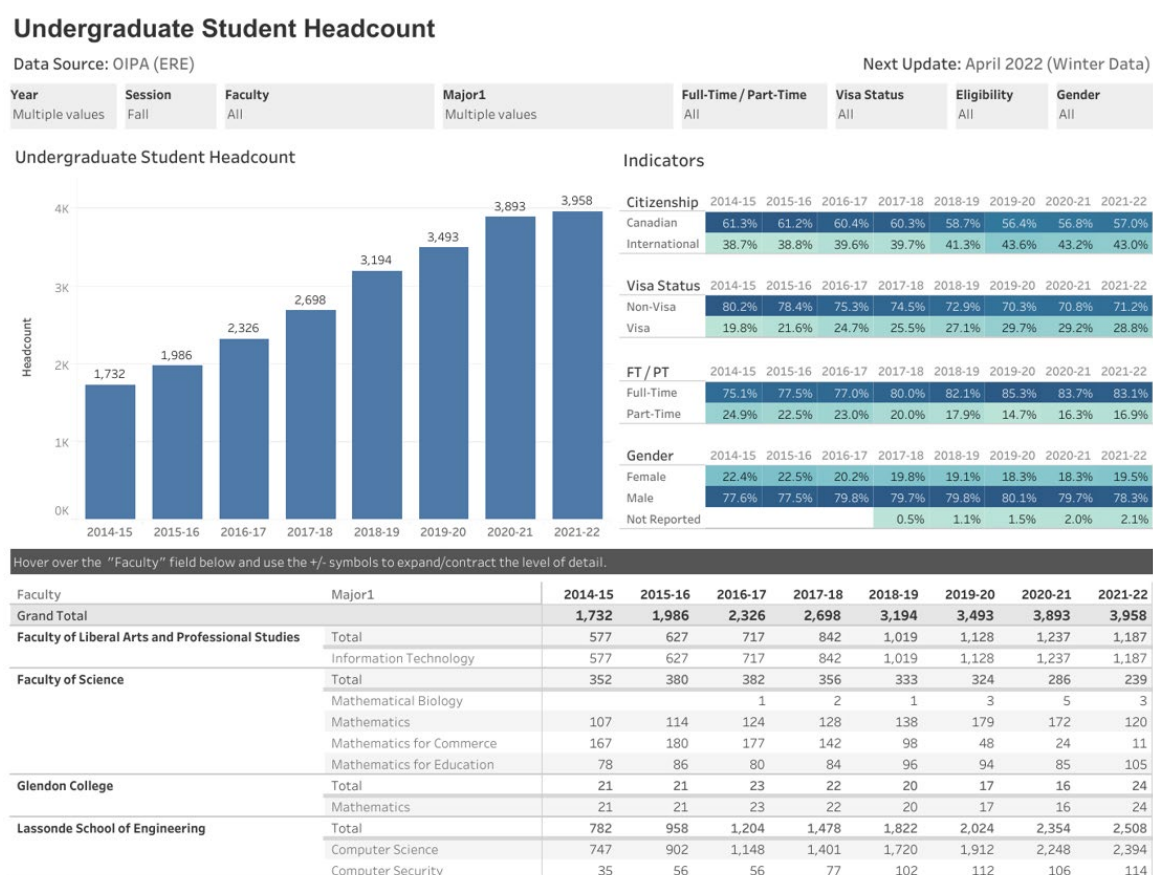
regulated or professional programs, was conducted to fit the objectives of this dissertation. The detailed 6-digit coding of the open-ended text entry to question PGM_Q010 (“What was your major field of study or specialization?”) was coded to the standard Classification of Instructional Programs (CIP) Canada 2016. The CIP groups together similar areas of study under a single category, i.e., ‘Physical and Life Sciences and Technologies’ which includes programs such as natural sciences, nutrition sciences, human biology, marine sciences, etc. Once a program has been placed in a CIP category, it cannot be extracted and analyzed outside of the larger grouping. This particular feature was difficult to work around given the objective of examining regulated and professional programs. This process compromised the purity of the regulated and professional program categories as some of the CIP groups contained both regulated and professional programs. For example, the primary grouping, *07 Mathematics, computer and information sciences*, is a mix of professional (computer and information sciences) and regulated (mathematics) programs. To determine which programs, fall under the regulated and professional fee structure, the CIP list was analyzed, and new groupings were formed. Unfortunately, the CIP list combines multiple areas of study into a singular category. This process compromised the purity of the regulated and professional categories.

Most of the fields of study embedded in the NGS variable were identified as either a regulated or professional program without much difficulty. As aforementioned, there was one field of study that was a mix of both professional (computer and information sciences) and regulated (mathematics) programs, *07 Mathematics, computer and information sciences*. To determine whether this area of study would be aggregated into the regulated or professional category, enrollment numbers per program were used as the deciding factor. Accessing enrollment statistics by program, rather than department, was challenging. Most universities in Ontario do not disclose

this information. For those that do, there are large discrepancies between the groupings of programs across institutions. Rather than providing specific enrollment numbers for programs such as mathematical physics, some institutions group programs under, for example, the Bachelor of Science. York University was contacted for specific enrollment numbers and the request was granted, meaning data could be consulted for specific enrollment statistics. As seen in Figure 10, some of the most enrolled programs in the mixed areas of study were professional (i.e., computer and information sciences have higher enrollments in comparison to mathematics). Therefore, the mixed category, *mathematics, computer and information sciences*, was declared a professional program in the variable, *regulated or professional program*.

Figure 1

York University Undergraduate Student Headcount, Field of Study Comparison



Another limitation was the process of classifying programs as regulated or professional. In fact, this proved to be more difficult than expected. A great deal of research and inquiries were made to obtain an official provincial list of the programs in Ontario classified as professional and therefore subject to tuition differentiation. After several unsuccessful attempts, a written communication from the Ministry of Colleges and Universities⁴⁵ revealed that an official list of professional programs is not available. The Ministry of Colleges and Universities provides a list with the general professional and regulated groupings, but not with specific program names. Additionally, each institution has the autonomy to determine which programs are considered full-cost recovery and will therefore be subject to tuition deregulation, meaning the Board of Governors of each institution is ultimately making these significant decisions.

Not only is this problematic from an ethical perspective, but also from a research perspective. In order to determine which programs fall under the regulated or professional tuition structure, each program has to be manually assessed by consulting Ontario university websites. As some institutions vary in their offerings of programs, this process has its limitations. Moreover, not each and every university in Ontario was consulted for tuition fees leaving room for potential discrepancies. Without an official list of specific programs, rather than overarching fields of study it is also possible that the classification of certain programs as regulated or professional may have changed since 2015. This further contributed to the limitations of this study.

Method

The study uses logistic regression modelling and controls for an assortment of variables to more fully examine the associations between professional program enrollment and social markers/location. There are five logistic regression models analyzed in the study. The first two

⁴⁵ See Appendix 7

examine the profiles/demographics of students enrolled in professional and regulated programs - the first for Canadian students, the second for Ontario students. The last three focus on the debt component investigating the student profiles of Ontarians with smaller and larger debt sizes. The third model examines the debt size at the time of graduation, while the fourth assesses the debt size at the time of the interview (3 months post-graduation). The fifth model examines debt repayment difficulties through the RAP. The independent variables selected for the models were deemed significant in the literature of PSE access and debt. A quantitative analysis of the 2018 National Graduates Survey (NGS) was conducted for this study. Logistic regression models have been estimated to take a number of variables into account simultaneously, and to determine which variables are associated with professional program enrollment, and debt size.

Conclusion

In this chapter, the hypotheses were stated and the rationale for the models was explained. Additionally, the variables breakdown and recoding were presented thoroughly. Information on the National Graduates Survey (NGS) was reviewed including participant demographics, survey weights and limitations of the study. The next chapter presents the results of the logistic regression models and discusses the datum and analysis of tuition differentiation through professional programs and in relation to issues of student debt.

Chapter 7: Results and Discussion

Through logistic regressions on NGS data, this chapter explores the student demographics of professional and regulated programs. Additionally, it sheds light on the predictors of student debt and the long-term struggles of large debt accumulation. As mentioned in earlier chapters, this analysis will provide insight into the debate on whether PSE functions as a site of class reproduction. Since class is often linked to other axes of exclusion, the intersectional analysis is broadened to include an array of social markers discussed below. It is crucial to investigate the outcomes of the neoliberalization of PSE, especially after the implementation of tuition differentiation.⁴⁶ No longer an area of social life protected from forces of market-based competition and commodification processes, PSE has fallen victim to neoliberal processes. If functioning as a site of exclusion and social reproduction, a political economy lens may reveal how PSE may be creating tensions and contradictions that have the potential for social change. In the previous chapter, the hypotheses were introduced, and predictions were made based on existing data, theoretical arguments, and PSE policies. The sections below provide the results for the logistic regression models 1-5 and discuss their implications. The findings here will illuminate whether professional programs, tuition differentiation, and student debt are reproducing social inequities and class disparities.

⁴⁶ Deregulated fees

Results

Table 24

Model 1 Regulated or Professional Programs in Canada

N= 139,755	B	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Source of funding	.353	.018	371.825	<.001	1.424	1.373	1.476
Father's education	-.001	.014	.004	.947	.999	.972	1.027
Mother's education	.015	.014	1.184	.277	1.015	.988	1.044
Gender	1.210	.012	9869.98	.000	3.353	3.274	3.434
Minority status	-.203	.017	144.969	<.001	.816	.790	.844
Status in Canada	-.500	.019	693.220	<.001	.606	.584	.629
Region of Institution	-.546	.013	1850.15	.000	.579	.565	.594

H1: Enrollment in regulated or professional programs is a function of source of funding, parental education, gender, minority status, citizenship, and region of the institution (Ontario).

Results for Model 1: Regulated or Professional Programs in Canada

The results in all five models will be presented based on the independent variables' level of importance according to the Wald statistic. As revealed in Table 24, the odds of being enrolled in professional programs for males is 3.35 times that of females, 95% CI [3.274, 3.434], making the 'gender' variable statistically significant ($p < .000$). The Region of Institution variable was statistically significant ($p < .000$). Students in Ontario experienced a 43% reduction in the odds of being enrolled in professional programs in comparison to students in provinces and territories outside of Ontario, 95% CI [0.581, 0.566]. Students who are not Canadian citizens by birth experience a reduction of 39% in the odds of being enrolled in professional programs in comparison to Canadian citizens by birth, 95% CI [0.584, 0.629]. The variable source of funding is statistically significant ($p < .001$). The odds are 1.42 times greater or there is a 42% increase in

the odds of self-funded students being enrolled in professional programs, 95% CI [1.373, 1.476]. Minority status is also statistically significant ($p < .001$) in this model. Students who identify as minorities experience a reduction of 18% in the odds of being enrolled in professional programs, 95% CI [0.790, 0.844]. Both mother's and father's education were not statistically significant.

Model 1 Discussion

Gender was found to be statistically significant ($p < .000$). The odds of being enrolled in professional programs for males is 3.35 times that of females, 95% CI [3.274, 3.434]. The lack of female representation in professional programs should come as no surprise. The literature on PSE and gender is filled with research and data that consistently reports the underrepresentation of women in STEM (science, technology, engineering, and mathematics and computer science) fields of study and occupations (Wall, 2019). In 2016, 34% of STEM graduates and a mere 23% of science and technology workers among Canadians aged 25 to 64 were females (Wall, 2019). The absence of women in these areas is concerning given that engineering and computer science are among the highest-paying and fastest-growing occupations in Canada. Statistics on poverty clearly indicate that women form the majority of the poor in Canada with more than 2.4 million living on a low income (Statistics Canada, 2016). The gender wage gap has devalued the work women contribute to the labour market, earning them only 67 cents for every dollar non-racialized men earn (Block & Galabuzi, 2018). Already disadvantaged due to structural sexism, the lack of female representation in professional programs can severely influence the economic stability and independence of women. It is clear that the policies created to promote women into STEM fields of study have not been successful in accomplishing this goal.

The 'Region of Institution' variable was statistically significant with a p-value of .000. Students in Ontario experienced a 43% reduction in the odds of being enrolled in professional

programs in comparison to students in provinces and territories outside of Ontario, 95% CI [0.581, 0.566]. This result is of particular interest, given that Ontario has some of the highest tuition fees in Canada between the 2011-12 and 2018-19 academic years (Statistics Canada, 2021). The NGS (2018) provides information on Canadian students who graduated in 2015. The policy surrounding professional programs and their tuition fees in all provinces and territories in Canada is outside the scope of this project, making it difficult to speculate on the underrepresentation of Ontarian students in these programs. However, given the finding that Ontarian students have lower odds of enrolling in professional programs in comparison to their fellow Canadians, a logistic regression focusing only on Ontario will be explored below.

Status in Canada is associated with enrollment in professional programs with a p-value of .001. Students who are not Canadian citizens by birth experience a reduction of 39% in the odds of being enrolled in professional programs in comparison to Canadian citizens by birth, 95% CI [0.584, 0.629]. Therefore, Canadian citizens by naturalization (i.e., those who were not born in Canada, but have Canadian citizenship/were a permanent resident before they became a citizen) and landed immigrants (permanent residents, including former asylum seekers and refugees) are less likely to participate in professional programs. The long-term implications can be detrimental, as Canadian citizens by naturalization and landed immigrants/permanent residents (often referred to as immigrants) suffer from high levels of economic marginalization, income and wealth disparities, poverty rates, and labour market segmentation (Hou et al., 2020; Maroto, 2016; Morissette et al., 2002). Moreover, certain groups within the immigrant category are more vulnerable than others. Research has indicated that racialized new immigrants have a much higher likelihood of economic exclusion than long-term immigrants and those who are Canadian-born (Hou et al., 2020). Previous research also indicates that immigrants have less wealth and are less

likely to be homeowners than the White population (Hou et al., 2020; Maroto, 2016; Morissette et al., 2002). Since professional programs can lead to employment with higher incomes and potential upwards social mobility, it is concerning that Canadian citizens by naturalization and landed immigrants/permanent residents are less likely to be enrolled in these programs.

In Canada, students who self-funded their PSE were 1.42 times more likely than students who primarily relied on loans to be enrolled in professional programs, 95% CI [1.373, 1.476]. This finding is of particular interest as students who rely on loans tend to come from lower socio-economic status families. If there is a 42% increase in the odds that students enrolled in professional programs are self-funded, this poses a serious risk to long-term economic equity in Canada. Since professional programs tend to lead to more affluent employment positions and higher wages, the cycle of economic marginalization may be reproducing itself through PSE. Perhaps the prospect of heavy debt accumulation may deter some from enrolling in these programs. It may also be possible that the greater social and cultural capital provided to students from more affluent families encourages them to enroll in professional programs (Childs, Finnie, & Mueller, 2010). However, it is difficult to interpret the reasons why self-funded students are more likely to be enrolled in professional programs without more detailed information. Future research may benefit from continuing to disentangle the effects of source of funding and other variables in the probability of professional program enrollment.

Minority status was also statistically significant with a p-value of .001. This signifies that minority students experience a reduction of 18% in the odds of being enrolled in professional programs, 95% CI [0.790, 0.844]. In other words, minority/racialized students have lower odds of being enrolled in professional programs. This is discouraging as minorities have historically been overrepresented in many low-wage occupations, with high levels of precariousness, and

underrepresented in higher-waged, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). Labour market discrimination and racist structures will continue to impact minorities. The lower odds of enrollment in professional programs may decrease their chances of access to higher-waged employment post-graduation.

Important to note are the variables that were not deemed statistically significant. Mother's ($p < .947$) and father's ($p < .277$) levels of education, which were used as proxies for socio-economic status were not statistically significant. These findings indicate that in this model, parental education did not impact enrollment in professional programs in Canada. High or low SES through parental education, were not associated with the odds of students enrolling in professional programs. This is not consistent with the general literature on PSE access or the literature on second-degree professional programs (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). Research on PSE and access has indicated that individuals from high socio-economic status families, measured by either family income or parental education, are more likely to be enrolled in and graduate from PSE (Andres & Adamuti-Trache, 2008). Furthermore, students from low-income families are less likely to attend college or university, especially university (Drolet, 2005; Frenette, 2005). The literature on second-degree professional programs in Ontario, such as law, medicine, dentistry, etc., reveals that the majority of students enrolled in these programs come from affluent backgrounds (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004). Despite their high tuition fees, first-degree professional programs are still not as costly as second-degree professional programs. Having to first obtain a bachelor's degree and then a second-degree with astronomical tuition fees may serve as the ultimate barrier for economically marginalized students. However, this finding suggests that students from different classes, not exclusively higher-income ones, are enrolled in professional

programs. If students from lower SES families are enrolling in professional programs, they may experience intergenerational mobility through higher-waged employment in professional fields post-graduation. This has the potential to lower levels of income inequality in the future.

From this model, it appears that self-funded, non-racialized, Canadian-born-citizens, males, attending a university outside Ontario, holding other independent variables constant, are the most likely to be enrolled in professional programs in Canada. This convention will apply to further inferences below. Alternatively, non-Canadian-born-citizens, racialized, women, attending an Ontario university, and relying primarily on student loans, are the least likely to be enrolled in professional programs. Hypothesis 1 is not fully supported by the findings.

Table 25

Model 2 Regulated or Professional Programs in Ontario

N= 61,342	B	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Source of funding	.140	.026	28.824	<.001	1.150	1.093	1.210
Father's education	.090	.023	15.196	<.001	1.095	1.046	1.145
Mother's education	.255	.023	124.842	<.001	1.291	1.234	1.350
Gender	1.118	.019	3348.452	.000	3.060	2.946	3.178
Minority status	-.246	.024	104.550	<.001	.782	.746	.820
Status in Canada	-.468	.027	305.614	<.001	.626	.594	.660

H2: Enrollment in regulated or professional programs is a function of source of funding, parental education, gender, minority status, citizenship.

Results for Model 2: Regulated or Professional Programs in Ontario

As seen in Table 25, the odds of being enrolled in professional programs for males is 3.06 times that of females, 95% CI [2.946, 3.178], making the gender variable statistically significant ($p < .000$). Students who are not Canadian citizens by birth experience a reduction of 37% in the

odds of being enrolled in professional programs in comparison to Canadian citizens by birth, 95% CI [0.594, 0.660]; this was statistically significant ($p < .001$). Mother's education ($p < .001$) is statistically significant. Students with mothers who have a bachelor's degree or higher have a 29% increase in the odds of being enrolled in professional programs, 95% CI [1.234, 1.350]. Minority status is also statistically significant ($p < .001$) in this model. Students who identify as minorities experience a reduction of 22% in the odds of being enrolled in professional programs, 95% CI [0.746, 0.820]. The independent variable source of funding is statistically significant ($p < .001$). The odds are 1.15 times greater or there is a 15% increase in the odds of self-funded students being enrolled in professional programs, 95% CI [1.093, 1.210]. Father's education ($p < .001$) is statistically significant. For students with fathers who have a bachelor's degree or higher, the odds are 1.10 times greater of being enrolled in professional programs in comparison to students with fathers who have less than a bachelor's degree, 95% CI [1.046, 1.145].

Model 2 Discussion

Males have higher odds of being enrolled in professional programs in comparison to females. As aforementioned in model 1, women are underrepresented in STEM fields of study and occupations which can lead to long-term inequity (Wall, 2019). See model 1 for a more detailed account of these implications. Furthermore, students who are not Canadian citizens by birth (i.e., Canadian citizens by naturalization and landed immigrants are less likely to be enrolled in professional programs. The variable Status in Canada was statistically significant with a p-value of .001. Students who are not Canadian citizens by birth experience a reduction of 42% in the odds of being enrolled in professional programs in comparison to Canadian citizens by birth, 95% CI [0.594, 0.660]. As discussed above, immigrants suffer from high levels of inequity and poverty.

Their lower odds of enrollment in professional programs can further exacerbate these pre-existing inequities.

Parental education variables were influential in the model, with mother's level of education having a higher Wald statistic than father's level of education. Both mother's level of education ($p < .001$) and father's level of education ($p < .001$) were statistically significant as proxies for socioeconomic status. The odds of being enrolled in professional programs for students with fathers who have a bachelor's degree or higher are 1.10 times greater than students with fathers who have less than a bachelor's degree. Students with mothers who have attained a bachelor's degree or above are 1.30 times more likely to be enrolled in professional programs than those with mothers who have less than a bachelor's degree, 95% CI [1.234, 1.350]. This is consistent with the literature that finds higher levels of parental education to be important variables in (second-degree) professional program access (Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). Parental education has been identified as a stronger predictor of access to PSE compared to family income (e.g., Drolet, 2005; Finnie & Mueller, 2008a, 2008b; Knighton & Mirza, 2002; Rahman et al., 2005; Turcotte, 2011). Assuming that students with parents who have less than a bachelor's degree come from lower SES families, the implications for their lower odds in professional program enrollment is a concern. Not only does this reinforce the reproduction of class through generational income inequality, but it also maintains and legitimizes the class structure (Bourdieu & Passeron, 1990). Higher SES students enrolled in professional programs appear to have succeeded on their own merit, rather than from the intangible support from their social location. Alternatively, the lower likelihood of low-SES students (lower levels of parental education) enrolled in professional programs is seen as an individual failure and not as a result of embedded systemic inequities. Again, it may also be possible that the greater social and cultural

capital embedded in students from more affluent families encourages them to enroll in professional programs and thus reproduces the cycle of class (Bourdieu & Passeron, 1990; Childs, Finnie, & Mueller, 2010). Moreover, it was recently revealed that both male and female bachelor graduates of professional programs in management sciences and quantitative methods, had the highest earnings in Canada (Frenette & Frank, 2016). In 2010, “management sciences and quantitative methods graduates earned the most—\$130,547, or \$43,004 more than the average bachelor’s degree graduate (after adjusting for age)” (Frenette & Frank, 2016, p. 3). Since professional programs tend to lead to more affluent employment positions and higher wages, the cycle of economic marginalization may be reproducing itself through PSE.

Some regulated programs, such as an arts-related degree, are considered disadvantageous in comparison to professional programs vis-à-vis labour market value (Fenesi & Sana, 2015; Frenette & Frank, 2016). In fact, past studies indicate that arts-related graduates face much greater labour market disadvantages than other program graduates (Fenesi & Sana, 2015; Frenette & Frank, 2016). If students with low levels of parental education are more likely to be enrolled in regulated programs, they may encounter labour market disadvantages such as more precarious employment and lower wages, reinforcing the reproduction of generational class.

Additionally, minority status was also statistically significant with a p-value of .001, demonstrating that students who identify as minorities experience a reduction of 18% in the odds of being enrolled in professional programs, 95% CI [0.746, 0.820]. This finding is of particular interest given the literature in Canada that details the higher rates of PSE participation for visible minorities in STEM programs (science, technology, engineering, and mathematics and computer science) than others (Finnie & Childs, 2018). The negative association between professional programs and minority students is concerning as racialized groups have historically been

overrepresented in many low-wage occupations, with high levels of precariousness, and underrepresented in higher-waged, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). As discussed above, minorities are already faced with pre-existing barriers through structural inequity and their exclusion in professional programs can have harmful impacts on their social and economic well-being.

In Ontario, students who self-funded their PSE were 1.15 times more likely than students who primarily relied on loans to be enrolled in professional programs, 95% CI [1.093, 1.210]. This may be an indication that class disparities are being reproduced through professional program enrollment. As aforementioned, the impacts of this can be adverse.

In Model 2, *Regulated and Professional Program Enrollment in Ontario*, reveals that self-funded, non-racialized, Canadian-born males, with high parental education levels, are the most likely to be enrolled in professional programs. Alternatively, non-Canadian-born citizens, racialized women, with low parental education levels, primarily relying on student loans, are the least likely to be enrolled in professional programs. Hypothesis 2 is supported by the findings.

Table 26*Model 3 Debt Size at Graduation*

N= 37,650	B	S.E.	Wald	Exp(B)	Lower	Upper
Mother's education	-.390	.027	215.031	.677	.643	.713
Father's education	-.347	.027	166.426	.707	.670	.745
Gender	-.219	.024	86.574	.803	.767	.841
Minority status	-.771	.027	840.007	.462	.439	.487
Status in Canada	-.102	.031	10.679	.903	.850	.960
Regulated professional programs	-.078	.027	8.396	.925	.878	.975

H3: Student debt size at graduation is a function of regulated or professional programs, parental education, gender, minority status, citizenship

Results for Model 3: Debt Size at Graduation in Ontario

As displayed in Table 26, minority status is statistically significant ($p < .001$) in this model. Students who do not identify as a minority experience a reduction of 54% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.439, 0.487]. Mother's education ($p < .001$) and father's education ($p < .001$) were both statistically significant. Students with mothers who have a bachelor's degree or higher experience a reduction of 32% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.643, 0.713]. Similarly, students with fathers who have a bachelor's degree or higher experience a reduction of 29% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.670, 0.745]. Students who identify as males experience a reduction of 20% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation in comparison to females, 95% CI [0.767, 0.841], making the gender variable statistically significant ($p < .001$). Students who are

Canadian citizens by birth experience a reduction of 10% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation in comparison to those who are not Canadian citizens by birth, 95% CI [0.850, 0.960]. This was statistically significant ($p < .001$). The variable regulated or professional program is statistically significant ($p < .004$). Those in professional programs experience a reduction of 7% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.878, 0.975].

Model 3 Discussion

Minority status was statistically significant with a p-value of .001. Students who do not identify as a minority (non-racialized students) experience a reduction of 54% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.439, 0.487]. Racialized students are much more likely to graduate with more than \$25,000 of government sponsored student debt. This is consistent with the literature that links visible minorities to higher levels of student debt. This is especially problematic given that, as discussed above, minorities have historically been overrepresented in many low-wage occupations, with high levels of precariousness, and underrepresented in higher-waged, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). Periods of unemployment are least likely for white men and women with a university degree, while racialized men without a degree are most likely to face unemployment (Lewchuk, 2018). Labour market discrimination and racist structures may compromise the ability of minority students to repay their loans upon graduation. With loan repayment difficulties primarily contingent upon future earnings, many racialized borrowers may experience more troubles in the repayment process.

Parental education variables were influential in the model. Both mother's level of education ($p < .001$) and father's level of education ($p < .001$), were statistically significant. Students with

mothers who have a bachelor's degree or higher experience a reduction of 32% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.643, 0.713]. Similarly, students with fathers who have a bachelor's degree or higher experience a reduction of 29% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation. These findings are consistent with the literature which assert that students from families with higher levels of socioeconomic status are less likely to take on student loans (Looker & Lowe, 2001; Usher, 2004). The PSE student population is already drawn disproportionately from students from higher-income backgrounds. The most marginalized in society often do not have access to PSE. Assuming that students with parents who have less than a bachelor's degree come from lower SES families, the implications for their increase in the likelihood of having more than \$25,000 of government sponsored student debt at the time of graduation is a concern. Not only does this reinforce the reproduction of class through generational economic inequity, but it also maintains and legitimizes the class structure (Bourdieu & Passeron, 1990). Higher SES students either do not require loans for PSE or have higher odds of graduating with lower levels of student debt. This will allow students with higher levels of parental education to begin accumulating more wealth through savings at an earlier stage in their lives. This may lead to more stable economic growth for this group of students, while those with lower levels of parental education are left to repay large loans of more than \$25,000 plus interest. Additionally, the social cost and consequences of larger student debt have negative long-term implications. Not only do those in debt suffer economically, but they also report the postponement of adulthood life events such as marriage, purchasing a vehicle, taking out a mortgage and having children – effects that are even more pronounced for members of already marginalized groups (Baptiste, 2001).

Gender was another variable found to be statistically significant ($p < .001$). Students who identify as males experience a reduction of 20% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation in comparison to females, 95% CI [0.767, 0.841]. Thus, female students are more likely to graduate with larger student debts than males. As previously discussed, females have some of the highest rates of poverty and are disproportionately employed in precarious work. Graduating with large loans of more than \$25,000 can severely influence the economic stability and independence of women. This problematic finding suggests that not only do women have higher odds of graduating with larger debts, but they will also struggle to repay their debts as a result of their economic marginalization in the labour market and oppressive gender ideologies. Some of the barriers include the underrepresentation of women in positions of authority, the glass ceiling, being penalized for motherhood and childcare responsibilities, and being associated with weak characteristics solely based on false gender ideologies. These are only a few examples of the countless barriers that impede the financial and social well-being of women.

Moreover, students who are Canadian citizens by birth were less likely of having more than \$25,000 of government sponsored student debt at the time of graduation in comparison to those who are not Canadian citizens by birth, 95% CI [0.850, 0.960]. This was statistically significant ($p < .001$). Therefore, Canadian citizens by naturalization and landed immigrants are more likely to graduate with larger debt levels. Once again, the long-term implications can be detrimental. Immigrants are often underemployed, unemployed and exposed to labour market discrimination, making graduating with large loans a riskier investment. As discussed in Chapter 2, Anisef et al., (2003) found that the earnings of immigrant visible minorities, in all fields of study, are not equivalent to their education level(s), despite similar investments in education. Structural and

institutional barriers and inequities such as labour market discrimination, racism, the gender wage gap, the racialized wage gap, the glass ceiling, etc. can compromise the economic well-being of immigrant students (Anisef et al., 2003; Bolaria, 1983; Das Gupta, 1996; Li, 1989).

Students enrolled in professional programs experience a reduction of 7% in the odds of having more than \$25,000 of government sponsored student debt at the time of graduation, 95% CI [0.878, 0.975]. With professional programs having much higher tuition fees than regulated programs, this finding is of interest. For those with student loans, students in regulated programs are more likely of having more than \$25,000 of government sponsored student debt at the time of graduation, despite the higher tuition fees of professional programs. Since professional programs tend to lead to more affluent employment positions and higher wages, it is especially problematic that regulated students are more likely to graduate with larger debts. Both male and female bachelor graduates of professional programs in management sciences and quantitative methods had the highest earnings in Canada (Frenette & Frank, 2016). As previously mentioned, some regulated programs, such as an arts-related degree, are considered disadvantageous in comparison to professional programs vis-à-vis labour market value (Fenesi & Sana, 2015; Frenette & Frank, 2016). Given that past studies indicate that arts-related graduates face much greater labour market disadvantages than other program graduates (Fenesi & Sana, 2015; Frenette & Frank, 2016), this finding poses a serious risk to long-term economic equity. If students in regulated programs are more likely to graduate with more than \$25,000 of student debt, and according to previous research, experience much greater labour market disadvantage, they may face larger difficulties in repaying their student loans. It is difficult to interpret why students who graduate from professional programs are less likely to have larger debts than regulated students without more detailed information. Future research may benefit from more detailed research in this area.

In Model 3, *Debt Size at Graduation*, it appears that non-racialized, Canadian-born citizens, males, with high parental education levels, enrolled in professional programs, are the least likely to graduate with \$25,000 or more student debt. Alternatively, non-Canadian-born citizens, racialized, women, with low parental education levels, enrolled in regulated programs, are the most likely to graduate with \$25,000 or more student debt. Hypothesis 3 is partially supported by the findings.

Table 27

Model 4 Debt Size Three Years Post-graduation

N= 27,480	B	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Regulated professional programs	-1.064	.044	576.172	<.001	.345	.316	.376
Fathers education	-.182	.038	22.749	<.001	.834	.774	.899
Mothers education	-.595	.039	234.399	<.001	.552	.511	.595
Gender	-.123	.033	13.480	<.001	.885	.829	.944
Minority status	-.026	.037	.486	.486	.974	.906	1.048
Status in Canada	-.559	.045	153.738	<.001	.572	.524	.625
Annual Wage 2018	-.911	.051	313.720	<.001	.402	.363	.445

H4: Long-term student debt size is a function of regulated or professional programs, parental education, gender, minority status, citizenship, and annual wages or salaries

Results for Model 4: Debt Size Three Years Post-graduation

As indicated in Table 27, the variable regulated or professional programs is statistically significant ($p < .001$). Those in professional programs experience a reduction of 65% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation compared to those who graduated from regulated programs, 95% CI [0.316, 0.376]. Those with

annual wages or salaries of \$70,000 or more experience a reduction of 60% in the odds of having more than \$25,000 of student debt three years post-graduation, 95% CI [0.363, 0.445]. Mother's education ($p < .001$) was statistically significant. Students with mothers who have a bachelor's degree or higher experience a reduction of 45% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation, 95% CI [0.511, 0.595]. Students who are Canadian citizens by birth experience a reduction of 43% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation in comparison to those who are not Canadian citizens by birth, 95% CI [0.524, 0.625]; this was statistically significant ($p < .001$). Father's education ($p < .001$) was also statistically significant as students with fathers who have a bachelor's degree or higher, experience a reduction of 17% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation, 95% CI [0.774, 0.899]. Students who identify as males experience a reduction of 11% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation in comparison to females, 95% CI [0.829, 0.944], making the gender variable statistically significant ($p < .001$). Minority status is not statistically significant ($p < .486$) in this model, 95% CI [0.906, 1.048].

Model 4 Discussion

In Ontario, professional programs students had a reduction of 65% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation compared to those who graduated from regulated programs, 95% CI [0.316, 0.376]. Thus, regulated program students are far more likely to have accrued over \$25,000 of government sponsored student debt three years post-graduation, despite the higher tuition fees of professional programs. This finding suggests that professional programs, which tend to lead to more affluent employment positions and higher wages, may allow students to repay their large debts at a faster pace than those who

graduated from regulated programs. Since male and female bachelor graduates of professional programs in management sciences and quantitative methods, had the highest earnings in Canada, this will impact their ability to repay their large loans (Frenette & Frank, 2016). It is especially problematic that regulated students are more likely to have larger debts three years post-graduation. As previously mentioned, regulated programs are not compensated as highly as professional programs which may pose a risk to long-term economic equity. If students in regulated programs are more likely to have more than \$25,000 of student debt three years post-graduation, and according to previous research, experience much greater labour market disadvantage, this may be an indication of their struggle to repay large student loans. Although it cannot be stated with certainty, we can confidently link professional program graduates to lower levels of debt three years post-graduation when compared to regulated program graduates, holding all other variables constant. It seems that regulated program graduates may be taking longer to repay their government sponsored student loans over \$25,000.

Moreover, annual wage, or salary was statistically significant ($p < .001$). Those with annual wages or salaries of \$70,000 or more experience a reduction of 60% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation, 95% CI [0.363, 0.445]. This finding is consistent with previous research that emphasizes that individuals' ability to repay loans in a timely manner is contingent upon their post-undergraduate income, rather than the size of their student debt (Kapsalis, 2006; Lochner et al., 2013). If students are able to attain employment with high wages, they are more likely to be able to repay their loans quickly. As discussed in Chapter #2, the rise of precarious work has made that difficult for students, even with an undergraduate degree. With the labour market becoming increasingly precarious, students with large debts who are unable to attain high wage employment are at risk of economic insecurity.

Parental education variables were also influential in the model. Both mother's level of education ($p < .001$) and father's level of education ($p < .001$) were statistically significant. Students with mothers who have a bachelor's degree or higher experience a reduction of 45% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation, 95% CI [0.511, 0.595]. Similarly, students with fathers who have a bachelor's degree or higher, experience a reduction of 17% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation, 95% CI [0.774, 0.899]. There is evidence to suggest that the association between owing high levels of student debt three years after graduation may be influenced by a graduate's parental education levels. As previously stated, if taking on large PSE student loans, more than \$25,000, is supposed to mitigate future economic disadvantages through better-paid employment opportunities, it may not be working as intended. Having more than \$25,000 of student debt three years after graduating may suggest that students with less educated parents are struggling to repay their student loans. Not only can this reinforce the reproduction of class through generational economic inequity, but it also maintains and legitimizes the class structure (Bourdieu & Passeron, 1990). Higher SES students either do not require loans for PSE or experience higher odds of having lower levels of student debt three years post-graduation. Again, this allows students with higher levels of parental education to begin accumulating more wealth through savings at an earlier stage in their lives. It may also lead to more stable economic growth for students from higher SES families, while those with lower SES are still in the process of repaying their student large loans of more than \$25,000 (plus interest) three years later. Thus, the cycle of economic marginalization is reproduced through student debt.

Furthermore, status in Canada is associated with having larger debt three years after graduation. Students who are Canadian citizens by birth experience a reduction of 43% in the odds

of having more than \$25,000 of government sponsored student debt three years post-graduation in comparison to Canadians who are not citizens by birth, 95% CI [0.524, 0.625]; this is statistically significant ($p < .001$). This may suggest that citizens who were not born in Canada, are struggling to repay their large student loans post-graduation. As discussed in previous models, having more than \$25,000 of student debt three years later can be detrimental as Canadian citizens by naturalization and landed immigrants/permanent residents are already suffering from economic exclusion. Labour market discrimination can compromise graduates' access to high-wage employment and positions of power. Given that the ability to repay student loans has been associated with income in previous research, Canadian citizens not by birth may experience difficulties in the repaying process. As aforementioned, being in a state of indebtedness not only has economic consequences, but also social costs.

Moving on to gender, which was statistically significant, students who identify as males experience a reduction of 11% in the odds of having more than \$25,000 of government sponsored student debt three years post-graduation in comparison to females, 95% CI [0.829, 0.944]. This may suggest that women have greater difficulties with student loan repayments, which is consistent with the literature. Several studies indicate that women experience more difficulty in student loan repayment than men (Lochner et al., 2013; Schwartz & Finnie, 2001). However, among both women and men, graduates with low current earnings and those in fields likely to have low lifetime earnings (fine arts, humanities, social sciences) often report greater problems with student loan repayments (Lochner et al., 2013; Schwartz & Finnie, 2001). Data assert that student loan repayment difficulties are often linked to those with larger amounts of PSE student debt at graduation (students who borrow more and come from lower SES families), students who graduate from low-earning fields of study (fine arts, humanities, social sciences) and women (Lochner et

al., 2013; MacLaren, 2014; Schwartz & Finnie, 2001). For women, in which a great deal suffer from elevated poverty rates, unemployment, underemployment, and low-wage work, savings and family assistance are relied upon in order to make standard loan payments (Lochner et al., 2013; Statistics Canada, 2016). Labour market discrimination may impact women's abilities to repay their student loans in a timely manner. Having large loans of more than \$25,000 three years after graduating, coupled with structural sexism, can severely hinder the economic stability and independence of women.

Lastly, minority status is not statistically significant ($p < .077$) in this model, 95% CI [0.994, 1.118]. This is encouraging as model 3 revealed that minority/racialized students have higher odds of graduating with more than \$25,000 of government sponsored student debt. Three years post-graduation, a student's minority status has no impact on their likelihood of having more than \$25,000 of student debt. As abovementioned, minorities have historically been overrepresented in many low-wage occupations, with high levels of precariousness, and underrepresented in higher-waged, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). If students' race/ethnicity is not associated with their ability to repay larger loans three years post-graduation, this is a step in the right direction. Although in this particular model, minority status was not associated with having larger student debt post-graduation, labour market discrimination and racist structures will continue to impact minorities.

In Model 4, *Debt three years Post-graduation*, it appears that Canadian-born-citizen, males, with high parental education levels, enrolled in professional programs, with annual wages or salaries of more than \$70,000 are the least likely to have \$25,000 or more in student debt three years post-graduation. Alternatively, non-Canadian-born citizens, women, with low parental education levels, enrolled in regulated programs, with annual wages or salaries of less than

\$70,000, are the most likely to have \$25,000 or more in student debt three years post-graduation. Hypothesis 4 is partially supported by the findings.

Table 28

Model 5 Received Repayment Assistance Program (RAP)

N= 24,442	B	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Regulated professional programs	.087	.039	4.877	.027	1.091	1.010	1.178
Father's education	.037	.040	.847	.357	1.038	.959	1.122
Mother's education	-.402	.040	100.035	<.001	.669	.618	.724
Gender	-.201	.034	34.468	<.001	.818	.765	.875
Minority status	-.135	.037	12.995	<.001	.874	.812	.940
Status in Canada	-.303	.045	45.528	<.001	.739	.676	.807
Debt size 3 years post-graduation	1.600	.033	2338.278	.000	4.952	4.641	5.284
Annual Wage 2018	-.709	.049	210.261	<.001	.492	.447	.542

H5: Student loan repayment difficulties (Repayment Assistance Program) is a function of regulated or professional programs, parental education, gender, minority status, citizenship, student debt size, and annual wages or salaries.

Results for Model 5: Received Repayment Assistance Program (RAP)

As seen in Table 28, the odds are 5.0 times higher, or 95% more likely for students with more than \$25,000 of government sponsored student debt three years post-graduation to be receiving government assistance to repay their student loans through the RAP, 95% CI [4.641, 5.284]. Those with annual wages or salaries of \$70,000 or more experience a reduction of 51% in the odds of receiving government assistance to repay student loans through the RAP, 95% CI [0.447, 0.542]. Mother's education ($p<.001$) is statistically significant, while father's education

($p < .357$) is not. Students with mothers who have a bachelor's degree or higher experience a reduction of 30% in the odds of receiving government assistance to repay student loans through the RAP, 95% CI [0.618, 0.724]. Students who are Canadian citizens by birth experience a reduction of 26% in the odds of receiving government assistance to repay their student loans through the RAP in comparison to those who are not Canadian citizens by birth, 95% CI [0.676, 0.807]; this was statistically significant ($p < .001$). Students who identify as males experience a reduction of 18% in the odds of receiving government assistance to repay student loans through the RAP in comparison to females, 95% CI [0.765, 0.875], making the gender variable statistically significant ($p < .001$). Minority status is also statistically significant ($p < .001$) in this model, 95% CI [0.812, 0.940]. In comparison to minorities, non-minority students experience a reduction of 13% in the odds of receiving government assistance to repay their student loans through the RAP. The variable regulated or professional programs is not statistically significant ($p < .027$).

Model 5 Discussion

High levels of student debt ($p < .000$) was strongly associated with receiving government assistance to repay student loans through the RAP. The odds are 5.0 times higher, or 95% more likely, for students with more than \$25,000 of student debt three years post-graduation to be receiving government assistance to repay their student loans through the RAP, 95% CI [4.641, 5.284]. Results suggest that highly indebted students, with loans of \$25,000 or more, are not able to cope with their loan repayments and must seek government assistance. This finding is important as it illustrates the damaging effects of a system built on indebtedness and the exploitation of disadvantaged groups. Some students, based on their social location, will undoubtedly have to take on larger loans to fund their PSE degrees. These are some of the most disadvantaged students who may rely entirely on student loans to cover the cost of PSE. As a result, those with larger debt loads

have higher odds of facing difficulties in the repayment process. The extent of these difficulties remains to be seen. Although research on student debt commonly links repayment problems to income size rather than debt size, these findings add new and more recent insight to the field.

The independent variable, annual wage, or salary was statistically significant ($p < .001$). Those with annual wages or salaries of \$70,000 or more experience a reduction of 51% in the odds of receiving government assistance to repay student loans through the RAP, 95% CI [0.447, 0.542]. There is strong evidence to suggest that high wages or salaries can mitigate issues with loan repayment. Unfortunately, the 21st-century economy and the proliferation of precarious work are compromising access to well-paid, permanent employment, especially for certain groups. Racialized people, women, and immigrants are often underrepresented in high-wage occupations, positions of authority, and permanent, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). Given that the ability to manage student loans is heavily compromised if a graduate does not possess a well-paying job, marginalized groups will face elevated levels of financial difficulties in managing their debt loads. The inability to secure employment that provides financial stability has further ostracized those who cannot rely on their families for financial assistance should it be required. Additionally, a plethora of barriers - labour market discrimination and segmentation, gender wage gap, racialized wage gap, glass ceiling, etc. - embedded in the labour market will impact the financial success of graduates. Thus, assistance through the RAP may be inevitable for some graduates. With loan repayment difficulties primarily contingent upon future earnings, many borrowers will be experiencing more troubles in the repayment process.

Moreover, status in Canada is associated ($p < .001$) with receiving government assistance to repay student loans through the RAP. Students who are Canadian citizens are less likely to receive

government assistance to repay their student loans through the RAP in comparison to those who are not Canadian citizens by birth, 95% CI [0.676, 0.807]. This suggests that citizens who were not born in Canada are struggling to repay their large student loans post-graduation. As aforementioned, it is well documented that Canadian citizens by naturalization and landed immigrants/permanent residents suffer from economic marginalization and labour market segmentation (Hou et al., 2020; Maroto, 2016; Morissette et al., 2002). Access to PSE might be achievable to some marginalized groups through student loans, however, results indicate that indebted non-Canadian-born citizens are struggling and require government assistance in the repayment process. Once again, groups that have been historically oppressed are the ones that suffer the consequences of the high cost of PSE after graduation. Given that the ability to repay student loans has been associated with income in earlier research, model 5 suggests that Canadian citizens not by birth are experiencing difficulties in the repaying process.

Turning to parental education variables, only mother's education ($p < .001$) was influential in model 5, 95% CI [0.618, 0.724]. The difference for father's level of education is not statistically significant meaning that there is not enough evidence to confirm the difference would hold in the population. Mother's level of education ($p < .001$) indicates that students with mothers who have a bachelor's degree or higher, experience a reduction of 30% in the odds of receiving government assistance to repay student loans through the RAP. For students with mothers holding lower education levels, the likelihood of struggling to repay student loans three years after graduating is heightened. Using parental education as a proxy for SES suggests that lower-SES students will likely not have the financial support of parents to assist with loan repayments should they find themselves struggling to meet their minimum obligations. As previous research indicates, student loan repayment difficulties have been associated with, amongst other things, a lack of family

financial support (Lochner et al., 2013). The neoliberal PSE system of debt captures low-SES students and in a web of indebtedness potentially damaging their long-term social and economic well-being. Not only do student loans generally disadvantage lower-SES students, through interest rates, and at times, the postponement of adulthood life events, but also seems to extend the hardships to well after graduation. This finding suggests that students with low levels of mother's education will experience more loan repayment challenges and will require loan relief assistance through the RAP.

In Model 5, gender was found to be statistically significant ($p < .001$). Students who identify as male experience a reduction of 18% in the odds of receiving government assistance to repay student loans through the RAP in comparison to females, 95% CI [0.765, 0.875]. Therefore, female students are more likely to receive government assistance to repay student loans through the RAP post-graduation. This is consistent with the literature that indicates that women experience more difficulty in student loan repayment than men (Lochner et al., 2013; Schwartz & Finnie, 2001). Gender discrimination in the labour market lowers the monetary value of women's work regardless of their credentials and experience. Furthermore, women tend to be underrepresented in positions of authority and high-income jobs. The gender wage gap, among other forms of sexism, can impact the ability of women to repay their student loans. It is very discouraging to discover that women continue to experience economic marginalization in many spheres including the student loan repayment process.

Furthermore, minority status ($p < .001$) is associated with receiving government assistance to repay student loans through the RAP, 95% CI [0.812, 0.940]. Non-minority students experience a reduction of 13% in the odds of receiving government assistance to repay their student loans through the RAP, making minority students more likely to struggle with the repayment of their

loans. Similarly, to women, minorities have been overrepresented in many low-wage occupations, with high levels of precariousness, and underrepresented in higher-waged, more secure jobs (Block & Galabuzi, 2018; Teelucksingh & Galabuzi, 2005). The racialized wage gap continues to affect racialized group members and new immigrants, sustaining a double-digit income gap and a higher rate of unemployment (Teelucksingh & Galabuzi, 2005). Furthermore, the racialized wage gap is evident among the university-educated (median gap 14.6%) as well as those without PSE (20.6%), which suggests a cross social class factor (Teelucksingh & Galabuzi, 2005). Labour market discrimination may again be at fault for reproducing income inequity among minority students. With pre-existing elevated levels of poverty, lower SES, and economic exclusion, the attainment of a PSE degree may not be enough to escape social location. The data indicates that minorities have higher odds of struggling to repay their student loans three years after graduating.

Lastly, Regulated or Professional program was not statistically significant. In Model 5, *Received Repayment Assistance Program (RAP)*, it appears that non-racialized, Canadian-born-citizens, males, with high levels of mother's education, with lower debt loads, and high annual wages or salaries, are the least likely to receive the RAP three years post-graduation. Alternatively, non-Canadian-born citizens, racialized, women, with low levels of mother's education, with higher debt loads, and low annual wages or salaries, are the most likely to receive the RAP three years post-graduation. Hypothesis 5 is partially supported by the findings.

Conclusion

When examining these findings through an intersectional lens, students with multiple social markers, for example, low-SES racialized women, will face heightened levels of marginalization. In all 5 models, certain social markers are more valuable than others. For example, those identifying as non-minority, Canadian-born, males, with high levels of parental education,

are often more likely to be enrolled in professional programs, have lower levels of student debt (less than \$25,000), repay their loans quicker and, not struggle with debt repayment. Conversely, if taking an intersectional approach, the most marginalized students for both program enrollment and debt size are racialized, non-Canadian-born, women, with low levels of parental education. These students had higher odds of being enrolled in regulated programs, had large amounts of student debt (\$25,000 or more), took longer to repay their loans, and struggled with debt repayments. This particular group faces even higher degrees of discrimination and inequity because of their intersecting axes of exclusion based on race, gender, citizenship status, and SES. The experience of racialized, immigrant, low-SES, women will undoubtedly differ from those of all women, or even non-racialized women. It is important to note that the social markers of gender, minority status, parental education, and citizenship were all often significant in disadvantageous ways holding other independent variables constant. This is problematic given that research suggests that racialized women with university degrees do not experience a rise in their rates of SER jobs and therefore may not have access to stable, well-paid employment post-graduation⁴⁷ (Lewchuk, 2018). Not only does this demonstrate that PSE is not a great equalizer, but that PSE is indeed functioning to reproduce inequalities in social class. Even when PSE is attained, the outcomes of the investment are not distributed equally. Especially in the context of the precarious 21st-century economy, debt can be detrimental to the long-term financial health and overall well-being of specific groups. In the final chapter, a conclusion and policy implications are discussed.

⁴⁷ As discussed in Chapter 2

Chapter 8: Policy Implications and Conclusion

Given the high tuition fees of professional programs and their link to lucrative employment post-graduation, this research explored the student demographics of first-degree (undergraduate) professional programs and regulated programs in Ontario. It aimed to examine whether higher tuition fees for professional programs are barriers to enrollment for students for disadvantaged students. It also focused on the ways in which student debt can reproduce class disparities given the precarious nature of the 21st-century economy. Additionally, the research investigated how the neoliberal fee environment reinforces existing socio-economic inequalities and how it produces new inequalities.

Despite data limitations and policy ambiguities, this study contributes valuable insight to the literature on PSE accessibility and student debt. Several conclusions can be drawn from the logistics regression models. As revealed in Chapter 7, students from more privileged and affluent backgrounds are more likely to be enrolled in first-degree professional programs, both nationally and in Ontario. When exclusively examining Ontario, these disparities are exacerbated. Specifically, higher levels of parental education or SES are significant determinants of professional program enrollment. In Ontario, the odds of enrollment for professional programs are higher for self-funded (not relying on student loans), non-racialized, Canadian-born-citizens, males, with high levels of parental education. Students from marginalized groups – racialized, non-Canadian-born citizens, females, relying primarily on student loans, with low levels of parental education – less likely to be enrolled in professional programs in Ontario. These trends are comparable nationally, with the exception of parental education levels. Furthermore, when analyzing

professional program enrollment on a national scale, Ontario students are less likely to be enrolled in comparison to other Canadian provinces. When examining these findings through an intersectional lens, students with multiple social markers, for example, low-SES racialized women, will face heightened levels of inequity.

Additional findings suggest that students from marginalized groups are more likely to accrue high levels of student debt (\$25,000 or more), take longer to repay their loans and, struggle with debt repayment. The odds of graduating with more than \$25,000 of student loans are higher for racialized, non-Canadian-born citizens, females, with low levels of parental education, enrolled in regulated programs. For the most part, with the exception of minority status, this trend prevails three years post-graduation. Lastly, students from disadvantaged backgrounds have higher odds of requiring government assistance through the RAP to repay their student loans. Students who are racialized, non-Canadian-born citizens, females, with low levels of parental education, had high debt loads of over \$25,000 and had annual wages or salaries of less than \$70,000, were more likely to struggle with student loan repayment. These findings have critical policy implications.

There is evidence to suggest that tuition differentiation may be functioning as an exclusionary policy that reproduces social inequities and class disparities. First-degree professional programs, which have higher tuition fees than regulated programs, have higher probabilities of enrollment for students from affluent backgrounds. These students are more likely to have funded their own PSE pursuits without accruing government sponsored student loans. Since professional programs tend to lead to more affluent employment positions and higher wages, the cycle of economic marginalization may be reproducing itself through PSE. Bachelor graduates of professional programs in management sciences and quantitative methods have some of the highest earnings in Canada (Frenette & Frank, 2016). In 2010, “management sciences and

quantitative methods graduates earned the most—\$130,547, or \$43,004 more than the average bachelor's degree graduate (after adjusting for age)" (Frenette & Frank, 2016, p. 3). Some regulated programs, such as an arts-related degree, are considered disadvantageous in comparison to professional programs vis-à-vis labour market value (Fenesi & Sana, 2015; Frenette & Frank, 2016). Past studies indicate that arts-related graduates face much greater labour market disadvantages than other program graduates (Fenesi & Sana, 2015; Frenette & Frank, 2016).

It is especially troubling that professional programs tend to exclude groups that are often the most marginalized in society. Through professional program enrollment, disadvantaged graduates could experience intergenerational mobility, which has the potential to mitigate social inequities. However, structural barriers and institutional oppression remain diligent in maintaining class structures and reproducing the status quo. Policies such as tuition differentiation only add to the existing barriers in place that prevent marginalized students from full participation. This policy may make it more difficult for disadvantaged groups to enroll in professional programs because of the higher tuition fees and stricter eligibility requirements, which may demand a certain degree of social and cultural capital.

Previous research on deregulation/tuition differentiation policies and their impacts on participation exclusively focused on second-degree programs (graduate studies) such as pharmacy, dentistry, law, business (MBA), etc. (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). Much of the research indicates a greater concentration of students with higher levels of parental income and education enrolled in these programs (CMA, 2009; Frenette, 2005, 2008; King et al., 2004; Kwong et al., 2002; Pardy, 2004; Sayed et al., 2018). This study is consistent with the literature on second-degree professional programs, finding that there is also a higher likelihood of students from more affluent backgrounds to be enrolled in first-

degree professional programs. Not only does PSE reinforce the reproduction of inequities, but it also maintains and legitimizes social structures (Bourdieu & Passeron, 1990). It may also be possible that the greater social and cultural capital embedded in students from more affluent families encourages them to enroll in professional programs and thus reproduces the cycle of class (Bourdieu & Passeron, 1990; Childs, Finnie, & Mueller, 2010). Pierre Bourdieu (1977) believed that “the educational system demands of everyone alike that they have what it does not give...[and] can only be produced by family upbringing when it transmits the dominant culture” (p. 494). There may be a multitude of reasons behind the lower probability of marginalized groups in professional programs. The higher cost of these programs, and the presumed greater levels of student debt, might be a factor. The competitive nature of these programs intrinsically favour students who excel academically. Bourdieu (1977) suggests that “a lack of cultural capital adversely shapes the attitudes and outlooks of youth who come from disadvantaged backgrounds. This resulting negative disposition towards school, otherwise known as an individual’s habitus, ultimately affects educational achievement and attainment” (p. 495). Future research examining the role of higher tuition fees, and/or the potential of large debt accumulation on program choice/enrollment would be beneficial to determine the full extent of PSE accessibility and the student debt problem in Canada. It is outside the scope of this study to provide evidence as to why students from disadvantaged backgrounds have a lower likelihood of professional program enrollment; but nonetheless, it does suggest that they do. The policy of tuition differentiation may be unintentionally functioning as a barrier to marginalized groups. More equitable and targeted policy should focus on extending access to these programs to underrepresented groups, rather than placing them out of their price range. The neoliberal reconstruction of PSE has created a hierarchy of programs that are becoming more exclusive and elite. The outcomes of tuition differentiation

suggest that it is functioning as an exclusionary policy that is reproducing wider societal inequalities.

There are also gaps in the tuition differentiation policy that lead to its ambiguity. An updated list of professional programs has not been published since the policy was extended in 2013. To further complicate matters, the list of professional programs in the 2013 policy document (and the previous ones) only contain general fields of study rather than specific program names (MTCU, 2006). The inclusion of overarching subjects, such as commerce and business administration, makes it difficult to verify whether specific programs are indeed professional or regulated. In addition, there are large discrepancies between the groupings of programs across institutions in Ontario. Some institutions group professional programs under a Bachelor of Science or Bachelor of Arts. For example, the University of Waterloo's (2021) Global Business and Digital Arts program is listed as a Bachelor of Arts. According to the tuition differentiation policy, Arts and Science programs are considered regulated; yet this particular program adheres to professional program fees (MTCU, 2006). When corresponding tuition fees are not provided on university websites, it becomes even more subjective to determine whether the program is regulated or professional. Without a more refined and detailed list of professional programs, it is difficult to distinguish between professional and regulated with certainty. This proves to be a significant barrier in policy application and interpretation when conducting research on the matter.

It was also discovered that universities across Ontario might not be adhering to the policy, specifically relating to the regulation of professional program tuition fees. While attempting to construct a list of professional programs from the CIP, several university websites were consulted for their tuition fees. U of T (2021), for example, states on its website that various first-degree undergraduate programs are deregulated and therefore have augmented tuition fees. The same

programs being classified as deregulated appear on the MTCU's (1998; 2006; 2013) list of professional programs, which are regulated. With tuition fees for programs such as commerce priced close to \$16,000 per year at U of T (2021), it is possible that deregulated fees may be at play. This is especially problematic given that U of T is the most enrolled university in Ontario (OCUL, 2021). If tuition fees for some undergraduate professional programs are deregulated, students may be facing financial barriers to these programs and/or large student debts upon graduation. Moreover, the University of Waterloo has referred to some of its professional programs as high-fee programs (University of Waterloo, 2021). Whether these programs are professional programs with regulated tuition fees or a different type of program with deregulated fees remains unclear.

These ambiguities contradict the policy, which clearly states that all programs listed as professional are regulated (MTCU, 2006; 2013). Perhaps certain programs are no longer being categorized as professional but rather as second-entry, full-cost recovery, or self-funded. If programs are in some way classified as those options, they will not qualify for government operation grants, permitting them to adopt deregulated fees (see Appendix 4). Several attempts were made to the Ministry inquiring about a policy or memo that may allow first-degree undergraduate programs to adopt deregulated fees or to be re-classified as second-entry, full-cost recovery, or self-funded programs. Unfortunately, the Ministry did not reply to the formal requests made; instead, they insisted that someone in the department was “looking at your questions and are working on some responses” (e-mail communication, 2021). Since the initial inquiry was made, it has been over six months, and no response has yet been received.

Student debt continues to be a problem for disadvantaged students. The neoliberal restructuring of PSE, as discussed in Chapter 2, which led to a shift in student aid from a system

based on grants to one centred on loans, has negative long-term impacts on select groups. It can even be regarded as an obstacle to meritocracy by shifting the low-incomes students enter with from pre-to post-graduation and thus, reproducing socio-economic inequity to a certain degree. RAP as a policy seems to be functioning effectively given the higher odds of the most marginalized students utilizing its assistance to repay their loans. Although evidence suggests that it is reaching the most marginalized groups, the reality remains that these very people who entered PSE at a disadvantage are still facing economic marginalization three years after graduating. If student loans are meant to lessen embedded social barriers and create a more equitable society, they may not be functioning as intended. Given that the most marginalized groups are more likely to graduate with higher debt loads, remain highly indebted three years post-graduation, and require assistance to repay their student loans through the RAP, changes to the existing system must be considered. The findings of this dissertation suggest that, despite PSE's intended role as a great equalizer, access for low-income students is contingent on high levels of student loans. Rather than creating equity, it reproduces inequity for marginalized groups, often the most disadvantaged. As a result, governments should reconsider their current approach to PSE accessibility. Replacing grants with loans and increasing the amount available to borrow is not the solution. Policy changes in the domain of student loans are needed. If governments are truly committed to mitigating socio-economic inequities, changes to the ways in which the student loans system is structured and PSE is financed are required.

The human capital model, as discussed in Chapter 2, which continues to be used as the framework for PSE loans and policy is inherently flawed. It assumes that when individuals increase their human capital through education, this will lead to employment which entails higher wages in the labour market (Baptiste, 2001). Essentially, the model treats education as an asset and focuses

on the ‘returns on the investment’ (Baptiste, 2001). It completely disregards social location and social markers that can be detrimental to the returns on PSE investments. Structural and institutional barriers and inequities such as labour market discrimination, racism, the gender wage gap, the racialized wage gap, the glass ceiling, etc. can compromise the economic well-being of students. When taking the cost of discrimination and barriers into account, there is no universal value that can be applied to all PSE degrees. The social and economic costs and returns will always vary based on a student’s social location. As data in this dissertation has revealed, access to well-paid and permanent employment is more likely for some groups than others. Additionally, those who take on large loans to fund their PSE pursuits often pay far more than the actual cost through interest fees and delays in their adult lives. Data also suggests that students relying on loans have higher odds of being enrolled in regulated programs, which tend to lead to lower-waged, more precarious employment. Long after graduation, those with large debts continue to struggle economically with their loan repayments suggesting that not all PSE graduates are able to attain affluent, high-income employment post-graduation.

Policy Recommendations

As part of the process of neoliberalization, governments have cut funding to PSE institutions, raised tuition fees, and expanded student loan programs, all the while voicing their support for accessible PSE for all Canadians, regardless of SES (Rae, 2005). The research findings in this dissertation indicate that for the cost of PSE - both upfront and post-graduation - to not impede access, a radical shift in policy is necessary. The neoliberal assault on PSE has transformed funding policies, which are now built on the premise that education is simply another commodity. The prevalence of neoliberal ideology is evident in tuition fee frameworks and funding policies, which emphasize the important private benefit to the graduates. This has led to the increase of

tuition fees by 60% for regulated programs, and more than 100% for professional programs, far higher than the rate of inflation over the past decade (Glover, 2018). There are a number of policy changes that could be implemented to better support students.

As it currently stands, Canada remains the only major industrialized country without national oversight of PSE. The creation of a federal PSE act in Canada will result in the production of much-needed guidelines for federal funding and will set an obligation to reduce tuition fees. To diminish the precarity of funding for PSE institutions, the federal government must establish a funding transfer designated exclusively for PSE. Rather than lumping the funds in transfers such as the CST and allowing provincial governments of the day to decide the fate of PSE, there should be a separate fund provided each year. Essential social services and programs such as health care, PSE, and childcare, should not have to compete for funding. Provincial governments would then be able to provide PSE institutions with clear, consistent, and dependable operating-grant funding. This would naturally lead to the demise of Ontario's current PBF⁴⁸ funding model, which risks compromising the integrity of PSE institutions across Ontario. In addition, the current transfer is underfunded and those who bear the burden of such a deprived system are those who rely on it most. An increase to PSE funding will provide institutions with grants for operating funds, which will lower tuition fees for students.

The elimination of tuition differentiation policy is recommended. Eliminating tuition differentiation and keeping the cost of professional programs consistent with those of regulated programs removes the additional financial barriers placed on disadvantaged students. Raising the cost of tuition fees for programs that lead to more affluent and stable employment is not in line

⁴⁸ Performance-based funding

with the government's promise of accessible PSE. To see real change through PSE, neoliberal policies such as tuition differentiation must be removed.

Furthermore, an increase in grants (to students to subsidize education expenses) targeted towards low-income and/or vulnerable students should be created. This will lower the total amount of PSE debt accumulated by marginalized students, providing them with an opportunity for long-term financial security. Additionally, an increase in the value and number of up-front grants available to students by redirecting funds currently used on education-related tax credits and savings schemes is recommended. A rise in upfront grants will immediately lower the cost of PSE for students. Redesigning loan programs to make them more attractive and more efficient, including simpler income-based repayment strategies, should be considered. This will lessen the burden for individuals with large amounts of PSE student debt. Flexible and simpler conditions will allow individuals with student debt to further participate in adulthood life events such as marriage, taking on a mortgage, having children, etc. Providing more options for students who prefer to work and attend school to avoid PSE student debt, such as an increase in work-study jobs and higher wages is also recommended. More on-campus work-study employment opportunities will provide students with the prospect to finance their own education or allow them to pay a portion of their student debt while attending classes.

The current research indicates that a move toward eliminating tuition fees would improve the long-term financial and social well-being of students, especially for those from historically marginalized groups. Regardless of the funding spent on PSE, there is still a need for improvement, especially given that education is a public good. The benefits to government and society from a better-educated population are significant. Previous studies indicate that, among other benefits, PSE graduates contribute more to income taxes, tend to be healthier and more engaged citizens,

have less involvement in the criminal justice system, and depend less on social services (Burley, 2016). The fiscal and social long-term benefits to governments of investments in PSE are limitless. In an era of ever-changing economies dominated by precarity, the need for an accessible and affordable PSE system is essential. The neoliberal PSE system in place, comprised of high up-front costs, which translate to unsustainably high levels of student debt, function as barriers to full participation in the economy for many. The societal effects of student debt are felt by everyone, not just those burden by the loans. Granting young Canadians financial security will undoubtedly allow them to achieve life milestones, further pursue education and training, and create a stronger economy. Public education should be just that: publicly funded, publicly accessible, and publicly affordable.

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APPENDICES

Appendix 1a: Additional Cost Recovery Policy, Ministry of Education and Training – Colleges

**Ministry of Education
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MEMORANDUM TO: Presidents
Colleges of Applied Arts and Technology

INFO COPIES TO: Chairs, Boards of Governors
Colleges of Applied Arts and Technology
ACAATO, CFS-O, COR, OCASA, OCCSPA, OPSEU

FROM: David Trick
Assistant Deputy Minister Postsecondary Education Division

DATE: May 6, 1998

SUBJECT: **Colleges of Applied Arts and Technology Tuition Fee Guidelines, Effective 1998-99**

On December 15, 1997, the Minister of Finance announced a new framework for postsecondary tuition fee policy to begin in 1998-99. This new framework will allow colleges to enhance the quality of their programs while providing more funding for student assistance and greater accountability to the college community for the use of tuition fee revenue.

I am writing to provide details on the implementation of this policy. It has the following key elements:

1. No college will be required to raise any tuition fees in 1998-99 or 1999-2000.
2. Any tuition fee increase is subject to the following conditions:
 - a) To ensure continued accessibility for students, colleges are to continue the practice established in 1997-98 of setting-aside 30 per cent of the annual increase in tuition fee revenues for needs-based student assistance.

- b) To reinforce local accountability, the college must report to its community on the use of additional tuition fee revenues.
- 3. The maximum average tuition fee increase for most college programs in each of the next two years will be 5 per cent for improving the quality of students' programs and a further 5 per cent to invest in additional educational program improvements.
- 4. Colleges may introduce additional cost recovery for:
 - a) post-diploma programs; and
 - b) programs where the Board identifies that there is demand for spaces, strong employment prospects and the expectation of high incomes for graduates, to a maximum of 15 per cent of college enrolments.
 - c) within the maximum of 15 per cent of college enrolments prescribed in 4b) above, one or more of the following programs: computer programmer, computer programmer analyst, computer systems technician/technologist, computer engineering technician/technologist, electronic engineering technician/technologist, systems analyst, following the approval by the Minister of Education and Training of a plan from the college to increase by 50 per cent the number of entry level spaces in these programs by September 2000, with the expectation of increasing by 50 per cent the total enrolment in these programs by 2002.
- 4. To protect students currently enrolled, no tuition fee may be increased by more than 20 per cent per year until such time as they could reasonably be expected to complete their program.

Appendix A provides more details on the new tuition fee policy framework.

Should you have any questions or comments about the new tuition fee policy and its implementation, please contact Catriona King, Director, Colleges Branch, at (416) 325-1815.

David Trick Attachment

APPENDIX A
CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99
AND 1999-2000

TABLE 1 REGULAR TUITION FEES

1A. SETTING OF REGULAR TUITION FEES

- a. College Boards of Governors are responsible for setting fees at their college within the Ministry's policy framework.
- b. No Board of Governors is required to raise tuition fees in either 1998-99 or 1999-2000.
- c. Each college's Board of Governors has the discretion to increase tuition fees on average:
 - by up to 5 per cent in 1998-99 and up to a further 5 per cent of the 1997-98 fee rate in 1999-2000; and,
 - by an additional increase of up to 5 per cent of the 1997-98 fee rate in each of these two years.
- d. College Boards may increase tuition fees by an annual maximum of 20 per cent for any single program.

1B. USE OF REVENUES FROM TUITION FEE INCREASES & ACCOUNTABILITY

- a. In approving any fee increase, each Board of Governors must make available to its community (including students, faculty, and staff) a Quality Improvement Plan demonstrating that the increased tuition revenues funds (net of the required student assistance set-aside) resulting from increased tuition fee rates will be used as follows:
 - up to 5 per cent for improving the quality of students' programs (for example, smaller class sizes, curriculum enhancement, instructional materials and equipment, more access by students to teaching faculty); and,
 - up to a further 5 per cent for investing in additional educational program improvements (for example, enhanced laboratory and technology programs, more computer access for students, more teaching assistants or tutors).
- b. Each Board of Governors must publish for its community, within 12 months after approving a fee increase, and annually thereafter, a report on the actual use of the increased fee revenue resulting from the increased fee rate(s).
- c. A penalty in the form of a government operating grant reduction will be applied to any college that does not comply with this tuition fee policy.

**CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99
AND 1999-2000**

TABLE 2 ADDITIONAL COST RECOVERY

2A. ADDITIONAL COST RECOVERY

- a. College Boards of Governors are responsible for setting fees at their college within the Ministry's policy framework.
- b. No Board of Governors is required to raise tuition fees in either 1998-99 or 1999-2000.
- c. Commencing in 1998-99, college Boards of Governors may require additional cost recovery for:
 - i post-diploma programs.
 - ii programs where the Board identifies that there is demand for spaces, strong employment prospects, and the expectation of high incomes for graduates, up to a maximum of 15 per cent of the college's postsecondary enrolment net of post-diploma activity.
 - iii within the maximum of 15 per cent of college enrolments prescribed in ii) above, one or more of the following programs: computer programmer, computer programmer analyst, computer systems technician/technologist, computer engineering technician/technologist, electronic engineering technician/technologist, systems analyst, following the approval by the Minister of Education and Training of a plan from the college to increase by 50 per cent the number of entry level spaces in these programs by September 2000, with the expectation of increasing by 50 per cent the total enrolment in these programs by 2002.
- d. Tuition fees for students enrolled in 1997-98 in these programs will be protected from annual increases exceeding 20 per cent, until such time as they could reasonably be expected to have graduated from their 1997-98 program.
- e. All domestic students in the same program and year of study must be charged the same tuition fee rate.
- f. Fees in these programs shall not be included in the determination of allowable fee increases for programs having regular fees.
- g. Enrolments in these programs will be counted, as before, for government funding purposes and will be included in performance-measurement initiatives linked to college funding distribution mechanisms or accountability frameworks.

2B. USE OF REVENUES FROM TUITION FEE INCREASES & ACCOUNTABILITY

- a. In approving any fee increase, each Board of Governors must make available to its community (including students, faculty, and staff) a Quality Improvement Plan demonstrating that the increased tuition fee revenues (net of the required student assistance set-aside) resulting from increased tuition fee rates will be used to improve

**CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99
AND 1999-2000**

**TABLE 3
STUDENT ASSISTANCE REQUIREMENTS**

3A. STUDENT ASSISTANCE FOR ALL PROGRAMS

- a. Colleges may not take the financial resources of an Ontario student into account in assessing applications for admission.
- b. To ensure accessibility for students, each college must reserve 30 per cent of annual incremental fee revenues for locally administered needs-based student assistance, in addition to the amounts set aside in previous years.

3B. STUDENT ASSISTANCE FOR PROGRAMS WITH ADDITIONAL COST RECOVERY

- a. OSAP will cover tuition and incidental fees to a limit of \$4,500 for students with financial need.
- b. The college must make available financial aid to Ontario students who would otherwise face financial need (as defined by the OSAP needs assessment) for the amount of tuition and incidental fees above \$4,500.
- c. The college's share of student support may be drawn from the 30 per cent set-aside, Ontario Student Opportunity Trust Funds or other institutional resources.
- d. The college's financial aid may be provided through bursaries, work-study, grants, or loans. If a loan is used, the student's total debt for the year (including repayable OSAP loans) may not exceed \$7,000 for a first-entry program. The loan may exceed \$7,000 for post-diploma programs if the college combines the loan with an income-contingent repayment or remission provision.

Appendix 1b: Additional Cost Recovery Policy, Ministry of Education and Training – Universities

Ministry of Education

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MEMORANDUM TO: Chairs of Governing Bodies and Executive Heads of
Provincially-Assisted Ontario Universities, Algoma, Dominican, Hearst
and OCAD

INFO COPIES TO: COU, CFS-O, OCUFA, OGA, OUSA, COUSA, CUPE, Senior
Finance Officers

FROM: David Trick
Assistant Deputy Minister

DATE: May 6, 1998

SUBJECT: **University Tuition Fee Guidelines, Effective 1998-99**

On December 15, 1997, the Minister of Finance announced a new framework for postsecondary tuition fee policy to begin in 1998-99. This new framework will allow universities to enhance the quality of their programs while providing more funding for student assistance and greater accountability to the university community for the use of tuition fee revenue.

I am writing to provide details on the implementation of this policy. It has the following key elements:

1. No university will be required to raise any tuition fees in 1998-99 or 1999-2000.
2. Any tuition fee increase is subject to the following conditions:
 1. To ensure continued accessibility for students, universities are to continue the practice established in 1997-98 of setting aside 30 per cent of the annual increase in tuition fee revenues for needs-based student assistance.

3. The maximum average tuition fee increase for most university programs in each of the next two years will be 5 per cent for improving the quality of students= programs and a further 5 per cent to invest in additional educational program improvements.
4. Universities may introduce additional cost recovery for:
 - 1) graduate programs;
 - 2) undergraduate professional programs in Business/Commerce (second-entry programs only), Dentistry, Law, Medicine, Optometry, Pharmacy and Veterinary Medicine; and
 - 3) undergraduate engineering and/or computer science, following the approval by the Minister of Education and Training of a plan from the university to double the number of entry-level spaces in computer science and/or high-demand fields of engineering by September 2000, with the expectation of doubling total enrolment in these programs by 2003-04.
5. To protect students currently enrolled, no tuition fee may be increased by more than 20 per cent per year until such time as they could reasonably be expected to complete their program.

Appendix A provides more details on the new tuition fee policy framework.

Should you have any questions or comments about the new tuition fee policy and its implementation, please contact Jamie Mackay, Director, Universities Branch, at (416) 325-1952.

David Trick
Assistant Deputy Minister Postsecondary Education Division
Attachment

APPENDIX A

CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99 AND 1999-2000

TABLE 1
REGULAR TUITION FEES

1A. SETTING OF REGULAR TUITION FEES

- a. Governing bodies are responsible for setting fees at their university within the Ministry's policy framework.
- b. No governing body is required to raise tuition fees in either 1998-99 or 1999-2000.
- c. Each university's governing body has the discretion to increase tuition fees on average:
 - by up to 5 per cent in 1998-99 and up to a further 5 per cent of the 1997-98 fee rate in 1999-2000; and
 - by an additional increase of up to 5 per cent of the 1997-98 fee rate in each of these two years.
- d. Governing bodies may increase tuition fees by an annual maximum of 20 per cent for any single program.
- e. The standard fee rates taken into account in calculating the government's basic operating grants will remain at their 1996-97 levels, where they have been held for the past two years.

1B. USE OF REVENUES FROM TUITION FEE INCREASES & ACCOUNTABILITY

- a. In approving any fee increase, each governing body must make available to its community (including students, faculty, and staff) a Quality Improvement Plan demonstrating that the increased tuition fee revenues (net of the required student assistance set-aside) resulting from increased tuition fee rates will be used as follows:
 - up to 5 per cent for improving the quality of students' programs (for example, smaller class sizes, curriculum enhancement, instructional materials and equipment, more access by students to teaching faculty); and,
 - up to a further 5 per cent for investing in additional educational program improvements (for example, enhanced laboratory and technology programs, more computer access for students, more opportunities for students to participate in research).
- a. Each governing body must publish for its community within 12 months of approving a fee increase, and annually thereafter, a report on the actual use of the increased fee revenue resulting from the increased tuition fee rate(s).
- b. A penalty in the form of a government operating grant reduction will be applied to any university that does not comply with this tuition fee policy.

**CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99
AND 1999-2000**

**TABLE 2
ADDITIONAL COST RECOVERY**

2A. ADDITIONAL COST RECOVERY

- a. University governing bodies are responsible for setting fees at their university within the Ministry's policy framework.
- b. No governing body is required to raise tuition fees in either 1998-99 or 1999-2000.
- c. Commencing in 1998-99, university governing bodies may require additional cost recovery for:
 - i graduate programs (including master's, doctoral, graduate diploma and medical/dental residency programs);
 - ii undergraduate professional programs in Business/Commerce (second-entry programs only), Dentistry, Law, Medicine, Optometry, Pharmacy and Veterinary Medicine; and
 - iii undergraduate engineering and/or computer science programs, following the approval by the Minister of Education and Training of a plan from the university to double the number of entry-level spaces in computer science and/or high-demand engineering fields of electrical engineering, computer and software engineering and communications engineering by September 2000, with the expectation of doubling total enrolment in these programs by 2003-04.
- d. Tuition fees for students enrolled in 1997-98 in these programs will be protected from annual increases exceeding 20%, until such time as they could reasonably be expected to have graduated from their 1997-98 program.
- a. All domestic students in the same program and year of study must be charged the same tuition fee rate.
- f. Fees in these programs shall not be included in the determination of allowable fee increases for programs having regular fees.
- g. Enrolments in these programs will be counted, as before, for government funding purposes.
- h. The standard fee rates taken into account in calculating the government's basic operating grants will remain at their 1996-97 levels, where they have been held for the past two years.

**TABLE 2
ADDITIONAL COST RECOVERY**

2B. USE OF REVENUES FROM TUITION FEE INCREASES & ACCOUNTABILITY

- a. In approving any fee increase, each governing body must make available to its community (including students, faculty, and staff) a Quality Improvement Plan demonstrating that the increased tuition fee revenues (net of the required student assistance set-aside) resulting from increased tuition fee rates will be used to improve the quality of students' programs, or in the case of engineering and computer science, to implement an approved plan to increase spaces.
- b. Each governing body must publish for its community within 12 months of approving a fee increase, and annually thereafter, a report on the actual use of the increased fee revenue resulting from the increased tuition fee rate(s).
- c. A penalty in the form of a government operating grant reduction will be applied to any university that does not comply with this tuition fee policy.

**CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99
AND 1999-2000**

**TABLE 3
STUDENT ASSISTANCE REQUIREMENTS**

3A. STUDENT ASSISTANCE FOR ALL PROGRAMS

- a. Universities may not take the financial resources of an Ontario student into account in assessing applications for admission.
- b. To ensure accessibility for students, each university must reserve 30 per cent of annual incremental fee revenues for locally administered needs-based student assistance, in addition to the amounts set aside in previous years.

3B. STUDENT ASSISTANCE FOR PROGRAMS WITH ADDITIONAL COST RECOVERY

- a. OSAP will cover tuition and ancillary fees to a limit of \$4,500 (plus co-op fees of up to \$850 where applicable) for students with financial need.
- b. The university must make available financial aid to Ontario students who would otherwise face financial need (as defined by the OSAP needs assessment) for the amount of tuition and ancillary fees above \$4,500 (\$5,350 for co-op programs).
- c. The university's share of student support may be drawn from the 30 per cent set-aside, Ontario Student Opportunity Trust Funds or other institutional resources.
- d. The university's financial aid may be provided through bursaries, work-study, grants, or loans. If a loan is used, the student's total debt for the year (including repayable OSAP loans) may not exceed \$7,000 for a first-entry program. The loan may exceed \$7,000 for second-entry programs if the university combines the loan with an income-contingent repayment or remission provision.

Appendix 2: Additional Cost Recovery (ACR) definition

CONDITIONS AND IMPLEMENTATION PROVISIONS ASSOCIATED WITH TUITION FEE INCREASES IN 1998-99 AND 1999-2000

TABLE 2 ADDITIONAL COST RECOVERY	
2A. ADDITIONAL COST RECOVERY	
a.	University governing bodies are responsible for setting fees at their university within the Ministry's policy framework.
b.	No governing body is required to raise tuition fees in either 1998-99 or 1999-2000.
c.	Commencing in 1998-99, university governing bodies may require additional cost recovery for: <ul style="list-style-type: none"> i graduate programs (including master's, doctoral, graduate diploma and medical/dental residency programs); ii undergraduate professional programs in Business/Commerce (second-entry programs only), Dentistry, Law, Medicine, Optometry, Pharmacy and Veterinary Medicine; and iii undergraduate engineering and/or computer science programs, following the approval by the Minister of Education and Training of a plan from the university to double the number of entry-level spaces in computer science and/or high-demand engineering fields of electrical engineering, computer and software engineering and communications engineering by September 2000, with the expectation of doubling total enrolment in these programs by 2003-04.
d.	Tuition fees for students enrolled in 1997-98 in these programs will be protected from annual increases exceeding 20%, until such time as they could reasonably be expected to have graduated from their 1997-98 program.
e.	All domestic students in the same program and year of study must be charged the same tuition fee rate.
f.	Fees in these programs shall not be included in the determination of allowable fee increases for programs having regular fees.
g.	Enrolments in these programs will be counted, as before, for government funding purposes.
h.	The standard fee rates taken into account in calculating the government's basic operating grants will remain at their 1996-97 levels, where they have been held for the past two years.

Appendix 3: Tuition Differentiation policy, April 10, 2006, Ministry of Training, Colleges and Universities

Guidelines for Implementation of the Tuition Fee Policy For Publicly-Assisted Universities, 2006-07 to 2009-10

These guidelines are intended to give direction to publicly-assisted university level institutions on how to implement the tuition fee policy, as announced by the Honourable Christopher Bentley, Minister of Training, Colleges and Universities on Wednesday, March 8, 2006. Publicly-assisted institutions are those defined in the *Operating Funds Distribution Manual*, including the Northern Ontario School of Medicine and the University of Ontario Institute of Technology.

Introduction

The government policy seeks an additional contribution from students to meet the quality goals of the Reaching Higher Plan. The student contribution will come from a regulated tuition framework. Increases will be capped, predictable and linked to improvements in quality and access. Institutions will have more flexibility to set fees, but only within this capped, regulated and predictable framework.

Tuition increases must be tied to quality improvements and the student access guarantee. Quality improvements and access for students will be ensured through multi-year accountability agreements that every institution is required to sign. The agreement sets out the institutions' commitment to quality, access and will include the student access guarantee.

All policies and directives in the current university *Ontario Operating Funds Distribution Manual*, in relation to tuition fees, will be in effect with the changes noted below. The Operating Manual will be revised to reflect the policy.

Overview of Tuition Fee Policy

MAXIMUM ALLOWABLE FEE INCREASE		
Program Type	Program Year	
	First Year	Continuing Years
Arts & Science and Other Programs	4.5%	4%
Professional and Graduate Programs	8%	4%
TOTAL TUITION	5%	

This is a regulated framework for all publicly funded programs. It allows for tuition fee differentiation based on program and program year of study. These guidelines are based on the principle that tuition fees may increase within specified limits over current actual 2005-06 tuition fee levels with the average tuition increase not to exceed 5%, excluding changes in enrolment.

Arts & Science and Other Programs

Subject to the total tuition increase cap of 5%, existing arts and science and other selected undergraduate programs, may increase by no more than 4.5% for students in the first year of their program and 4% for students in continuing years of their program. A detailed list of programs included in this category is specified in Appendix A.

Professional and Graduate Programs

Subject to the total tuition increase cap of 5%, existing graduate and professional programs, may increase by no more than 8% for students in the first year of their program and 4% for students in continuing years of their program. A detailed list of programs included in this category is specified in Appendix A.

Calculating the 5% Total Tuition Increase Cap

The 5% total tuition increase cap is to be calculated at each institution by multiplying every program's year-over-year tuition fee increase in percent by every program's current year FTE enrolment. These results are to be added together and then divided by the institution's total FTE enrolment. Using this method, fluctuations in enrolment are taken into account.

FA₁ = Fees in program A in 2005-06 FA₂ = Fees in program A in 2006-07

FB₁ = Fees in program B in 2005-06 FB₂ = Fees in program B in 2006-07

FA_{etc} = as above for all other programs in 2005-06 FA_{etc} = as above for all other programs in 2006-07

EA = Enrolment in program A in 2006-07

EB = Enrolment in program B in 2006-07 E_{etc} = Enrolment in all other programs

$$= \frac{EA * (FA_2 / FA_1 - 1) + EB * (FB_2 / FB_1 - 1) + (\text{change in fees for all other programs})}{(EA + EB + \text{enrolment in all other programs})}$$

For the current year, tuition revenue, as calculated on an FTE basis, net of enrolment change, should not exceed the 5% cap.

For the purposes of establishing fees for the 2006-07 academic year, institutions will be basing fee increases on projected enrolment for the academic year. Final reporting of fee levels will be based on final audited enrolment.

Differentiating First and Continuing Year of Study

Institutions should use their existing definitions and practices in defining first and continuing years of study for the purposes of implementing these guidelines. The distinction between first and continuing years in a program should be operationalized in a way that is consistent with established enrolment reporting practices, and institutional definitions between the first and upper years of programs.

In general, the first year of study should be considered to be the initial year of study in a program or the period required for a student to complete the first full year of the academic program (as adapted to reflect terms, semesters and course levels appropriately). A continuing year of study should be defined as any one of the subsequent years of study in a program after the first year of a program.

Students who choose to change programs or enter a program through transfer should be charged the tuition fee in effect in for the relevant program year (be it first year or continuing) in the program to which they transfer.

Students who repeat a year should be charged the same tuition rates as students starting the same program.

In cases where an institution has an existing program with higher (or lower) fees in the upper years of a program, the differential between tuition fees in each year of study may be maintained, in addition to any increases mandated under the new tuition fee framework.

Tuition Fee Policy Application

The tuition policy does not apply to programs or for student categories that are ineligible for MTCU operating grant funding (e.g., full cost recovery/self-funded programs, fees for international students).

As is the current policy, a university may not convert an existing publicly funded program to a full-cost recovery program without prior approval by the Ministry.

The tuition fee policy comes into effect in the 2006-07 academic year. It is linked to the Reaching Higher investments and will be in place, until the end of Reaching Higher, in 2009-10.

Tuition Fee Policy

Tuition Levels for New Programs

Institutions may introduce new programs, subject to normal Ministry approvals.

Institution may set the tuition fee for new programs up to a level commensurate with the tuition charged for comparable university programs in Ontario. Fees should not exceed the maximum fee rates charged by other comparable Ontario university programs. Comparability will consider factors such as course and program design, credential outcome and assigned BIU weight.

Institutions must indicate in their new program approvals submission to the Ministry the proposed fee rate for any new program. Institutions may provide information on the comparator programs used to set the tuition fee level. Recognizing that final decisions in the program approvals cycle could occur after the date required for governing body approval and student notification, it is strongly recommended that information be provided to the Ministry in advance of the program approval deadline. The Ministry will review the appropriateness of the comparator programs chosen to set the tuition fee rate and has the final authority on all decisions of comparability.

Once program fees for the first year of a program being offered have been established, the program will be subject to the maximum allowable percentage increase for first-year programs and the 4% maximum allowable percentage increase for each continuing year. In their first year of operation, new programs will not be included in the 5% total tuition increase cap.

Annual Tuition Fee Reports and Compliance

Universities will be required to report their annual tuition fees to the Ministry. University Executive Heads will be required to sign-off on the report confirming that the tuition policy has been correctly implemented. Institutions may expect further communication with regards to the reporting requirements and template.

Any institution that raises fees over the allowable amount may be required to reimburse students for the excess fees charged. In the event that the students cannot be reimbursed, the amount of excess tuition fee revenue may be deducted from the institution's operating grants as a penalty in the form of a grant reduction.

Tuition Fee Set-Aside Policy

The tuition fee set-aside policy will continue to be in effect in 2006-07 with modifications to reflect enhancements to OSAP and increased harmonization between provincial and institutional student aid. The annual tuition fee set-aside amount should be set at the projected 2005-06 level, as reported by each institution in 2004-05 tuition set-aside reports. Tuition fee set-aside amounts will be finalized after the final 2005-06 reports have been received. The amount of tuition fee set-aside is to be increased/decreased by the annual percentage increase/decrease in final audited full time equivalent (FTE) enrolment.

Universities continue to be responsible for expending this amount annually to provide financial support to students through bursaries, scholarships, work-study programs, and work between academic terms. The policy has been revised to include disbursement for emergency assistance as eligible expenditures. Universities will continue to report on the disbursement of tuition set-aside funds.

Ancillary Fee Policies

Ancillary fees are not covered by the tuition policy. The current ancillary fee policy outlined in the *Ontario Operating Funds Distribution Manual* remains in place. The protocol process for introducing new or increasing current, ancillary fees will continue. For those ancillary fees exempt from the protocol process, it is the Ministry's expectation that institutions will limit fee increases to reflect the reasonable cost of providing service to students.

Tuition Freeze Compensation

All tuition fee increase are to be calculated over 2005-06 actual tuition fee levels charged to students. Tuition fee compensation should not be included in the calculation of tuition fee increases to students as institutions are considered to have been fully compensated for the tuition freeze.

Further Information

If you have any policy questions about tuition, ancillary fees, set-aside calculations and expenditure guidelines, and other tuition policy matters, please call Heather Schramm, Universities Branch at (416) 325-4077.

Appendix A Program Categories
Ontario University Formula (Standard) Fee Schedule 2006-07
Arts & Science and Other Programs

Group 1: Technology (Lakehead)(a)	Standard Fee: \$1,575
Groups 2 & 3:(b)	Discontinued
Group 4: Dental Hygiene (Technology) Nursing Technology	Standard Fee: \$2,034
Group 5: Agriculture Arts & Science (Toronto) Arts & Science (1st Year, Trent) Arts, General & 1st Year Honours Arts, Upper Years Honours Conversion Engineering (Lakehead) Diploma Public Health Nursing Education Environmental Studies Fine & Applied Arts Forestry Household & Food Science Journalism Library Science Music Nursing* Ontario College of Art and Design Programs (formerly Group 3) Physical & Health Education Preliminary Year Pre-medicine Secretarial Science Science General & 1st year Honours Science, Upper years Honours Social Work, 1st year Social Work, Upper years Theology	Standard Fee: \$2,386
Professional and Graduate Programs**	
Group 5: Commerce & Business Administration Computer Science Law Pharmacy Physical & Occupational Therapy Veterinary Medicine	Standard Fee: \$2,386
Group 6:(c) Architecture Engineering Landscape ArchitectureIndustrial Design Optometry	Standard Fee: \$2,591
Group 7: (c) (d) Dentistry (e) Medicine	Standard Fee: \$3,035
Graduate (One Term Fee) All Programs	Standard Fee: \$1,198

* Collaborative Baccalaureate of Nursing: Subject to the tuition increase of cap of 5 percent, tuition fees for the Collaborative Baccalaureate of Nursing programs may increase 4.5 percent for the first year and 4 percent for the continuing years of study as is consistent with the fee increases that colleges may charge.

** Former Additional Cost Recovery programs are now regulated under the new tuition policy. Programs which were formerly ACR and additional programs (such as Physical & Occupational Therapy, Industrial Design and Landscape Architecture) have been placed in a new category of “graduate and professional” programs. These programs are permitted a higher tuition fee increase than programs in the “arts & science” program category. Due to the variation in maximum discretionary fee by program that emerged during program deregulation between 1997 and 2003, the maximum discretion fee above standard fee will now be monitored as a part of each institutions tuition fee reports.

(a) Not all standard fees for institution-specific programs are listed. Please refer to the *"Essential Notes and Reporting Instructions"*, produced by the ministry, for a detailed breakdown of institution-specific standard fees.

b) Group 2 (Ryerson-specific fee category) and Group 3 (OCAD-specific fee category) have been discontinued.

1. Group 6 fees apply to all programs in the group, with the exception of the Optometry program at Waterloo, for which an additional \$1,000 may be charged on top of the standard fee including the discretionary component.

2. Standard fees are applied to Group 7 programs, except for the residency years of Oral Surgery and Oral Pathology and Medical Interns and Residents, to which a zero standard fee applies.

3. For their Doctor of Dental Surgery program, Toronto and Western were permitted to increase the standard fee including the discretionary component, by an additional amount of up to \$4,000, beginning with students entering in September, 1996.

Appendix 4: Professional and Regulated Program List

Program Categories

Ontario University Formula (Standard) Fee Schedule 2006-07

Arts & Science and Other Programs	
Group 1: Technology (Lakehead)(a)	Standard Fee: \$1,575
Groups 2 & 3:(b)	Discontinued
Group 4: Dental Hygiene (Technology) Nursing Technology	Standard Fee: \$2,034
Group 5: Agriculture Arts & Science (Toronto) Arts & Science (1st Year, Trent) Arts, General & 1st Year Honours Arts, Upper Years Honours Conversion Engineering (Lakehead) Diploma Public Health Nursing Education Environmental Studies Fine & Applied Arts Forestry Household & Food Science Journalism Library Science Music Nursing* Ontario College of Art and Design Programs (formerly Group 3) Physical & Health Education Preliminary Year Pre-medicine Secretarial Science Science General & 1st year Honours Science, Upper years Honours Social Work, 1st year Social Work, Upper years Theology	Standard Fee: \$2,386
Professional and Graduate Programs**	
Group 5: Commerce & Business Administration Computer Science Law Pharmacy Physical & Occupational Therapy Veterinary Medicine	Standard Fee: \$2,386
Group 6:(c) Architecture Engineering Landscape Architecture Industrial Design Optometry	Standard Fee: \$2,591
Group 7: (c) (d) Dentistry (e) Medicine	Standard Fee: \$3,035
Graduate (One Term Fee) All Programs	Standard Fee: \$1,198

Appendix 5: University of Toronto Fee Schedule, 2021-2022

Classical Civilization - <i>Minor</i>	✗	ERMIN0382	Type 1
Commerce - <i>Major</i>	✓ Deregulated Fees apply	ERMAJ1111	Type 3
Commerce - <i>Specialist</i>	✓ Deregulated Fees apply	ERSPE2273	Type 3
Commerce: Accounting - <i>Specialist</i>	✓ Deregulated Fees apply	ERSPE1704	Type 3
Commerce: Finance - <i>Specialist</i>	✓ Deregulated Fees apply	ERSPE2034	Type 3
Commerce: Marketing - <i>Specialist</i>	✓ Deregulated Fees apply	ERSPE2380	Type 3
Communication, Culture, Information & Technology - <i>Major</i>	✓ Deregulated Fees apply	ERMAJ1034	Type 3
Comparative Physiology - <i>Specialist</i>	✗	ERSPE0482	Type 2
Computer Science - <i>Specialist</i>	✓ Deregulated Fees apply	ERSPE1688	Type 3

Appendix 6: University of Toronto Professional Program Tuition Fees 2021-2022

For a full breakdown of your fees, please visit the [U of T Student Accounts](#) website.

Tuition Fees (2021-22)

PROGRAM	COSTS
Bioinformatics Computer Science Information Security	Domestic \$6,100 (Year 1) \$11,420 (Upper Year)
Communication, Culture, Information & Technology Digital Enterprise Management	International \$58,160 (Year 1) \$60,150 (Upper Year)
Biomedical Communication Visual Culture & Communication	Domestic \$6,100 (Year 1) \$15,900 (Upper Year)
All Commerce programs Human Resource Management	International \$58,160 (Year 1) \$66,110 (Upper Year)
All Management programs (except Human Resource Management, as listed above)	Domestic \$6,100 (Year 1) \$12,720 (Major) \$15,900 (Specialist) (Upper Year)
	International \$58,160 (Year 1) \$60,150 (Major) \$66,110 (Specialist) (Upper Year)

Appendix 7: Ministry of Training, Colleges and Universities Reply to Professional Program Inquiry

Ministry of Colleges and
Universities

Ministère des Collèges et
Universités

Postsecondary Education Division

Division de l'éducation postsecondaire

Postsecondary Finance &
Information Management Branch
315 Front Street
16th Floor
Toronto ON M7A 0B8
Tel (416) 325-1953
Email : PSFIMB@ontario.ca

Direction des finances et de la gestion
de l'information du secteur postsecondaire
315, rue Front
16^e étage
Toronto ON M7A 0B8
Tél (416) 325-1953
Courriel : PSFIMB@ontario.ca



grace.barakat@mail.utoronto.ca

Dear Grace,

Thank you for your contacting the ministry regarding undergraduate programs at Ontario universities. I appreciate the opportunity to respond to your inquiry.

In Ontario, publicly assisted universities are autonomous institutions established by individual statutes and governed by their Board of Governors. Ontario universities are responsible for their academic and administrative matters.

Most undergraduate programs at Ontario universities are considered eligible for operating funding after being approved by the Minister of Colleges and Universities. There are a few undergraduate programs that are considered full-cost-recovery or self-funded and are not eligible for operating funding from the ministry. In addition, these programs are operated solely on a full-cost recovery basis are not subject to the ministry's program approval procedures and excluded from the provisions of the Tuition Fee Framework.

The Ministry of Colleges and Universities does not have the authority to intervene in matters related to academic matters and the administration of programs. Institutions can choose to offer programs as a full-cost-recovery program. Since these programs are not regulated, the ministry does not maintain a repository for these programs and the relative tuition fees.

I encourage you to contact the institution of interest directly to request a list of programs.

Thank you again for taking the time to write and sharing your views.

Sincerely,

A handwritten signature in black ink, appearing to read "David Combaluzier".

David Combaluzier
Manager (A)
Universities Finance Unit
Ministry of Colleges and Universities

Appendix 8: University of Waterloo Degree Requirements

UNIVERSITY OF
WATERLOO

Advanced Search or

2021-2022

UNDERGRADUATE STUDIES ACADEMIC CALENDAR

List of Undergraduate Studies Archived Calendars

The Undergraduate Studies Calendar

General Information

Calendar of Events and Academic Deadlines

Admissions

Fees

Awards and Financial Aid

Co-operative Education & Career Action

University Policies, Guidelines, and Academic Regulations

Faculty of Arts

About the Faculty of Arts

Arts Admission

Arts Academic Regulations and Advice

Arts Degree Requirements

Student Responsibility

Undergraduate Communication Requirement

Declaring a Major, Minor, or Specialization

Bachelor of Accounting and Financial Management

Bachelor of Computing and Financial Management

Bachelor of Global Business and Digital Arts

Overview

Admissions and Tuition

Arts Degree Requirements

Bachelor of Global Business and Digital Arts

Admissions and Tuition

Printable Version

Admissions

Students may earn a Bachelor of Global Business and Digital Arts degree as outlined in [Degree Requirements](#). Students normally apply for direct admission from high school into the first year of the Global Business and Digital Arts program. Upon completing a provisional first year (maintaining a minimum 70% average in the required set of courses that are specifically identified in the Degree Requirements page), students will formally proceed into the Global Business and Digital Arts program in second year.

Students will be required to have a minimum of 75% in Ontario Grade 12 U (university level) English or equivalent. It is recommended that students complete Ontario Grade 12 U (university level) Mathematics of Data Management.

Tuition

This is a high-fee program; as such, tuition higher than the normal University of Waterloo tuition is required. For details of tuition costs, see the [Fees section](#) of this Calendar.

Office of the Registrar

University of Waterloo

Ira G. Needles Hall

200 University Avenue West

Waterloo, Ontario, Canada N2L 3G1

519-888-4567

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Appendix 9: Classification of Instructional Programs (CIP 2016)

2018 National Graduates Survey (NGS) (Class of 2015) – Public Use Microdata File (PUMF) User Guide
Appendix A

Appendix A

Classification of Instructional Programs (CIP 2016)

For more information on the Classifications of Instructional Programs (CIP) 2016 go to
<https://www.statcan.gc.ca/eng/subjects/standard/cip/2016/index>
For more information on the Variant of CIP-Primary grouping go to
<https://www.statcan.gc.ca/eng/subjects/standard/cip/2016/introduction>

PGMCIPAP

Value	Primary Grouping	Constituent CIP Series and Subseries	CIP Code(s)
01	Education	Education	13.
02	Visual and Performing Arts, and Communications Technologies	Communications technologies/technicians and support services Visual and performing arts	10. 50.
03	Humanities	Aboriginal and foreign languages, literatures, and linguistics English language and literature/letters Liberal arts and sciences, general studies, and humanities Medieval and renaissance studies Holocaust and related studies Classical and ancient studies Maritime studies Philosophy and religious studies Theology and religious vocations History French language and literature/letters	16. 23. 24. 30.13 30.21 30.22 30.29 38. 39. 54. 55.
04	Social and Behavioral Sciences and Law	Area, ethnic, cultural and gender studies Communication, journalism, and related programs Family and consumer sciences/human sciences Legal professions and studies Peace studies and conflict resolution Biopsychology Gerontology Museology/museum studies Science, technology, and society Behavioural sciences International/global studies	05. 09. 19. 22. 30.05 30.10 30.11 30.14 30.15 30.17 30.20

Value	Primary Grouping	Constituent CIP Series and Subseries	CIP Code(s)
		Intercultural/multicultural and diversity studies	30.23
		Cognitive science	30.25
		Cultural studies/critical theory and analysis	30.26
		Dispute resolution	30.28
		Human computer interaction	30.31
		Sustainability studies	30.33
		Psychology	42.
		Social sciences	45.
05	Business, Management and Public Administration	Accounting and computer science	30.16
		Public administration and social service professions	44.
		Business, management, marketing, and related support services	52.
06	Physical and Life Sciences and Technologies	Biological and biomedical sciences	26.
		Biological and physical sciences	30.01
		Natural sciences	30.18
		Nutrition sciences	30.19
		Human biology	30.27
		Marine sciences	30.32
		Physical sciences	40.
		Science technologies/technicians	41.
07	Mathematics, Computer and Information Sciences	Computer and information sciences and Support services	11.
		Library science	25.
		Mathematics and statistics	27.
		Systems science and theory	30.06
		Mathematics and computer science	30.08
		Computational science	30.30
08	Architecture, Engineering, and Related Technologies	Architecture and related services	04.
		Engineering	14.
		Engineering technologies/technicians	15.
		Historic preservation and conservation	30.12
		Construction trades	46.
		Mechanic and repair technologies/technicians	47.
		Precision production	48.
09	Health, Parks, Recreation and Fitness	Parks, recreation, leisure and fitness Studies	31.
		Health professions and related clinical Sciences	51.
		Dental, medical and veterinary residency	60.

2018 National Graduates Survey (NGS) (Class of 2015) – Public Use Microdata File (PUMF) User Guide
Appendix A

Value	Primary Grouping	Constituent CIP Series and Subseries	CIP Code(s)
		Programs	
10	Other (Includes Agriculture, natural resources and conservation; Personal, protective and transportation services; and Other)	Agriculture, agricultural operations, and related sciences	01.
		Natural resources and conservation	03.
		Personal and culinary services	12.
		Technology education/industrial arts programs	21.
		Reserve entry scheme for officers in the Armed forces	28.
		Military technologies	29.
		Multidisciplinary/interdisciplinary studies, other	30.99
		Security and protective services	43.
		Transportation and materials moving	49.
		High school/secondary diploma and certificate programs	53.
		Basic skills	32.
		Citizenship activities	33.
		Health-related knowledge and skills	34.
		Interpersonal and social skills	35.
		Leisure and recreational activities	36.
		Personal awareness and self-improvement	37.