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THE DOWNSIDE OF FINANCIAL AID: AN ANALYSIS OF STUDENT LOAN DEFAULT
AT A MIDWEST PUBLIC UNIVERSITY

BRIAN W. JOHNSTON

90 Pages

The goal of this study is to compare the likelihood of student loan default by students from a Midwest public university amongst a variety of variables. A dataset was acquired from an institution in the Midwest. A logistic regression was run to determine the predictive value of several identifiers on student loan default amongst several race groups. The findings of this study reveal that grade point average (GPA), age, total scholarships and grants received, and transfer status impact likelihood of student loan default. The results of this study challenge higher education institutions to analyze their student loan default and identify populations who need additional attention and support to ensure they are not making a negative financial decision. Through the lens of social contract theory, human capital theory, monetary theory and critique, and a critical lens of neoliberalism, student loan default is analyzed for a Midwest public institution, with recommendations on how to move forward with the findings.

KEYWORDS: financial aid, student loans, student loan default, monetary critique, neoliberalism

THE DOWNSIDE OF FINANCIAL AID: AN ANALYSIS OF STUDENT LOAN DEFAULT
AT A MIDWEST PUBLIC UNIVERSITY

BRIAN W. JOHNSTON

A Dissertation Submitted in Partial
Fulfillment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

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2022

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THE DOWNSIDE OF FINANCIAL AID: AN ANALYSIS OF STUDENT LOAN DEFAULT
AT A MIDWEST PUBLIC UNIVERSITY

BRIAN W. JOHNSTON

COMMITTEE MEMBERS:

Lenford Sutton, Chair

John Rugutt

Lucille Eckrich

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CHAPTER I: INTRODUCTION TO THE STUDY

Overview

When financial aid was created through the Servicemen's Readjustment Act of 1944, the National Defense Education Act (NDEA) of 1958, and the Higher Education Act (HEA) of 1965, it was a tool to provide access to higher education for more individuals—the first for veterans, the latter two for all who needed aid—to attend higher education (St. John, Paulsen, & Carter, 2005). The provision of federal financial aid to help lower income individuals afford higher education created the belief that the United States government considered higher education as a public good (Burt & Baber, 2018; St. John, Paulsen, & Carter, 2005).

The discourse on higher education becoming a private good grew in the 1970s with the introduction of new legislation to include access to student loans and grants for more middle-income students. The Student Loan Marketing Association, more commonly referred to as Sallie Mae, was created in 1972 to help with the rapid demand for student loans but created further complications with how student loans were funded and backed by the federal government. While the Middle-Income Student Assistance Act of 1978 alludes to financial aid being available to all, it was a clear shift from equity to equality. In the same year as the Middle-Income Assistance Act, the Guaranteed Student Loan Act arrived to replace the government's belief in providing need-based aid to casting a wide net of student loans (Thelin, 2011). Equality focuses on ensuring everyone is entitled to the same resources, whereas equity focuses on trying to provide resources fairly and justly to individuals ideally to achieve equal outcomes (Espinoza, 2017). Although it could be perceived as positive that more middle-income students would have access to Pell Grants through the Middle-Income Student Assistance Act and Higher Education Act, there was not an increase in financial aid targeting low-income and other underrepresented

populations (Burt & Baber, 2018). The lack of financial aid directed toward underrepresented populations did not allow for those with fewer resources to afford higher education during an era of increased tuition rates, and accommodations being created for wealthier families. Tuition continued to rise over time due to inflation, decreased state appropriations, increased university spending, and a variety of sociopolitical reasons leading to the current high price tag for higher education.

With higher education taking gradual turns away from public to private good, the financial burden is being shifted to the student. Kane (1995) and Woodhouse (2015) state that while there is a large amount of federal spending on higher education, the funding from the federal government has begun going straight to the student in the form of student loans. In addition, instead of loaning its own money directly, as it had done under NDEA, the federal government shifted in 1965's HEA to guaranteeing loans that would come from commercial banks, using its funds to pay the-- albeit now at higher rates--interest that came due for qualifying students while they were in school, and subsidizing it afterwards (Best & Best, 2014). These changes in policies have led to inequities for those who consider attending higher education (Davis, Green-Derry, & Jones, 2012).

With the shift of funding for higher education going from being sent to the institution to funding the student through federally guaranteed commercial loans (American Academy of Arts & Sciences, 2015), the debt burden in the country began to increase drastically. While student loans became the primary vehicle to fund low- and middle-income families to have access to higher education, the financial benefit to the private sector was exploited leaving the students to foot the bill through their future earnings. The number of students borrowing has drastically increased since the 1990s as states decreased their funding of universities and the cost was offset

to students, and the amount they are borrowing is also increasing (American Academy of Arts & Sciences, 2015; Chen & Wiederspan, 2014). The decrease in state funding increased in the 1990s due to the Clinton administration allowing the privatization of Sallie Mae. Sallie Mae had since 1972 done for student loans what Fannie Mae did for home loans – buy them from commercial banks, bundle, and resell them as investment instruments on the secondary market (Howe, 1984). This change in economic and political approach was introduced with the introduction of Sallie Mae in 1972, and has continued to today (St. John, 2003). Houle and Warner (2017) state that increased borrowing burdens Black and Latinx borrowers in additional ways by causing mental health issues, having to return home to live with parents, and lower retirement contributions. In 2017, the national student debt burden was over 1.6 trillion dollars, and had surpassed the amount of credit card debt in the United States (Fox, Bartholomae, Letiewicz, & Montalto, 2017). The average borrower has risen from approximately \$28,400 in student debt to \$37,113 in just eight years (Reed & Cochrane, 2014; Hanson, 2022). Houle and Warner (2017) addressed that certain populations are unable to sustain living on their own after taking on student loan debt, and are unable to purchase homes, repay car payments, and progress like others in their cohort. Student loans affect more than just the students who borrowed. Institutions and the government are affected by the students who are unable to payback their student loans through restrictions to federal funding seen at many for-profit institutions receiving less access to federal funding and loan servicers being expected to repay students for predatory loans (Fox, Barholame, Letiewicz, & Montalto, 2017). While the restrictions help the government prevent further default and financial instability for students, they also help with punishing the institutions that have not worked to address the issue.

With the increased amount of debt being carried by students, some feel it is inevitable that student loan default rates would increase (Looney, Wessel, & Yilla, 2020). Despite that feeling, the recent Department of Education dataset on national cohort default rates (CDR) for fiscal year (FY) 2016 is 10.6% of the relevant cohort of graduates (U.S. Department of Education, 2016). A cohort is the group of student loan borrowers who enter repayment. This study examines default rates at one large public university in the midwest. Given the focus of the study, it is relevant to look also at the numbers for higher education institutions in midwest and public institutions in the United States default rates. In Illinois, the CDR for FY2016 is 9.5% (U.S. Department of Education, 2016). For public institutions in the United States, the CDR for FY 2016 is 9.6% (U.S. Department of Education, 2016). While it appears that national default rates are decreasing across the country (Fredman, 2019), there are a number of factors that could impact the decreasing numbers. The most recent cohorts have not had as many years outside of school to possibly default on their loans, and more students are choosing not to attend higher education making those who are more likely to be able to pay off their loans a larger percentage of more recent cohorts (Kreighbaum, 2019). Defaulting on student loans is a national problem that is not going away, at least not until we change our monetary system and how we choose to finance higher education.

Statement of Research Problem

While financial aid research has been plentiful and rich, a gap in the literature is understanding student loan default at the institutional level. There has been research that has centered on default rates at the state and national level, but the research does not cover individual traits that can be found at the four-year institutional level (Fox, Barholame, Letiewicz, & Montalto, 2017; Fredericks Volkwein, Szelest, Cabrera, & Napierski-Prancl, 1998; Herr & Burt,

2007). The few studies centered at the institutional level have reflected specific institutions that do not meet a similar classification to this study. For instance, Christman (2000) and Salas-Amaro (2007) center on two-year institutions, while Barone, Steiner, and Teszler (2005) and Herr and Burt (2007) focus on four-year institutions with different individual characteristics from the institution in this study. When considering national data, it is harder to look at institutional traits such as feeder high school information or major/minor. The other issue when considering national or state level data is that institutions classify their data differently. While they may have submitted similar information or traits, they could have used a different lens in interpreting their data, or did not submit their data fully. Having to interpret that national data makes it challenging for a researcher to investigate fully who is defaulting on their student loans (Herr & Burt, 2005). An additional gap in the literature is that there is limited attention to specific predictors for defaulting that an institution-level analysis can offer. By looking at the default rates for a specific institution, the data could include the amount of merit-based aid received, need-based aid received, alumni information such as current salary, occupation, etc., credit hours obtained, credit hours for major obtained, major, student employment, cost-of-attendance, job placement support and rates, and other specific predictors that could help with understanding what is the cause of defaulting for a student (Razaki, Koprowski, & Lindberg, 2014). With that being said, since there is a national issue on defaulting, the results of this study and lessons learned could help other higher education institutions as well.

Research Purpose

At a large, Midwestern, public, four-year institution, there is a culture of affordability that suggests to prospective students that they are less likely to default than if they attended other institutions of higher education. The institution in this study has defined its culture of

affordability through newspaper articles and publishing rankings describing the institution as affordable. With that culture, it is important to examine which students are likely to default on their student loans, and how those students can be better served to prevent that from happening. The university advertises lower student loan default rates than the national average. While the purpose of this study centers on identifying who is likely to default on their student loans, it should not be used as a tool to withhold resources from those students. The significance of understanding why students are defaulting on their loans is understanding how the university is limiting access or social mobility for specific populations due to the student loan debt. For the sake of this dissertation, we are going to label this institution as Midwest Public University (MPU).

Given the information regarding default rates in the nation and the desire to get a deeper look at the reasons for defaulting at the institutional level, the purpose of this study is to explore what are the reasons that students are defaulting at this large, Midwestern institution. The study is intended for the leadership team at MPU to better understand the problem of student loan default at their institution and how to resolve the issue. This exploratory study intends to understand what the predictors are of who is likely to default at this specific institution. The institution can begin thinking about how to support those students, prior to their likely default. Part of the social contract universities have with their students, that will be articulated later in more detail, is that a student is spending their (or their borrowed) money on higher education, and expect an outcome that betters themselves. If the outcome of attending an institution is defaulting on loans and being in a worse financial situation, then did the institution achieve their part of the contract? A quantitative approach to this study works to examine the numbers

associated with student loans and defaulting at the specific institution, and the ability to run several tests to understand the different variables that could affect defaulting.

Research Questions

In order to achieve the purpose of this study, the answers to the following questions are being sought:

1. What are the student characteristics that can affect the likelihood of student loan default?
2. What are the student characteristics that are more influential to affect the likelihood of student loan default?

Definition of Terms

For full understanding of this study, the following terms are important to define (definitions based on U.S. Department of Education, 2013):

Cohort Default Rate (CDR): The number of students who default on their loans during the government fiscal year (or over three fiscal years), divided by the total number of students in the cohort listed as a percentage.

Default: The inability to meet any part of a credit agreement or grant payback conditions after 270 consecutive days of nonpayment.

Deferment: A time during which the borrower is able to postpone the payments of principal on federal education loans (given they meet the requirements of deferment). Borrowers are still responsible for the accrued interest on loans for unsubsidized and PLUS loans.

Delinquency: The status when the borrower is unable to make their payment.

Direct Loan: A federal financial aid program where the government provides four types of loans to borrowers: subsidized and unsubsidized Stafford loans, PLUS, and consolidation loans. Direct Loan programs were in effect from 1958-1965 and again since 2010. From 1965-2010 the government guaranteed federal financial aid loans that commercial banks provided.

Estimated Family Contribution (EFC): The collected information from the Free Application for Federal Student Aid (FAFSA) to determine the amount of federal financial aid given. EFC takes into consideration a family's size, tax information, taxable and non-taxable assets, and other government benefits.

Federal Perkins Loan: An institution-based financial aid program where low-interest rate loans are given to students based on need. The program began in 1958 and ended in 2017-2018. Since the program ended, there has not been a replacement loan for students in need. The options for low-income students are Pell Grants, work-study, loans, grant aid from the university or outside sources, or the Federal Supplemental Educational Opportunity Grant.

Forbearance: Similar to deferment, but interest will continue to accrue during the temporary gap in payments or reduced payments.

Parent Loans for Undergraduate Student (PLUS): Federal loans provided to parents to help pay for their dependent child's education.

Subsidized Loan: A federal loan that the government will pay the interest during specific reasons including in-school grace, deferment, and other for low-income students.

Unsubsidized Loan: A federal loan that will accrue interest from the date of disbursement for the loan until the principal is repaid (U.S. Department of Education, 2013).

Definition of Variables

This study has a very direct dependent variable and many independent variables that are going to be considered. The dependent variable of this study is student loan default status, and will be looked at with 0 being no and 1 being yes. Default status can be operationally defined as a student being in delinquent status of not paying back student loans by their assigned deadline. Default status conceptually can be defined as a student's ability to pay back their student loans. The independent variables that will be looked at to determine whether or not they influence the likelihood of student loan default are sex, veteran status, dependency status, state of residence, mother and father graduation levels, EFC per year of attendance, total scholarships and grants received while in attendance, Pell Grant status, work study status, ethnicity, did the student receive a failing grade, grade point average (GPA) while in attendance at the university, current age, did the student enter college with Advanced Placement (AP) credits, transfer status, highest degree awarded, and enrollment status at the time of default. In looking at the variables available and how they influence the likelihood of student loan default, I believe an understanding can be found about loan default at MPU.

Theoretical Framework

For the sake of this study, there are four theoretical frameworks that are key to understanding why students who take out student loans may, ultimately, default: human capital theory, social contract theory, monetary critique, and neoliberalism.

The first theory that pertains to this study is human capital theory. Human capital theory holds that higher education benefits graduates' future income earnings (Becker, 1993). This is significant for understanding why students perceive the need to attend higher education as the

means for social mobility. Most students view student loans as a necessary evil for their ability to succeed in the current society (Flint, 1997). The private rate of return on higher education is affected by the job market earnings and the other benefits of obtaining a credential (Zumeta, Breneman, Callan, & Finney, 2012). There is a conundrum in this conversation since more individuals having access to higher education could lead to credential inflation, and offset the job market away from those who did not obtain a higher education degree (Zumeta, Breneman, Callan, & Finney, 2012). While human capital theory helps to explain why students are willing to enter into higher education and take out loans, it does not address the issue of the misleading narrative the government and higher education have illustrated. My critique of how human capital theory is used to promote higher education is that it implies the government is adequately funding higher education institutions (HEIs), and that borrowers are not the ones burdened with the cost. This narrative is created through the feeble attempts the federal government has made to make it “clear” what the impact of student loans are (i.e., The College Scorecard), and how it should impact college choice. While student loans are used to cover the cost of higher education, the rise in tuition has resulted in the continuing rise in the debt burden and the impact of the loans on the borrower (Kane, 1995). The rise in tuition could be considered a symptom of the stagnant funding, the disinvestment in higher education from the state and federal governments, and federal student loan borrowing increasing (Chen & Wiederspan, 2014; American Academy of Arts & Sciences, 2015; Woodhouse, 2015). This continual rise in tuition and stagnation/decrease in grants and funding have forced the cost burden on to students instead of the government and HEIs, and created frustration in the social contract of who is responsible for funding higher education (Yankelovich, 2009).

Social contract theory, as defined by the 18th century philosopher Rousseau (2012), is that the government was created by members of society to ensure equality for all its constituents. As private property, possessions, and currency developed, inequality stemmed from individuals claiming more from others. Higher education according to social contract theory is complicated in nature. One argument could be made that the US government has no obligation to fund higher education for individual students because the federal government provided, directly or indirectly, the land (which it expropriated from indigenous people) to each state to establish a public university, and hasn't provided finances directly to institutions otherwise and has no Constitutional responsibility to do so (Thelin, 2004; Lee et al., 2020). Despite this information, direct funding from the federal government to state HEIs and for financial aid for veteran and other low- and middle-income students could be considered part of the federal government's responsibility under the 14th amendment to provide equal protection under the law by providing equal access to higher education (Yankelovich, 2009). While it is easy to point to the need to address the inequities associated with higher education finance through the lens of the social contract, it is complicated when you factor it into the monetary system of the United States.

The critique of the federal monetary system is an economic theoretical framework, that helps to explain why and how the student loan system was built. Money itself is a progressive means of exchange, however, modern money has led to issues because it entails private entities creating money out of interest-bearing credit denominated in the national currency and fungible with it (Eckrich, 2017; McMillan, 2014). In the founding of the federal monetary system in 1913, credit was centralized through the Federal Reserve, which tries to control the amount of money in circulation through defining banks' reserve ratio and discount rate to help stabilize the economy through upticks and downturns. Since these are limited effective federal regulations on

the creation of new credit by private entities, the amount of bank money that is being circulated is difficult for the government to control (Eckrich, 2017; McMillan, 2014). Student loans are both necessitated and affected by this conception of money, necessitated because, after ceding its constitutional money creation power to the banks, government could not create money as a public asset for the public good of education, and affected because the government had been issuing student loans with lower interest rates than private companies were willing to offer. But the need for higher education, and, thus, the demand for student loans, was more than the government had to loan. So, it shifted in the 1965 HEA to using its limited resources to subsidize lower income students' now higher interest commercial loans and to guaranteeing both their and unsubsidized loans it subsequently (1978) made more available to middle- and upper-middle-income students. In 1972, Sallie Mae was established to buy the federal loans that were created by the commercial banks and to bundle and sell bits of them to private investors (Howe, 1984). Doing this got the loans off the "books" and provided "safe" investments for investors (Eckrich, 2017). The student loans are thus based on interest-bearing credit created by commercial banks not the federal government, enforced to benefit private investors rather than serve the greater good of society, and guaranteed by the government. When the loan limits increased through the reauthorization of the Higher Education Act and the outsourcing of investment in student loans took place, the perception of higher education being a public good is significantly challenged.

The political and economic philosophy of neoliberalism centers around the idea that the primary beneficiaries of investments should be the investors rather than the community (Mintz, 2021). The focus on individual benefits can be seen in how higher education has assumed neoliberal values. Public higher education, as assumed by human capital theory and social contract theory, is labeled as a public good, and, as such, it should be open and available to all.

The caveat in the neoliberal lens that higher education gradually assumed is that higher education is available to those who are willing to invest their money, or assume student loans, to obtain it. The focus on the individual's investment and free market mentality of public higher education has brought forth more disparity and continuation of the class system (Giroux, 2008; Harvey, 2005; Mintz, 2021). The dominant neoliberal narrative helps to explain how students could be misled to take out student loans, leading to problematic financial decisions taking place for students and their families.

The combination of these four frameworks helps us to analyze default rates and to articulate the need for change in how higher education is funded and ensure that access to higher education is equitable. The rising cost of tuition caused by the decrease in government investment and the increase in guaranteed student loans is creating an undue burden on our students who need help accessing higher education. The increased debt burden that the students are assuming is resulting in their financial potential being affected by the amount they are focusing on loan repayments, and even pushing students away from choosing higher education (Houle & Warner, 2017; Kreighbaum, 2019).

Research Paradigms

For this study, a quantitative approach will be used due to the postpositivist paradigm of the research problem. Creswell (2014) states that postpositivist studies challenge what is considered factual and understand that behavior and actions can lead to varying results. This study focuses on identifying the predictors of who is likely to default on their student loans drawing on information from a graduation cohort of MPU from the 2010s. Based on the direction of the study, it requires a methodology most apt for identifying the likely predictions of student loan default. Using a quantitative approach to solve the problem will allow for an examination of

the cause for a specific cohort of students' default rate and to identify what their predictors were for loan default. This research is postpositivist in nature because it is focusing on what is the likely outcome for the problem of student loan use. The method for assessment is to use a logistic regression model to identify the predictors of who is likely to default on their loans from this cohort of students. Through this methodology, there should be a better understanding of characteristics of former students at MPU who are defaulting on their loans, so the author can give information to the university on who is likely to default based on individual characteristics. The dataset retrieved from MPU's financial aid office has provided information that is deidentified that provide a list of who has defaulted on their loans, and identifiers to assist in what predicts default. These identifiers include but are not limited to race, gender, dependent status, amount of financial aid received, highest degree obtained, and others. Through this quantitative approach, I believe there will be a well-rounded story in place to articulate which students are defaulting at MPU, which can guide MPU to create strategies to ensure better default management and lower rates.

Study Limitations and Delimitations

For this study, the limitations and delimitations are based on choosing to focus only on MPU. By only focusing on one institution, I am unable to generalize to the population of similar or all universities state or nationwide. This study becomes less of a cross-institutional study, but a study geared toward assessing and improving the equitable outcomes for the students at MPU. It is important to study student loan default at every individual HEI, including MPU, and increasing the scope will not address the individualized issues at MPU. Other limitations of the study may include the availability and accuracy of the dataset, perhaps because some data was not received from students. A final limitation to this study is that student loan default is not fully

predictable. While a model can be created to predict based on pre-existing information, students can deviate from the predictive model and be an outlier who default. The additional challenge that a student who is considered an “outlier” for loan default could yield qualitative, narrative information that would be worthy of analyzing is valid. For the scope of this study however, narrative data could not be obtained by the dataset available and given, so it cannot be analyzed.

The delimitation of the study is only focusing on the predictors that I have outlined above, and not including other potential predictors. While there are other factors that could be seen as valuable to understanding student loan default at MPU, I believe this study will encapsulate the phenomena of who is likely to default on their loans based on the information I was able to use from the institution. In the dataset that was obtained from the financial aid and institutional research offices, the data requested was not able to be fully received because it was not being tracked by the university. Specific characteristics that were requested but not obtained were high school rank, legacy status, the number of loans and lenders, and use of disability accommodations. Another issue was that some characteristics could lead to the information being identifiable. The addition of majors to the dataset led to a concern from the financial aid office that the students would become identifiable. In choosing to only focus on this dataset from the financial aid office, I lose the generalizability to all populations because it is focused on undergraduate students at MPU, and lacks a qualitative component of hearing rationales from students on why they obtained student loan debt or their circumstances that led to default.

Significance of the Study

Student loans, financial aid, default rates, and the social contract of who is responsible for paying for education all need to be examined in today’s society. In today’s climate, equity and access to higher education are continuously scrutinized, and the changing demographics in

higher education are requiring administrators to reconsider their operations (Grawe, 2018). If the changing demographics and/or calls for equity are going to force or motivate institutions to bring in different students than who have traditionally attended higher education, the funding of higher education will need to be reconsidered. At this point, students are realizing the financial burden that student loans are causing, and may reconsider their attendance to HEIs at all (Kreighbaum, 2019) especially in the post-pandemic labor market. This study hopes to identify characteristics of those who have defaulted on their loans, and associated identities that can predict loan default. High school graduates and post-secondary students with these characteristics may be apprehensive to take on student loans due to the possibility of defaulting, and the goal is to show MPU who these populations are so the institution can use the data to better assist students likely to default.

This study is not only valuable to MPU, but it can work to outline the framework to conduct research at other institutions, and identify what are the predictors for their students. If universities were able to run similar studies at their institutions and they were able make changes to benefit their students, students who are looking to make a college choice would ultimately benefit. The scope of this study can be much larger if others look at the general framework of this study, and work to apply it to their institution. If more institutions begin to look internally at the factors affecting loan default rates, more data on the topic could be pooled to look at a larger scale study. Additionally, if there are specific predictors at an institutional level that require data not available at the national level, this literature could work to call for that information to be collected nationally. If other institutions follow the framework outlined in Chapter 3 for their institution, this study could be scaled to receive larger scale results than just understanding MPU.

It may expose default trends and inequities common across HEIs that point to a flaw in our monetary system as the underlying culprit.

Organization of the Study

This dissertation is laid out in five chapters. This first chapter features the overview of the study, statement of the research problem and questions, definition of terms, theoretical framework, research paradigms, study limitations and delimitations, significance of the study, and the organization of the study. The second chapter is the literature review and covers the literature pertaining to the history of financial aid, what caused the student loan crisis, who is affected by the student loan crisis, human capital theory, social contract theory, monetary theory, neoliberalism, and how these themes directly tie to the literature and this study. The third chapter lays out the research design, data source and sample size, and goes over the logistic regression model. The fourth chapter contains the results from the logistic regression model. The fifth and final chapter discusses the conclusions from the data analysis, and outlines the ramifications for MPU and the students who, based on this study, are more likely to default on their loans.

CHAPTER II: LITERATURE REVIEW

Introduction

The literature about funding in higher education is expansive, so it is important to frame the literature as it pertains to my topic. In this literature review, I will focus on student loans, debt, money, and how US higher education was funded up to this time in history. The literature review will not pertain to scholarships or merit versus need-based funding. While scholarship theory would be an interesting view on financial aid, it is not the focus of my research on student loan debt. This literature review also does not include alternative funding models or university spending habits. Ideas such as performance funding or mission-based spending are interesting in the scope of higher education finance, but do not fall within the scope of this study. Based on reading articles and books on my topic, the overall themes of this chapter are the history of student loans, what caused the student loan crisis and who is affected by the debt crisis, human capital theory, social contract theory, the present monetary system, and neoliberalism. These varied themes in the literature help illustrate the issue of student loan debt, and how policy decisions lead us to an approximate \$1.7 trillion student debt crisis in the US (Carlson, 2020).

History of Student Loans

Although it may not be directly tied to student loans, the Morrill Land Grant Act of 1862 was crucial in understanding the federal government's involvement in higher education. This act allowed for institutions to be created with more practical applications, and catered to a wider audience. The act was further expanded in 1890 to create more institutions including Historically Black Colleges and Universities (Mettler, 2014). Zumeta et al. (2012) state that the Morrill Land Grant Act was instrumental in showing the federal government's stance on higher education. The

federal government could help with land, which the colonists had expropriated from indigenous people (Lee et al., 2020), but the states and HEIs themselves were responsible for the operating cost and the students for a share thereof.

Following World War II, the federal government provided subsidies for veterans returning home from war to obtain higher education to stimulate the economy through the Servicemen's Adjustment Act, also known as the GI Bill (St. John, 2003; Mettler, 2014; Zumeta et al., 2012). This act came with education benefits that included tuition, fees, books, room and board paid directly to the HEI, and a stipend paid directly to the student (Best & Best, 2014). The stipend consisted of \$50 a month for single veterans and \$75 for married. This program was significant in policy because it created an entitlement to higher education. This program stated that if you served in the military, you were entitled to education benefits (Thelin, 2011). Thelin (2011) claims that the GI Bill was instrumental in creating access across socioeconomic status lines to attain higher education. Zumeta et al. (2012) disputes that this was intentional of the federal government, and that the GI Bill was merely a way to express gratitude to veterans. While the GI Bill and Truman were encouraging of access to higher education, Truman didn't commit government funding to the massification of higher education. Truman recommended access to higher education, but was financially conservative and facing criticism on other policies (Thelin, 2011; Zumeta et al., 2012).

The 1950s and 1960s were met with federal grant monies being allocated to institutions for research. This "soft money" was only allocated to specific purposes, and was not as helpful as "hard money" that could be dedicated to the overall operating budget (Thelin, 2011). The success of the GI Bill and research-based grants informed policy in the 1958 National Defense Education Act (NDEA). The NDEA led to the creation of student loans, as well as graduate

assistantships and fellowships (St. John, 2003; Mettler, 2014; Hearn & Holdsworth, 2004). Zumeta et al. (2012) say that the NDEA was a direct response to Sputnik being launched, and Congress wanting to put money into education and scientific research to compete with the Soviet Union. At the same time as the GI Bill and NDEA, private companies began finding ways to invest in higher education to carry out their own corporate interests. For example, the Ford Foundation invested in multiple universities to strengthen their business schools to create a better trained workforce. This push to corporate interests and money into HEIs also started the fundraising arms and endowments of universities that have become a significant part of university finance (Thelin, 2011). In 1964 the federal government also created educational benefits for children of deceased parents who had paid into Social Security in 1964, but the program was discontinued from the Reagan administration in 1982 (St. John, 2003).

The Higher Education Act of 1965 (HEA) was authorized to create loan, grant, and work study programs to assist students with financial need to attend HEIs including, for the first time, loans for middle income students. The program also created direct aid to “developing” institutions (St. John, 2003; Mettler, 2014; Zumeta et al., 2012; Davis, Green-Derry, & Jones, 2013). Despite the Truman Commission stating that affordable tuition was necessary for expansion of higher education, it gained little traction as the funding went directly to the institution through the first iteration of financial aid (in a way, the funding still goes directly to the institution, but it presently goes to the institution in the name of the student) (Thelin, 2011). Additionally, HEA established the guaranteed student loans (GSL), later called the Federal Family Education Loan Program, and an income ceiling was placed to determine whether or not the loan would be subsidized. The GSL policy entailed what economists recognize as “moral hazard” because banks may become lax about issuing credit if loans are guaranteed to be paid.

Other achievements through the HEA were TRiO programs, federal work study, and Perkins Loans (Cervantes et al, 2005). In 1972, HEA was reauthorized to provide further access to financial aid, and incentivized states creating grant programs (Cervantes et al, 2005; St. John, 2003; Davis, Green-Derry, & Jones, 2013). The reauthorization of the HEA also included the creation of the Basic Educational Opportunity Grant, also known as the Pell Grant, and Title IX, which forbid the exclusion of women from financial aid and required gender equity in other realms too.

One goal of the first reauthorization from the legislators was to make federal financial aid for needy students more centered in grants relieving their need for student loans (Cervantes et al, 2005). The reauthorization of the Higher Education Act also included the creation of Sallie Mae, a “government-sponsored enterprise” that could borrow at low Treasury rates to purchase loans from the banks that issued them and then bundle them into government bonds that investors could purchase as long-term, guaranteed investments. This flow-through encouraged banks to provide additional loans (Howe, 1984). The 1972 reauthorization of HEA also allowed for student aid to go to proprietary (i.e., for-profit) and vocational schools (Zumeta et al., 2012).

In 1978, the Middle-Income Assistance Act was passed that further expanded federal aid offerings to middle income families and created loans for parents to support their children’s college. As the program was expanded to allow more to receive federal aid, the funding for grants declined (St. John, 2003). By the end of the 1980s, almost 80% of college students were enrolled at public colleges with low tuition (Mettler, 2014). The Middle-Income Student Assistance Act (MISAA) arrived to replace the government’s belief on providing need-based aid to casting a wide net of student loans (Thelin, 2011). This change in focus caused a sharp decline in need-based aid as the price of education increased (St. John, 2003). The decrease in need-

based aid, mainly the Pell Grant, was caused by the fact that it was not written into legislation as an entitlement like the GI Bill. Since it was not an entitlement, it was subject to budget appropriations yearly (Zumeta et al, 2012). The decrease in annual funding forced university leaders to take a more entrepreneurial approach to managing higher education, and continued higher education's move from a public good to a market good (Zumeta et al, 2012; Best & Best, 2014). As the shift to student loans took place, HEIs continued seeking partnerships with private companies and foundations to subsidize the amount of funding that was not coming directly to the institutions due to decreased state funding, and allowed the institutions to carry out their loftiest endeavors (Thelin, 2011). The additional reauthorization that took place in the 1970s was in 1976 where no sweeping changes were made. The family income ceiling was raised for loan borrowing, the amount that graduate and professional students could borrow was increased, and the Basic Educational Opportunity Grant was slightly increased (Cervantes et al, 2005).

The 1980s was a time where the Reagan Administration took office, and a distinct shift in mentality changed regarding financial aid. During the Reagan administration, the focus began to shift away from providing need-based federal aid to students, to stating that academic preparation for college was a more pertinent avenue to invest in by not making substantial cuts to the budget for K-12 education and not committing money to the rising tuition in higher education (Thelin, 2011; Fiske, 1982). The two reauthorizations of the HEA brought forth a higher interest rate for the Guaranteed Student Loan, the creation of Parent Loans for Undergraduate Students (PLUS), the creation of a needs-assessment for anyone seeking financial aid, the removal of the MISAA, and the creation of a federal loan consolidation program (Cervantes et al, 2005). In the eyes of the federal government there was still care to students being performed by providing GSL aid to students (Cervantes et al, 2005).

In the 1992, another amendment to the Higher Education Act created unsubsidized loans, additional parent loans, and continued to move away from need-based grants (Zumeta et al, 2011; Cervantes et al, 2005). The reauthorization brought forward the renaming of the guaranteed student loans to Stafford Loans, as well as the continued raising of borrowing limits and modest increases to the Pell Grant. The 1990s also saw a continued push away from need-based aid to merit-based at the state level. This is easily seen in the creation of the Georgia HOPE Scholarship, where students could receive aid based on GPA (Zumeta et al, 2011). The 1990s also brought tax credits in the form of the Hope Scholarship Credit and Lifetime Learning Credit. While these sound beneficial, they presented additional challenges for low-income families because they were only available to students who met a certain threshold and to families that filed tax returns (Zumeta et al, 2011).

The 2000s saw a deviation from investment in higher education due to national tragedy. In 2001 the government was fixated on how to respond to the terrorist attacks on 9/11. In 2005, the government was focusing on how to handle the effects of Hurricane Katrina. The federal funding conversations had no focus on higher education because there was emergency consideration of how to spend money (Cervantes et al, 2005). In 2007-09 came crises in the financial sector with ripple effects throughout the US and global economies. In 2008, the Higher Education Opportunity Act was passed that required colleges and universities to have more transparency in their costs, and to publish when increases happened for their institution, as well as penalize states that are not adequately supporting higher education (Zumeta et al, 2011). In 2009, the American Recovery and Reinvestment Act was enacted to provide relief to education, healthcare, and infrastructure. This brought an increase to the Pell Grant, as well as federal dollars to assist in state appropriations (Zhou & Mendoza, 2017). In 2010, the Health Care and

Education Reconciliation Act provided modest improvements to the Pell Grant and streamlined the financial aid process. There were some changes that diverted funds from higher education to health care that were targeted at community college and persistence programs (Zumeta et al, 2011). This Act also eliminated the Federal Family Education Loan Program (FFELP), and moved all loans back to being Direct, as they had first been 1958-1965 through NDEA, which means the federal government, rather than banks, are the primary lenders. This was supposedly done to assist in eliminating subsidies to private entities (Zhou & Mendoza, 2017). In 2015, the Enhanced Financial Counseling Act was published to provide more entrance and exit counseling to students and families on financial aid. In the same year, the Financial Aid Simplification and Transparency Act was passed to ensure colleges were more transparent about their costs, and provide additional information to families (Zhou & Mendoza, 2017). The historical context of financial aid and federal government investment in higher education is essential to seeing how student loans became a crisis in terms of the total of student loan debt and the repayment difficulties borrowers are having.

What Caused the Student Loan Crisis?

Koch (2019) explains that there is not one person to blame for the student loan crisis. Universities can be blamed for overextending their expenses and spending finances on items outside of the educational mission. The legislators and governors can be blamed for reallocating university funds elsewhere and not accounting for inflation, thus forcing institutions to raise their tuition rates. The federal government can be at fault for enacting in 1913, shoring up in the 1930s, and maintaining ever since a debt-based, private-interest-bearing money system, and their subsequent push of neoliberal policies. Their increased debt ceilings, for their own and student loans, allow for increased tuition. Archibald and Feldman (2011) articulate that universities and

the government would differ in opinion on why tuition increased. Universities would say it was the slow economy, which led to less taxes, and less revenue for institutions. Governments would state universities have wasteful spending habits, which tuition rates have been used to accommodate. Technological advances have affected higher education in terms of cost. While technology has improved other labor markets, higher education's cost has increased (Archibald & Feldman, 2011; Mettler, 2014). The technological advances also cost the university more money to accommodate the most up-to-date teaching practices for a given profession. Some neoliberal proponents call all this "cost disease" (Hartlep, Hensley, & Eckrich, 2017, p. 259).

As of 2016-17, nearly 96% of student loans that were taken out were authorized and financed by the federal government (Koch, 2019). While the amounts of loan and debt increase have gone up, the decrease in household wages has made loan repayment unmanageable for too many (Goldrick-Rab, 2016). Despite the previous statement, Archibald and Feldman (2011) state that college could be seen as more affordable now with the grants and tuition reductions for all students regardless of socioeconomic status. Although my critique of this statement is that college may seem more affordable with the financial aid options available to students, but rising tuition rates and dependency on student loans does not equate to affordable. Baker and Doyle (2017) add that student loan borrowing has even increased at community colleges, which are considered the most affordable of the higher education options. Best and Best (2014; 2016) state that one of the causes of the loan crisis was that loan programs were created with good intentions, but became the primary form of student aid. They state the problem worsened with the creation of protections for lenders from the impending rates of student loan default. They state the subsequent mess is the crushing burden that student loan debt has risen to, and the final mess is the student loan bubble that has been created in the economy. One of the issues with the

loan crisis is how it was abused. For-profit colleges have roughly 10% of college enrollees, but account for 25% of the student loan debt in the United States (Mettler, 2014). This egregious amount of student loans being pumped into the for-profit colleges accounted for approximately 90% of their revenue. That 90% did not include their money used from the GI Bill or other Department of Defense funding. Mettler (2014) describes one of the greatest failures that led to the student loan crisis is the political polarization in the American government, and its cooptation by moneyed interests, and therefore its citizens.

Tuition has continually risen over time for several different reasons. Flagship state institutions are competing for students who can already afford higher education, so increasing their tuition rates, if done in tandem, doesn't hurt their draw on students. Other institutions have capped tuition rates to retain students until degree completion but raised funds through charging for student services such as tutoring and mental health counseling (Mettler, 2014). St. John (2003) explains that state funding used to account for nearly 80% of the educational costs of higher education. By the 2000s, state funding was able to cover 20% of operational costs or lower (Mettler, 2014). Mitchell, Leachman, and Saenz (2019) expand on state funding declining, indicating that, from 2008 to 2018, 41 states spent less on students, and they were spending, on average, 13% less. Goldrick-Rab (2016) states that the grant aid provided by the state and federal government is being drastically outpaced by the cost of attending higher education. The cost of college also outpaced employment rates during the Great Recession which continued to exacerbate the problem (Mettler, 2014). While it is easy to point to times that appropriations declined, the amount of state appropriations for higher education has fluctuated since the 1980s. There were downticks in funding in the early 1990s and throughout the 2000s, but there was growth in the 1980s and late 1990s (Zumeta et al, 2011).

With the decline of state funding, privatization has taken place in higher education. Newfield (2016) defines privatization as the replacing of public partnerships with private partnerships and interests. Newfield (2016) describes “the great mistake” of higher education was eliminating the low-cost, debt-free, high-quality institution, and eliminating the ability to democratize intelligence. A critique of Newfield’s work would be that one could argue there has never been an equitable, high quality HEI that was accessible to all members of society. The lens of Newfield’s work could be seen as white and male dominated, which is a fair critique. Higher education becoming a private good rather than a public good has shifted the paradigm of higher education, and it cannot be fixed until higher education is accessible for all. Archibald and Feldman (2011) explain the difference in public school tuition volatility and private school tuition volatility as public schools being market driven and private schools being portfolio driven. Newfield (2016) states that a lack of public funding and market thinking hasn’t caused the steep rise in tuition at and decreased value of a degree from public institutions; rather the problem is the private funding in higher education and the pandering to private interests. Privatization of public institutions has caused an increase in tuition and separated them from their educational and missions. Privatization reflects the concept of private entities taking over ownership in public spaces. This happens conceptually with funding and literally with the purchasing and operations of different spaces on a public campus (Kwiek, 2017). This shift to privatization reflects the neoliberal ideals of the market in the university setting. Newfield (2016) describes that one of the costs of privatization is that schools are struggling to articulate their social benefit to the general public. With prices increasing and educational benefit decreasing, the university end of the human capital theory is stagnating (Koch, 2019). This can also be seen

through the move toward business-centric tactics and a push for online education, only exacerbated by the Covid-19 pandemic.

There are a number of different solutions that were discussed as a mode to fix the student loan crisis. Newfield (2016) recommends that fixing this problem is to create more research-style learning on an individualized level that is debt-free for public institutions. This would only be able to take place if public higher education is seen as a public good, and overall buy-in on the need for public higher education. Newfield (2016) outlines the eight essential stages to do this: university recognized as a public good, subsidies to private investors in public HEIs reduced or ended, tuition is capped and reduced toward zero, public funding is reset to replace tuition, student debt reduced to zero, universities retain core educational functions as nonprofit, equal and higher overall learning across the state's race/class/sex demographics, and creative capabilities pressure productivity wage. Koch (2019) recommends moving toward income-share agreements to address student loan repayment. Income-share agreements are where the lender and the borrower agree the latter puts a percentage of their monthly income toward loan repayment. While some are in favor of this, others disagree with the concept due to the volatility of the market, and how it could push students away from majors based on difficulty of repayment.

While St. John (2003) acknowledges that state support has declined over time, he suggests that states and institutions work together to establish a funding plan that can allow for tuition rates to decrease through funding institutions, or increasing the amount of state grant support. St. John (2003) continues that the federal government can establish both grants that are given to students with financial need, and to states where they can provide direct aid to students and institutions. A critique to St. John (2003) is that it believes this two-tiered grant system

would eliminate the need for student loans. Given the present political climate and the aversion to higher taxation, I don't believe that individuals would be so quick to support the radical change to a grant-only structure unless we reform our money system. St. John (2003) also failed to mention the cost of his approach. The money that would be needed to sustain and continue this program would be expensive.

Best and Best (2014; 2016) offer an assortment of solutions on how to fix the crisis. They begin by controlling the costs of institutions by controlling administrative costs and reducing noninstructional and instructional costs. They recommend governmental policies related to increasing appropriations to colleges, more borrower friendly default policies, withholding funding from poorly performing colleges, retooling loan repayment, and creating more opportunities for the most vulnerable students. Best and Best (2014) describe in their recommendations that lenders could avoid student loan defaults by restricting borrowing from high-risk populations and encouraging families to save more money for college. These statements from lenders are problematic in a conversation of equity because there is encouragement to restrict borrowing to a population in a system where student loans are dominant without recognizing—and working to supersede—the systemic cause (Eckrich, 2017) for their dominance. Unfortunately, very few who study student debt and the funding of higher education recognize the underlying flaw in our monetary system that forces us to turn to loans for funding the public good. If student loans remain a primary source of financial aid, restricting access to loans will disallow students deemed less credit-worthy from attending. Additionally, there is trouble in assessing who is high risk. If those making that determination do not have an equity mindset, individuals may be left out of higher education, intentionally or not. This problematic stance that lenders could take is one of the distinct reasons why change is needed.

The present student loan system encourages denying access to those who cannot afford higher education, or encouraging them to take on debt to sustain the cycle of poverty. The system needs to be reconsidered to avoid denying access strictly based on affordability. Additionally, the conversation on encouraging families to save more money directly counters the student loan conversation. If students are forced to borrow money to attend higher education, then how are families supposed to begin saving money for higher education? If parents are paying off their own student loans and/or earning low wages because they never went to or finished post-secondary education, how are they supposed to save for their children's education. The generational debt associated with higher education was not sufficiently considered by Best and Best (2014; 2016).

Goldrick-Rab (2016) stated several ways to address the affordability and student debt crisis. Her recommendations included reconfiguring the federal work-study program, creating a work-through college program, reevaluating how institutions are funded from states, requiring states to fund more students, eliminating merit aid, and a free first-degree or two-year college option program at public HEIs funded by ending subsidies to for-profit institutions and federal financial aid for students at all private institutions (Goldrick-Rab & Kendall, 2014). While these proposals pass muster equity-wise, whether they are politically achievable is another question.

Finally, Archibald and Feldman (2011) suggest trying to nationalize the Georgia HOPE program at the expense of taxation of higher income families. Their second proposal is for the federal government to create a savings account for students who qualify for the Pell Grant prior to college so they have funding by the time they enter higher education. Their plan would have the government deposit the amount of a Pell Grant into a government-controlled savings account for families who are eligible to receive a Pell Grant. There is very significant critique to the

Archibald and Feldman (2011) proposal because they stake the whole proposal on the Georgia HOPE Scholarship. The Georgia HOPE program was identified as problematic because of the preferential treatment given to high-performing, high-income families (Koch, 2019). Using this as this program as the framework for any form of proposal is problematic, and shortsighted.

What is evident from all of the solutions to solving the financial aid crisis is that they hinge upon the need for higher education to be considered a public good, and equity to be centered at the conversation. If either of those considerations are not met, then fixing the financial aid system is not viable. These two steps may not be achievable on their own or alone fully fix the system, but if achieved, they would allow for larger sweeping changes to take place because all high school graduates would have a place in public higher education that the government was committed to support.

Who's Affected by the Crisis?

The answer to who is affected by the student loan crisis is complicated. From one lens, it is important to see who is defaulting on student loans, which could be considered the worst possible scenario of borrowing. The other extreme is to consider the effects of student loan debt on individuals who choose not to borrow. Knapp and Seeks (1992) and Castonguay (2017) found that it was not institutions but individual characteristics that were more likely to predict loan default. Outside of proprietary institutions, two and four-year institution characteristics were not significant to their study. Fredericks Volkwein et al. (1998) stated that institution type was not significant for predicting loan default for white students, but was significant for Black and Latinx students. Koch (2019) and Hartlep, Hensley, and Eckrich (2017) state that not only are people directly affected by the student loan crisis, but the economy is. Koch (2019) cites that marriage, homeownership, and retirement contribution rates have declined as student debt has increased.

Houle and Warner (2017) explain that the increases in costs and debt have led to an increase of students returning home to live with parents after college, which undermines adult transitions, and hinders mental health. Houle and Warner (2017) continue that these challenges are greater for Black borrowers than their white counterparts. Best and Best (2014) agree to this, and also point out that some graduates forego their intended careers to afford their loan debt. Toby (2010) discusses that family planning could be delayed as a result of student loan debt.

An explicit goal of recent policy has been to provide clarity to families regarding student loans and the cost of higher education. While that has been the goal of the government, it hasn't had the impact intended. Rosinger (2017) stated that there is little to no correlation between the information provided by the government and borrowing decisions made by families. One of the flaws of the present system of student loans is that lower income students are afraid to attend elite, state institutions because of the debt burden associated with attending them. Koch (2019) describes the California higher education system where high-income, high-performing students are able to attend UC-Berkeley and UCLA, while high-performing, low-income students are attending community colleges or the lesser valued California State University system. Some states even directed state scholarship dollars to initiatives that favored high-income, high-performing students by providing merit-based, state scholarships. The movement away from need-based to merit-based state are departures from equity-minded funding.

As tuition rates rose, students were faced with limited options: seeking out student loans, transferring to lower-cost institutions, or withdrawing and repaying the debt they already accrued (Koch, 2019). Even the cost-effective option of community college has resulted in the need for borrowing. This has yielded adverse effects for students on completion and default (Baker & Doyle, 2017). Community colleges have been discussed as a great option for low-income and

underrepresented students, but the need to take out loans to attend contradicts their benefit (González Canché, 2014). This issue begins to negate some of the historic rhetoric that starting at a 2-year college is the best choice to save money prior to attending a 4-year college. While there are findings that support that rhetoric, the increase in tuition, loan burden, and barriers for transfer students make the decision more difficult (González Canché, 2017).

Lower-income students were not afforded the same opportunity as their middle and upper-income counterparts. Lower-income families were not persisting through higher education because they could not afford the day-to-day cost of attending without grants and loans. The disparity was even more apparent when considering family income and race (St. John, 2003; Goldrick-Rab, 2016; Green, 1989; Fincher & Cruse, 2019). Grinstein-Weiss et al. (2016) outlines that educational debt burdens are higher for Black families versus white families. They found that Black, low-income families have the greatest risk of excessive student loan borrowing. Chiyaka et al (2018) state that online colleges see a positive correlation between lower retention and defaulting on student loans. Chiyaka et al. (2018) states that online institutions need to promote better guidance and information on loans to prevent defaulting (despite evidence that supports otherwise). Fredericks Volkwein et al. (1998) states that race impacts default rates differently than the other authors, stating that racial and ethnic minorities are less likely to default on multiple categories of default information than their white counterparts. Fredericks Volkwein et al. (1998) claim that lower achievement levels, number of dependents, and divorce rates are more likely causes of default than race. Flint (1997) states that borrowers with lower disposable incomes are more likely to default than those with higher disposable incomes. Persistence was linked to student loan default when cross-referenced with high school performance (Herr & Burt, 2005). Herr and Burt (2005) found that persistence

through college and college performance were the strongest indicators of student loan default at the University of Texas.

Students are choosing not to repay their loans because of the insurmountable nature of the loans, or taking on the minimum payment approach where borrowers are paying lower amounts and accruing more interest. This approach has been taken by debtors because of the belief that other debt is more significant because there was no collateral put up for the student loans (outside of future labor/earning power), or that they should not have to pay because they were defrauded by their institutions (Koch, 2019; Flint, 1997). Students who receive financial aid offers are more likely to borrow than students who receive zero offers (Marx & Turner, 2019). While this may appear obvious, seeing a financial aid offer leads students to borrow more than if they received no offer (Marx & Turner, 2019). Toby (2010) states that it may be more beneficial to not offer financial aid to families that are considered “risky” or “subprime” investments. Toby (2010) relates it to other financial investments where collateral or credit history is essential in the transaction. I fundamentally disagree with Toby (2010) that it is a good idea for the government and universities to deny these families loans. While this may be a better from a neoliberal perspective, it demonstrates a lack of attention to equity in access to higher education and shows that people are seen as “subprime investments.” The cost of attendance and the anticipated loan amounts have resulted in changes to the college choice conversation. Fishman (2015) discusses that students are now prioritizing the cost anticipation more than any other factor in their decisions for higher education. St. John, Paulsen, and Carter (2005) state that Black students adapted their college choice and persistence drastically as a result of financial aid availability and cost. Fincher and Cruse (2019) stated that the cost of college has resulted in potential students foregoing college to avoid accruing debt.

Students who are not able to persist through higher education are most likely to default (Koch, 2019; Woo, 2002). Additionally, borrowers were more likely to default if they borrowed less than \$10,000, which aligns with students who do not persist through higher education until degree completion being more likely to default (Woo, 2002). Green (1989) found alternate findings, although with a smaller sample, that the more grant and scholarship money obtained alongside loans, the more a student was likely to default. Gladieux and Perna (2005) point out the conundrum that students face. There is a correlation between positive persistence and obtaining student loans, which strengthens the narrative for student loans. The counterpoint is those who do not persist and obtained student loans are more likely to face financial hardship, and those who are low-income in this category face even more significant financial ramifications. McKinney and Burrige (2013) report that students at community colleges are less likely to persist with student loans, and are more likely to default if obtaining loans. Gladieux and Perna (2005) recommend creating more strategies to assist with persistence because of the economic benefits of completion. But this narrative continues the neoliberal conflict with higher education. If the answer is to take more debt and persist through college, the root of the issue — affordability— is not addressed. Students who accrue more debt through a graduate program on top of debt from their undergraduate program are likely to default (Koch, 2019). Students with lower credit scores were identified as a predictor of student-loan delinquency (Mezza & Sommer, 2016).

Students who struggle with finding a quality job due to their low-demand discipline are likely to default on their student loans (Koch, 2019). Flint (1997) found that students who did not have congruence between their job and major were more likely to default on their loans. Fox et al. (2017) stated that students who already have expectations of anticipated difficulty in loan

repayment are more likely to default on their loans. Student knowledge about finances and parental guidance were also suggested as predictors on student loan default. Flint (1997) and Woo (2002) agreed that having loans from multiple entities increased the likelihood of defaulting. Goldrick-Rab (2016) articulates that families are hit distinctly by this student loan crisis. If educational attainment is the goal, it should apply not just to traditional-age students, but non-traditional students too. Different groups like single-mothers and low-income families that don't have generational education benefits are hamstrung by the current fiscal challenges in the economy. While these populations would benefit from educational attainment, they are forced to work several jobs in order to create opportunity for their family, and have little time for their own and ability to save for their children's education. This disparity is not only true based on socioeconomic status, but by race too. Goldrick-Rab (2016) states that several researchers concur with her findings that family status is motivation for students to obtain higher education. What is evident from this section is that student loans affect more than just the student who borrows. A greater group of individuals are impacted through the direct and residual effect of loan debt.

Human Capital Theory

Human capital theory is a prevalent theme when it comes to higher education, choice, and financial aid. Becker (1993) describes that higher education will benefit graduates' future earnings. Human capital theory would continue to suggest that parents would invest financially into their children. Parents are likely to pass on educational aspirations and goals to their children, and want to provide the resources to make them attainable (Sewell & Houser, 1980). Brown, Scholz, and Sheshadri (2012) discussed expected family contribution, and how it impacts attending higher education. Their article relates to human capital theory because a family who

wants to send their children to college but cannot contribute to it will have to rely on financial aid. Brown, Scholz, and Sheshadri (2012) continue that financial aid is a tool for human capital theory in that it provides access and resources to those who could not attend higher education. Parental financial investment in higher education relates to human capital theory because families are putting resources toward the students bettering themselves as well as the community (Best & Best, 2014). Best and Best (2014) and Archibald and Feldman (2011) posit that parents saving and investing in their children's higher education early could be a way to help fix the present student loan problem. Cho, Xu, and Kiss (2015) say that the early investment in higher education would yield more positive results for higher education attainment.

Human capital theory is not only predicated on getting students to choose to attend higher education, but has demonstrated positive results from students attending. Zumeta et al (2012) discuss how the rate of return from higher education is impacted by the overall job market earnings and other financial benefits of the credential. Cho, Xu, and Kiss (2015) refer to the positive rate of return in higher education that there is a consensus that higher education leads to better job prospects and higher income. The general benefit associated with higher education is that the credential will provide better access to higher skilled work, and the communal benefit of a better educated society (Best & Best, 2014). The use of financial aid is not directly associated with an issue in attaining a degree. The overall issue is that the rising tuition rates, decrease in state funding, and student loans becoming the primary source of financial aid has led to the positive rate of return on higher education being either delayed or no benefit being felt by the borrower (Chen & Widerspand, 2014; Woodhouse, 2015; Cho, Xu, & Kiss, 2015). Mettler (2014) describes that this deception is fully predicated on the belief that higher education creates benefits to its students and community. Student loans have put a complication in human capital

theory being true for higher education. While the general consensus is still that higher education is a benefit to those who partake in it, student loans have impacted the reality of the educational benefit on the student (Koch, 2019).

Social Contract Theory

Social contract theory is rooted in the belief that the government, and its programs, were created by members of the society to ensure all members benefit and are treated equally (Rousseau, 2012). Higher education achieves its goal of benefitting citizens through creating knowledge that benefits the community, promoting economic development, and providing education to create a better educated work force. Higher education has in turn received benefits as a part of society by being tax exempt, receiving state funding and federal financial aid to draw students in (Newman, Couturier, & Scurry, 2004; Kezar, Chambers, & Burkhardt, 2005). Best and Best (2014) believe there is a communal benefit to higher education where those who participate in higher education are able to take their knowledge, and do positive things for the greater community. While higher education has provided benefits to those who obtain it and to the greater community, is the benefit the same given the current climate of student loans?

Social contract theory is used in this study because of how it ties into the deception and misleading nature of student loans. As stated above, the narrative for higher education being beneficial has been promoted and pushed to students and families. Aid programs were expanded to bring in more access to higher education. Students and families were led to believe in, or have positively experienced, higher education through institutions and the government putting an emphasis on attaining a degree, and, for the most part, all were correct that it was beneficial. But the social contract between the federal government and higher education has been confusing over time. The federal government has not directly invested in higher education institutions, and has

issued conflicting messages through the years (Dunek, 2015; Newman, Couturier, & Scurry, 2014; Kezar, Chambers, & Burkhardt, 2005). The federal government designated land, expropriated from indigenous people who were here first, to each state to establish a public institution, but it did not allocate funds directly for their creation or implementation (Thelin, 2004; Lee et al, 2020). Later, the federal government directly funded veterans to attend higher education, and established our student aid and loan system. It is only at the level of state constitutions that some degree of public education is named as a responsibility of state and local governments (Walsh, 2011).

Another component of social contract theory to consider is the social contract that universities have toward their students. Douglass (2007) discusses that public HEIs have mission statements and roots centered on benefitting their students and the community. Social contract theory would posit that students be afforded an attainable and beneficial education from the university that was designed to benefit its students. Student loans have created a complication in the social contract because an argument can be made that the loans that students undertake are not beneficial to the students of the institution (Douglass, 2007). Institutions are competing with one another for students, and have driven up costs, and thus tuition and fees, by offering resources, amenities, and numbers and quality of programs to draw more people in, thereby participating in more of a market driven mission (Dunek, 2015; Newman, Couturier, & Scurry, 2014; Kezar, Chambers, & Burkhardt, 2005). The two social contracts between HEIs and their students and the federal government and its constituents are strained, and have come to an impasse in the present system. This concept is essential for understanding the lens of the study because the present student loan system is adversely affecting students and preventing the attainment of higher education. If there is a failure to understand the government's and higher

education's involvement in the social contract, then progress cannot be made to address the shortcomings of the present student loan system.

Monetary Theory

Monetary theory and critique are an interesting context for the student loan conversation. For those studying student loans, it is easy to focus on the effects of student loans on different populations, or on how student loans are situated in a political context. Monetary theory and critique undergird the conversation about student loans because of the way that loans are funded, and why this system is the way that it is. The investment in student loans from the private sector has led to a significant issue that is hard to undo. To understand monetary critique, it is important to understand banking, money, and credit. McMillan (2014) defines "banking as the creation of money out of credit" (p. 3). Private banks create about 98% of our national money (Hammon & Pash, 2019), a prerogative that, according to the authors cited here, belongs 100% in the public sector. Another challenge of creating money as credit is how private lenders choose to distribute it. McMillan (2014) discusses that banks are more willing to distribute credit to larger manufacturers versus smaller companies and individuals because the rate on their investment is more likely to be returned at a higher rate with less risk. Private debt-money system is arguably unconstitutional (yet has not been ruled so), biased, unsustainable, unstable, and reflects neoliberal rather than democratic ideals (Hammon & Pash, 2019). Huber (2017) discusses that money has a distinct link to power. Huber (2017) states, "money is an instrument of exerting power," and "the right to be a creator and first user of money gives power and privilege over all subsequent users" (p. 3). Since there is an article of the constitution that gives Congress the power and authority to create money and regulate the value thereof, Congress is derelict in its duties by relinquishing this power to commercial banks (Huber, 2017; Hammon & Pash, 2019).

Eckrich (2017) discusses the implications of this for higher education. When the government decided to get into the business of higher education funding, the government did not have adequate resources to fund the high demand for federal financial aid, and had to seek out resources from private lenders. Then with the Higher Education Act, the primary form of financial aid was student loans that were funded by private investors at a higher interest rate that the government subsidized for low-income borrowers. Over time, the investors had to be kept happy, so debt-ceilings and interest rates were increased, and Sallie Mae was created to purchase, bundle, divide, and resell guaranteed student loans as long-term investments for the wealthy. While Sallie Mae was privatized by 2004 and split into two entities, doing so has not undone a significant amount of damage that was created and student loans continue to be made through them and, after 2010, directly from the government again with funds it gets from taxes or borrowing(Eckrich, 2017). Money created out of credit leads to more debt within the country (Hammon & Pash, 2019). Though this system is exacerbated through the digital technology revolution, it originated in a technological revolution about seven centuries earlier –namely, double-entry bookkeeping (McMillan, 2014). This new technology allowed for credit to grow more rapidly and people and planet to be thereby exploited, and only caused issues for the banks when distrust in the system and banks runs took place. The addition of digital technology in banking led to more difficulties in providing regulations to banking (McMillan, 2014; Huber, 2017). Kuzminski (2013) states that the financial crisis is not only a monetary and political issue, but also an ecological issue. Profit extracted is sometimes partially reinvested, enabling people to make some incredible inventions and technological revolutions. This revolution took place with devastating ramifications on the environment. Much like the student debt crisis, the ecological

crises can and must be addressed through monetary reform before the demise of the environment (Kuzminski, 2013).

Various authors have brought forth their ideas on how to fix the monetary system. Hammon and Pash (2019) and Eckrich (2017b) focus on sovereign or Just Money, a monetary system where the government controls the production and distribution of money for the public good in amounts that maintain its value, or purchasing power, across generations. McMillan (2014) discusses that the government established the present banking system, but it is to the detriment of the United States government and citizens. The private banks are making tremendous profits on their investments, and the government has provided bailouts in times of tremendous losses at the taxpayers' expense (Huber, 2017). This model has been sustained overtime because of the power relations, initial benefits, and well-hidden costs of the system. Borrowing itself is not necessarily problematic but that our money is created through it. The issue intensified when riskier loans and investments were made, and bundled for additional investing (Huber, 2017; McMillan, 2014). The Constitution, Article 1, Section 8 gives Congress the right and responsibility to "coin money, and regulate the value thereof," but it was only used by Congress to pay for the Civil War. Money creation has instead been entrusted to the private banking sector, which has profits as its focus rather than the public good and equity and stability in commerce (Hammon & Pash, 2019). McMillan (2014) states that the solution to the present system is to eliminate the creation of money out of credit, namely banking. They argue we can do so by a simple change in accounting rules and separating money and credit in two wholly separate spheres, with the public organization of money and the private organization of credit. The electronic digital technology we have today allows for a decentralized monetary system that does not require banking. McMillan (2014) and others cited here argue that the government can

and should exercise its authority to eliminate banking so that if private investors make dangerous investments, which they willll also then be less likely to do, it's on them and doesn't have significant ramifications on the economy. For example, the Great Recession in 2007 resulted from series of bundled risky mortgage loans sold and even insured as asset-backed securities, "collateralized debt obligation," and "credit default swaps" in the finance sector (McMillan, 2014, Part 2).

This links to student loans because a bubble can be seen through the investment in student loans and bundling, dividing, and reselling of the loan investments. If the private entity who creates money as interest-bearing credit is removed and money is created as a public asset, student debt would have the chance to be driven down and eliminated (Eckrich, 2017). Eckrich (2017) continues that this macro-level monetary reform could lay the groundwork for more meso-level monetary measures to alleviate additional inequities in local communities. Huber (2017) advocates the same thing, calling it sovereign money versus bankmoney (i.e., credit created by banks when they lend), and having a singular form of and circuit for currency for the country. The lack of a unitary public currency in each nation or monetary union has led to confusion and challenges in regulating the monetary system, and nationalizing money would allow for its simplification and effective circulation as legal tender, as a public unit of account for commensurable exchange of goods and services among the people who create them and whose name the money bears. Additionally, the money power would be restored to the people through their government, while the banks, savings and loan associations, and other peer-to-peer lenders in the private sector would handle credit—the saving and lending or borrowing of already existing money. Eckrich (2017) links economic policy and behavior to neoliberalism in

that the power exuded by the banks led to their systematic wealth extraction at the expense of others and riskier investments.

The three steps to implement a new monetary system once established would be deciding how much money to create (or not) to keep the value of money steady, enter the amount as income and an asset on our government books, and distribute the new money into the economy by spending, lending, giving, or investing to promote the goals as stated in the Constitution (Hammon & Pash, 2019, p. 33). Through the creation of a new monetary system, Hammon and Pash (2019) state that infrastructure could be repaired and improved, jobs can be created, universal healthcare and education could be funded, and sustainability could be refocused on. The flaws inherent in our current monetary system have exposed an issue through the unregulatable, rampant investment, and wealth extraction that the private sector has been able to do over the years of technological development. It is the elimination of banking, the creation of money out of interest-bearing credit, through a simple change in accounting rules and the public organization of money and private organization of credit that could help with the current debt crisis (McMillan, 2014).

Stepping away from the neoliberal banking approach would allow for a democratic vision of funding, and, in turn, allow for student loans to be reimagined and eliminated and higher education to be funded differently. One critique of neoliberalism and monetary theory is that the government has a role in ensuring the strength and integrity of money (Harvey, 2007). However, what Harvey and neoliberals fail to understand is there are three prerogatives of money: naming the currency of the realm, creating and issuing the money denominated in that currency, and earning the seigniorage from that and from the first use of that money (Huber, 2017, p. 39). With the establishment of the Federal Reserve in 1913, neoliberals have been able to be aggressive

with spending, over half of which goes to the military and an increasing amount for interest payments, despite their narrative of government oversight and needing less government intervention. Given the aforementioned research, the integrity of our monetary system is not evident. There are vast disparities in wealth across the system, and the integrity is increasingly damaged through banking. If neoliberalism is the system that the government and institutions have grounded themselves in, there are tenets of neoliberalism that directly contradict higher education's mission.

Neoliberalism

Neoliberalism is a political-economic theory that claims that individuals are best suited in an economic system where private property rights, free markets, and free trade are strong and entrepreneurial efforts encouraged (Harvey, 2007). Harvey (2007) states that the prominence of neoliberalism in the United States in the late 1970s and during the Reagan administration was due to the increase of conservative think tanks. The Reagan administration impacted higher education through his neoliberal thinking, and the paradigm shift brought forth changes in cuts to higher education, and increases in student loans (Shumway, 2017). While there are other historical events that brought neoliberalism forward in money system, the Reagan administration exposed and abused its power to further damage the student loan system.

A tenet of neoliberalism is that the government should create markets if they are not present, and then refrain from intervention. Neoliberalism hangs upon the concept that the government cannot be unbiased, and should not interfere with the market (Harvey, 2007). This directly correlates to the first foray of higher education funding at the federal level. The Morrill Land Grant Act of 1862 was the federal government intervening to create a market for public higher education, and not intervening further. The limited intervention of the federal government

has come in the preliminary form of need-based grants, and evolved to mainly student loans. While there is a surface-level appearance that this intervention is assisting students and families, the intervention comes at the benefit of the private financial sector. Harvey (2007) states that one of the facets of neoliberalism is the drive to privatization. This can be seen in higher education through the conversations about whether institutions are public or private goods.

While state support is prevalent in public HEIs, tuition, fundraising, and private subsidies are the primary revenue drivers for institutions, which begs the question if these institutions are public or private. Shattock and Brown (2012) also bring up the 1980 Bayh-Doyle Act as another example of how private property became prioritized in higher education through the ownership of patents. The neoliberal state is necessary and sufficient to create wealth, which enhances the well-being at large but mainly fills private pockets of the 1% (Harvey, 2007). This concept translates to higher education, as well through the concept of access. If higher education is a private good, then those who can afford should take advantage of higher education in a neoliberal state because it will benefit them. If it also benefits the greater community, so much the better, though that's not its rationale. If students cannot afford higher education, they need to work harder to obtain education. This concept is distinctly neoliberal, and directly contradicts the access argument. Neoliberalism hinges on a concept of individuality and personal responsibility (Harvey, 2007). In hearing that, it reminds me of the human capital theory that is prevalent in higher education. It holds that individuals can better themselves through higher education and hard work. In true neoliberal form, this contradicts its thought on state intervention for obtaining higher education. If low socioeconomic status students succeed in school, they still would not have adequate funds for higher education. To compromise, student loans bridged the gap to provide access even if the covert purpose of federal student loan programs was to generate

revenue for the primary lenders and secondary investors. Even if well-intending, this approach preyed upon students and families, especially but not only those, who didn't know anything about student loans and entered into loan debt unknowing of their effects (Giroux, 2014).

Neoliberalism is not the cause of the student loan crisis but exacerbated the issue. The student loan crisis started in the 1970s and 1980s with the increased loan limits and interest rates, federal guarantee to lenders decreased state appropriations, and increased tuition rates (Hartlep, Hensley, & Eckrich, 2017). The reliance on loans and debt to finance higher education came from the 1970s when the combination of legislation and reliance on private-interest, debt-based student loans took root (Hartlep, Hensley, & Eckrich, 2017). Burt and Baber (2005) add to this discourse that the omission of race from the discussions on financial aid in the 1970s was overtly neoliberal and racist. When race was omitted from the conversation, it supported a "colorblind" approach that omits the effects that financial aid, and exclusion from financial aid and access to home loans, has on underrepresented populations. The shift to include more middle-class families in the 1970s could be seen as a push to bring more white students into higher education, but in actuality it pushed out the lower-class and underrepresented populations. Neoliberalism is a necessary subject to understand as it pertains to student loans. Neoliberalism as a political and economic system is intertwined with the justifications and rationales for student loans as the primary form of student aid. It can also, unfortunately, serve as a smokescreen that distracts analytical attention from its underlying systemic source in our money system.

Discussion

Through the readings, I was able to learn about a number of different areas that pertain to student loans that I wasn't well-versed in before. The main areas that I have grown in my understanding are monetary theory, its connection to neoliberalism and federal financial aid, and

federal vs. state funding. Critical monetary theory is an area that I was not aware of until meeting with Dr. Eckrich. Dr. Eckrich stated that the monetary system would be integral for my understanding of the issue with the financial aid system. Upon reading, it made sense why this area of scholarship was key for understanding financial aid. The current monetary system gave rise to and is entrenched in neoliberal values, and has led to distinct issues with equity and unbalanced wealth. Its precipitating link to neoliberalism is a great segue in my understanding. The addition of the monetary system on top of my previous knowledge of neoliberalism helped me to understand how both fit in the financial aid policies. Neoliberalism is seen in financial aid policy through the decision to use student loans instead of grants or providing direct funding to institutions. The push toward student loans reflects the neoliberal belief in the market, and that students can use student loans to make their choice on higher education. The institutions used a neoliberal lens to increase their private property and endowments, which, along with a decrease in state subsidies, caused an increase in tuition and in the influence of private donors and the institution's investment portfolio. The neoliberal system that influences both the institutions and the government has led to the increase in student loans, and has been to the detriment of borrowers and their families. Finally, the difference between state and federal funding in education was an important distinction I learned through this process. Prior to reading for and writing this dissertation, I wrote ambiguously about governmental spending, and did not distinguish between state and federal. The federal government not getting involved in direct funding of higher education is important to understand the existing social contract and neoliberal ideals in how the refusal to invest is a sign of continuing the perception that higher education is a private good.

My perception on the topic did not change in several ways, too. The main ways my perception didn't change were in the theories that ground financial aid research, that higher education isn't considered a public good (even if I and many think it should be), and that higher education isn't funded equitably. The theoretical frameworks that I found prior to beginning writing the dissertation were grounded in social contract theory and human capital theory. St. John (2003; 2004) cites human capital theory as a distinct reason why people choose to attend higher education. St. John grounds his studies in John Rawls' theory of justice which offers an alternate explanation of human capital and social contract theory. Mettler (2014) asserts that the American dream of social advancement through higher education is a crucial mental model for the United States that was betrayed in the 1980s. Zumeta et al. (2012) explain that human capital theory is critical for understanding the private interest in higher education. Private companies understand that higher education provides more skilled workers, and thus investing in higher education would strengthen the workforce. Newfield (2016) cites social contract theory and argues higher education needs to be considered a public good in order to discover finally an affordable public higher education. Douglass (2007) discusses social contract theory not through the lens of the government's social contract to students, but through the university's social contract with students. Douglass (2007) says that the public HEIs has an obligation to align its mission to serve the constituents of the state in which it is chartered, to provide resources to ensure access to the institution, and to create beneficial academic programs for the people, commerce, and communities of state. In these references to social contract and human capital theory it was reaffirming to see that the previous research I had read and written about was accurate. What was less reassuring was finding additional research that shows higher education is not a public good and that funding is not equitable. Prior to writing the dissertation, I saw

Rousseau's (2012) explanation of the social contract to be saying that the government was responsible for restoring equity in society as individuals sought additional private property. Given that definition, I knew that higher education was not a public good. Higher education funding is not equitable in access, and is evident in the lack of affordability. Individuals can attend higher education if they can afford it, but those who cannot are expected to use student loans. While this may seem to be an equitable solution from the government, or at least the only possible one unless we reform the money system, the continuing debt inherited by those who need to use student loans perpetuates the debt cycle and stalls social mobility and fills the pockets of their lenders. With the funding going to student loans from the federal government, the funding isn't creating equity in higher education. The funding being owed by the students has allowed for institutions to raise their tuition, and led to issues of affordability. With funding being focused on the students rather than on making institutions affordable, the burden has fallen to the students, which favors the students whose families can afford higher education. These areas that I already knew were helpful in guiding the research I did on student loans to become more well-rounded on the overall topic. Student loans were a crucial lynchpin for understanding the financial system of higher education. This research helped with understanding the overall funding of higher education, the monetary system, and the repercussions of student loans on borrowers, their families, and society. The overall topic of finance in higher education is vast, but starting with the history and political economic context of student loans viewed through the lenses of human capital, social contract, monetary theories, and neoliberalism enabled me to shine a light on several areas of finance.

CHAPTER III: METHODOLOGY

Introduction

At the conclusion of my coursework, I am left with the question is there a sample of students that is most affected by the present student loan system and is the most at risk for defaulting on their student loans. There has been research conducted thus far discussing the topic. Wilms, Moore, and Bolus (1987) and Dynarski (1994) stated that the students who do not complete their degree have the strongest predictor of defaulting on student loans. They state that Black students, students who didn't complete high school on time, and low-income students were also more at risk to default. Wilms, Moore, and Bolus (1987) also stated that the main institutional characteristic that reflected default rates was attendance at for-profit institutions. Dynarski (1994) continues that high school dropouts, Black and Latino students, those who do not persist through higher education, and low-income students are the most likely to default on their loans. Knapp and Seaks (1992) concur that defaulting increases sharply if students do not graduate, but likelihood of graduation is based on individual characteristics, and they call for more research on individual characteristics at the institutional level. Flint (1997) challenges the assumptions of Knapp and Seaks (1992) because he believes they are placing more blame on the student than the institution. Flint continues, stating that it is easy to pull the research, but understanding the results and context is more of a challenge.

Given the complexities that can be associated with student loan default, I believe that it would be beneficial to conduct studies at the institutional level. Research at the institutional level will allow institutions to focus on which of their students are at risk based on their specific demographics at the institution, and then plan courses of action to prevent student loan default. Thus, I conducted an original study looking at the student characteristics that impact student loan

default at MPU, in order to target prevention efforts toward the students who are most likely to default.

Research Questions

Through this study, my research questions are:

1. What are the student characteristics that can affect the likelihood of student loan default?
2. What are the student characteristics that are more influential to affect the likelihood of student loan default?

Instrumentation and Data Collection

The questions and nature of this study lend themselves to a quantitative methodology. Since I am sought to identify predictors of student loan default based on student characteristics, I completed the logistic regression model for this study. Logistic regression is used to explain whether independent and dependent variables are related, and to identify the likelihood of predictors based on their relation. Once approval was given from the financial aid and institutional research offices at MPU and obtained deidentified, student characteristic information and ran the regression model using SPSS (Statistical Package for the Social Sciences, 2022).

Based on my conversations with the financial aid and institutional research offices, the student characteristics that I was able to obtain are financial, academic, and demographic traits of students from a financial cohort that is from the 2010s. For this specific study, the Institutional Review Board (IRB) gave this study an exemption due to the study not involving human subjects, but rather deidentified data from individuals.

Data Analysis Schema

This study used logistic regression, Stoltzfus (2011) defined logistic regression as “an efficient and powerful way to analyze the effect of a group of independent variables on a binary outcome by quantifying each independent variable’s unique contribution” (p. 1099). This study features several independent variables in the form of student characteristics being tested for their effect on the dependent variable of student loan default status. The model yielded results in odds ratios, which determine the effectiveness of an independent variable toward the dependent variable. The odds ratio helps determine the odds of the dependent variable, student loan default, occurring or not (Stotzfus, 2011).

Data Sources and Preparation

The sample for this study is a collection of students who attended MPU during an unidentified time during the 2010s. Given the desire to keep the students unidentifiable in the regression model looking through several predictors, the specific timeframe the dataset came from was not available. In the sample, there are students of all races, genders, ethnicities, high school GPAs, completion status, veteran status, transfer status, dependent status. The reason why this institution has been selected is because of the specific intentionality of looking at an institution that self-identifies as “affordable,” but also due to the ease of access to the data.

Coding the Variables

Once the dataset was received, the data preparation completed the following steps. For any of the cells that were listed as unknown or not applicable, the cell needed to be listed as blank to go into SPSS effectively. The next step in preparing the data was to change all the yes responses in the cells to be listed as “1,” and the no responses to be listed as “0.” For some of

the data points, there were high amounts of blanks or unknowns which were changed to “2,” and were controlled for before running statistical analysis. The categories that were blanks or unknowns were Dependency Status and State of Residence.

For the “sex” column, man was changed to “0,” woman was changed to “1,” and non-binary or not disclosed was changed to “2.”

For dependency status at time of aid given, dependent was listed as “0” and independent was listed as “1.”

In the category for state of residency, Illinois was listed as “0” and anything outside of Illinois or undisclosed was listed as “1.”

For father and mother level of education, college educated was rendered as “0,” high school educated as “1,” middle school educated as “2,” and unknown or blank as “3.”

For the Ethnicity column, white was listed as “0,” Black as “1,” American Indian as “2,” Hispanic as “3,” Asian as “4,” Hawaiian as “5,” any combination of two ethnicities as “6,” any combination of three or more ethnicities as “7,” and unknown or blank as “8.”

The final two categories are highest degree awarded and enrollment status at the time of default. The category breakdown for highest degree awarded is no degree awarded as “0,” undergraduate degree awarded as “1,” and graduate degree awarded as “2.” For enrollment status at the time of default the categories are full time as “0,” three-quarter time as “1,” half-time as “2,” less than half-time as “3,” withdrawn as “4,” graduated as “5,” and no enrollment records found as “6.” The data transformation done to all of the columns was to allow for the data to be input into SPSS to run the logistic regression model effectively.

Summary

The study I conducted for my dissertation was a quantitative study to identify what categories of students are most likely to default on their student loans at MPU. The default rate at MPU is lower than the national average for student loan default, and leads MPU to being labeled as an affordable institution. While MPU is doing well for supporting students financially, there are still students who default on their student loans. Identifying the students who are likely to default on their student loans based on predictors can be beneficial to MPU to help it work with students who may possess characteristics that make them more likely to default to avoid that financial harm. To conduct this study, I used a logistic regression model to analyze loan default against various identifiers. This test took place through SPSS, and then the data is reported in and analyzed for the subsequent chapters of this study.

CHAPTER IV: RESULTS

Re-Coding

While running the initial tests on the dataset, variables were recoded and inverted to best suit the statistical analysis. A logistic regression is able to find what independent variables predict membership in the dependent variable. Below is the breakdown of how the variables are coded: Work Study – 0 is Yes, and 1 is No, Transfer Status – 0 is Yes, and 1 is No, and Veteran Status – 0 is no, and 1 is yes.

In looking at missing variables, there were two separate variables, State of Residence and Dependent Status, where a trend in the data emerged. When doing the check for missing variables, there were exactly 5786 students missing variables in each of the categories. With the dataset from the financial aid and institutional research offices, this was an issue in obtaining the data from students. Investigation by those departments on why the data are missing and figuring out how to obtain them moving forward would be beneficial for future studies. The students with the missing information from my study brought the total down from 24,077 students to 18,291. These cases were omitted to ensure data integrity.

Enrollment Status at the Time of Default was coded in a way that was not beneficial to the study. A recode to three simpler variables and to omit the missing pieces of information was necessary to ensure the test could run effectively. The new breakdown of the variable is enrolled is 0, graduated is 1, and withdrew is 2. After rerunning the enrollment status, the test was incomplete due to issues with the variable. Thus, this variable was deemed not to be beneficial to the overall study due to the uncertainty within the variable. There were nearly 10,000 students who did not have the information regarding their enrollment status at the time of default, and that

yielded adverse results. So, the variable was removed from the data analysis. In the preliminary tests, we withheld SAT, and yielded no significant results. ACT did not have a significant odds ratio in that it is so close to 1 and had minimal effects on the dependent variable, so it was left out of the final regression model. Conversely, I ran the data analysis for SAT with ACT withheld, and the sample size was so small for students who took the SAT, that it was insignificant to the study, and omitted from the final data analysis.

At the conclusion of running preliminary regression tests of the data, the following variables are not significant to this study: EFC, Sex, Veteran Status, Pell Grant Status, Work Study Status, AP Credits, and highest degree awarded. When running the stepwise function in SPSS, the aforementioned variables were not seen in the set. For the final running of the data, the variables that were considered are State of Residence, Dependent Status, GPA, Total Scholarships/Grants Received, Failing Grade, Age, Transfer Status, Ethnicity, and Father/Mother Education Levels.

Typically, the only data-cleaning step that a logistic regression analysis would require would be a test for multivariate outliers. Traditionally, this would come in the form of an examination of Mahalanobis distances, which is a way to identify multivariate outliers within the analysis. Any case where the chi-square (χ^2) exceeds the critical value at $p < .001$ would be excluded, as it may represent an unusual outlier. In looking at the Mahalanobis distances for my study, I found that there were nine meaningful variables: State of Residence, Dependent Status, GPA, Total Scholarships/Grants Received, Failing Grade, Age, Transfer Status, and Father/Mother Education Levels. The degrees of freedom (df) is 9, and the critical value α is .01, which yields a critical value of 21.67. After calculating the Mahalanobis distances, 96.8% of the data were not considered outliers. That means 3.2% or 1351 cases are excluded from the final regression analysis. The final total of students being considered are 16,940.

Description of Sample

After the outliers and students with inadequate information were eliminated from it, the initial data obtained from the financial aid and institutional research offices at MPU went from 24,077 students to consider to 16,940 (70.4% of the original data). The students in this data set represented the students who had student loans taken out who attended MPU during a given time in the 2010s. This information was made available from the offices of financial aid and institutional research. The frequency table below shows the quantity of student populations in the final dataset.

Table 1

Demographic Frequencies of Sample

	Frequency	Percent	Cumulative Percent
White	12492	76.6	76.6
Black or African American	1417	8.4	85.0
American Indian	24	<1	85.0
Hispanic or Latino	608	3.6	88.6
Asian	330	2.0	90.6
Native Hawaiian	10	<1	90.6
Bi-Racial	1435	8.4	99.0
Three or More Ethnicities	124	1.0	100
Total	16890	100.00	

Within this sample, there were two race/ethnicity categories that were not large enough to consider for the overall analysis of the information: American Indian and Native Hawaiian. The two variables account for less than 1% of the overall sample, and were inconclusive in the preliminary tests. For the final analysis, I have chosen to focus on the other 6 variables and forego the American Indian and Native Hawaiian results. Race/ethnicity is the primary way I want to describe the sample because of the detail it provides. MPU would be described as a Predominantly White Institution (PWI), and the frequency of the data demonstrates that. Given

what other variables are not considered significant to the study, these two ethnic groups do not need to be considered in the description of the sample.

Research Questions

Prior to looking at the findings of the study, it is important to recall the research questions for this study:

1. What are the student characteristics that can affect the likelihood of student loan default?
2. What are the student characteristics that are more influential to affect the likelihood of student loan default?

Findings

A logistic regression was run using SPSS. The dependent was Default Status, and the independent variables were State of Residence, Dependent Status, Total Scholarships/Grants, Failing Grade Status, Age, Father Graduation Level, Mother Graduation Level, Transfer Status, and GPA. The variable Ethnicity was used as a selector variable, and individual logistic regression were conducted for each of the six relevant, self-reported race/ethnicity categories (0=White, 1=Black/African American, 3=Hispanic/Latino, 4=Asian, 6=Bi-Racial, 7=Three or More Ethnicities). Each binary logistic regression was run with stepwise analysis to determine the effect size of each variable. While binary logistic regression does not allow for the “controlling” of the influence of particular variables, a stepwise analysis of the results can illustrate the comparative weight of each variable, and how each variable increases or decreases when considered.

The stepwise logistic regression for white students (n=12942) yielded a model that included Dependent Status, Total Scholarships/Grants, Fail, Age, Father Graduation Level, Transfer Status, and GPA. State of Residence and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value of 3851.77 at $p < .001$. The Nagelkerke R^2 was .357 , meaning that the model accounted for 35.7% variance. 75.3% of cases were correctly predicted using the model.

The stepwise logistic regression for Black/African American students (n=1417) yielded a model that included Total Scholarships/Grants, Fail, Age, Transfer Status, and GPA. State of Residence, Dependent Status, and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value of 405.39 at $p < .001$. The Nagelkerke R^2 was .433 , meaning that the model accounted for 43.3% variance. 71.1% of cases were correctly predicted using the model.

The stepwise logistic regression for Hispanic/Latino students (n=608) yielded a model that included Dependent Status, Total Scholarships/Grants, Age, Transfer Status, and GPA. State of Residence, Fail, Father Graduation Level, and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value 167.87 at $p < .001$. The Nagelkerke R^2 was .356, meaning that the model accounted for 35.6% variance. 73.3% of cases were correctly predicted using the model.

The stepwise logistic regression for Asian students (n=330) yielded a model that included Total Scholarships/Grants, Age, Transfer Status, and GPA. State of Residence, Dependent

Status, Fail, X Father, and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value of 81.43 at $p < .001$. The Nagelkerke R^2 was .312 , meaning that the model accounted for 31.2% variance. 71.8% of cases were correctly predicted using the model.

The stepwise logistic regression for Bi-Racial students (n=1435) yielded a model that Total Scholarships/Grants, Age, Father Graduation Level, Transfer Status, and GPA. State of Residence, Dependent Status, Fail, and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value of 336.00 at $p < .001$. The Nagelkerke R^2 was .308 , meaning that the model accounted for 30.8% variance. 72.5% of cases were correctly predicted using the model.

The stepwise logistic regression for students with three or more ethnicities (n=124) yielded a model that included Total Scholarships and Grants, Age, Transfer Status, and GPA. State of Residence, Dependent Status, Fail, Father Graduation Level, and Mother Graduation Level did not produce results at a significant threshold less than 0.1, and were automatically removed from the model. The final model produced a χ^2 value of 38.74 at $p < .001$. The Nagelkerke R^2 was .403 , meaning that the model accounted for 40.3% variance. 74.1% of cases were correctly predicted using the model. A presentation of all the results can be seen below in Table 2:

Table 2

Logistic Regression

95% Confidence
Interval for Odds
Ratio

(Table Continues)

Table Continued

Race Category	Overall % Correct	B	Wald	df	p	Odds Ratio	Lower	Upper
White	75.3%							
Dependent		-.36	44.25	1	<.001	.70	.63	.78
Total Scholarships		-.21	172.96	1	<.001	.81	.78	.83
Failing Grade		-.24	20.16	1	<.001	.79	.71	.88
Age		.66	1221.12	1	<.001	1.94	1.87	2.01
Father Grad Level		.18	28.75	1	<.001	1.20	1.12	1.29
Transfer		1.54	1232.53	1	<.001	4.67	4.29	5.09
GPA		-.70	916.96	1	<.001	.56	.54	.58
Black or African American	79.8%							
Total Scholarships		-.43	60.36	1	<.001	.65	.58	.723
Failing Grade		-.43	5.05	1	.025	.65	.45	.95
Age		.39	36.91	1	<.001	1.47	1.30	1.67
Transfer		1.85	91.32	1	<.001	6.36	4.35	9.30
GPA		-.82	94.17	1	<.001	.44	.37	.52
Hispanic or Latino	73.8%							
Dependent		-.94	8.64	1	.003	.39	.21	.73
Total Scholarships		-.33	19.01	1	<.001	.72	.62	.84
Age		.68	34.61	1	<.001	1.98	1.58	2.49
Transfer		1.63	36.74	1	<.001	5.12	3.02	8.69
GPA		-.56	45.58	1	<.001	.57	.48	.67
Asian	71.8%							
Total Scholarships		-.24	5.85	1	.016	.79	.65	.96
Age		.50	20.58	1	<.001	1.66	1.33	2.06
Transfer		1.63	30.05	1	<.001	5.12	2.86	9.19
GPA		-.41	11.87	1	<.001	.67	.53	.84
Bi-Racial	72.5%							
Total Scholarships		-.28	33.13	1	<.001	.76	.69	.83
Age		.35	45.08	1	<.001	1.42	1.28	1.57
Father Grad Level		.22	4.26	1	.039	1.24	1.01	1.52
Transfer		1.34	83.42	1	<.001	3.82	2.86	5.09
GPA		.77	99.69	1	<.001	.60	.54	.66
Three or More Races	74.1%							

(Table Continues)

Table Continued

Total Scholarships	-.41	6.14	1	.013	.67	.48	.92
Age	.57	6.58	1	.010	1.77	1.15	2.74
Transfer	1.49	7.84	1	.005	4.43	1.56	12.55
GPA	-.75	13.16	1	<.001	.47	.32	.71

CHAPTER V: CONCLUSIONS AND DISCUSSION

Introduction

The purpose of this study was to conduct an exploratory study on many predictors to see what affected the likelihood of student loan default at MPU. To conduct this study, data from MPU was analyzed through SPSS to compare the influence of a variety of predictors on student loan default through a logistic regression model. The analysis determined there were several predictors that produced statistically significant results.

Prior to discussing the totality of the results, it is important to first acknowledge the limitations of this statistical analysis method. Logistic regression utilizes the Nagelkerke R^2 to predict variance in the dependent variable (student loan default), which is a linear representation of a logistic curve. For my study, the Nagelkerke R^2 values ranged from 30.8% for bi-racial students to 43.3% for Black students. These percentages would imply that the model is only correctly predicting roughly 1/3 of the MPU population through the interpretation of the linear representation of a logistic curve. The Nagelkerke R^2 values may be significant to consider for some, but in my opinion, the Nagelkerke R^2 values should be interpreted with caution due to the nature of the value. In the context of the other findings (strong significance values, higher percentage of correct prediction, clear odds ratios), the results of this study should still be considered and considered heavily. Student loan default can be impacted by a variety of financial, academic, and personal reasons. Some reasons for student loan default cannot be quantified and tested at a large scale, and some variables can impact students at different rates. Despite my interpretation of the Nagelkerke R^2 values being an imperfect description of the

dataset, it is still predicting nearly 1/3 of students who are likely to default on their student loans, and that information is invaluable to a university and its constituents.

Many studies have examined student loan default, and they have pointed toward several meaningful predictor variables. This study found the primary predictors, regardless of ethnicity, are student's dependent status, age, GPA, total scholarships and grants received, transfer status, parental education level, and whether the student received a failing grade for a class. When including ethnicity, mother's education level dropped in significance. In comparing the odds ratios, transfer status was a strong indicator of student loan default. Black transfer students were up to six times less likely to default on their student loans than Black students who did not transfer to MPU. Additionally, age, GPA, and total scholarships and grants received appeared as a predictor of likelihood of student loan default for all ethnicities.

Research Questions

This study sought to answer the following research questions:

1. What are the student characteristics that can affect the likelihood of student loan default?
2. What are the student characteristics that are more influential to affect the likelihood of student loan default?

When attempting to run regression analysis on American Indian or Native Hawaiian students, the sample size of students was too low to produce a reliable analysis. As a result, the research questions could not be answered for either group.

This study indicates that the following student characteristics affect the likelihood of student loan default: dependent status, age, GPA, total scholarships and grants received, transfer

status, father's education level, and whether the student received a failing grade for a class. Student ethnicity is also an important confounding factor in predicting default. The regression analysis allowed for the likelihood of default to be assessed. The study started with nearly 20 predictor variables, which were eventually reduced to seven statistically significant predictors.

With the seven predictors that are listed as influential, it is important to define what the predictors mean after the data analysis. From this study, white and Hispanic students who are independent of their parents are less likely to default than students who are dependent. White and bi-racial students whose fathers are high school educated are more likely to default than white students whose fathers are college educated. Additionally, white students whose fathers are middle school educated are more likely to default than white students whose fathers are high school educated. Black and white students who receive a failing grade are less likely to default than those who do not receive a failing grade. For students of all race and ethnicity groups analyzed, students who receive more scholarships and grants are less likely to default on their student loans. Similarly, students of all race and ethnicity groups are less likely to default with higher cumulative GPAs at the time the data was pulled. Student's age at the time the data was pulled show that at a higher age, students are more likely to default on their student loans than students at a traditional college age based on the analysis. Lastly, students who do not transfer in are significantly more likely to default than those who transfer in.

In running an initial test with only the students whose information on it was collected, State of Residence was found not to be significant. Several cases needed to be removed due to incomplete data. This represented 5786 cases. Several potential factors could explain these missing data points. Some students do not self-report their information to the university which is one consideration, and another is that they may have not turned in their FAFSA. Of the missing

data points (such as state and family income), FAFSA would be able provide that information to the institution. If a student did not complete the FAFSA, MPU may not have this information on file. An interesting consideration for future studies would be to add an additional variable for whether or not they turned in their FAFSA, to the financial aid office. When working through the FAFSA document, there is entrance and exit counseling, as well as other resources made available to the student, and creating this variable in the future could assist in finding if there is an association with filling out FAFSA and loan default. The omission of State of Residence, Enrollment Status at the Time of Default, Highest Degree Awarded, and other variables withheld due to potential issues related to identifying students does not present the full story of student loan default at MPU.

The second research question of this study asks which student characteristics are more influential to the likelihood of student loan default. The most influential student characteristic that impacts student loan default is transfer status. Across all races and ethnicities, transfer status stands out as the characteristic with the highest odds of influencing [or predicting] student loan default. More specifically, transfer students were significantly less likely to default on their student loans regardless of race or ethnicity. The analysis shows that being a transfer student results in being three to six times less likely to default regardless of ethnicity. The other strongest student characteristic to have an impact on student loan default is GPA. Specifically, white students are 44% less likely to default as GPA increases; Black students are 56% less likely to default as GPA increases; bi-racial students are 40% less likely to default as GPA increases; and students with three or more ethnicities are 53% less likely to default as GPA increases. The other five student characteristics are significant but do not impact the likelihood of student loan default as strongly as the transfer status and GPA do.

The overall default rate for all MPU students is 52.8%, which is concerning on its own. When considering student ethnicity, the frequency that each race or ethnicity defaults is important to understand. In the frequency table (Table 3 below), 68.9% of Black students are presently in default status for their student loans. When I discovered that Black students were defaulting almost 16% more than all other students, that struck me as alarming. The next highest race or ethnicity on the list is Hispanic or Latino at approximately 59.4% which is nearly 10% less than Black students' default rate and almost 9% more than the default rate of white students. This study has shown that students' identity affects default rates at MPU. As the author, I believe that having Black as your race or ethnicity should be in the discussion of what student characteristics are likely to impact student loan default. This seems to be evidence of systemic racism and the continuing oppression of Black and underrepresented students in public higher education,

Table 3

Frequency of Loan Default by Race

	Not In Default Status	In Default Status
White	6394 49.4%	6548 50.6%
Black/African American	441 31.1%	976 68.9%
American Indian	11 45.8%	13 54.2%
Hispanic/Latino	247 40.6%	361 59.4%
Asian	164 49.7%	166 50.3%
Native Hawaiian	6 60%	4 40%
Bi-Racial	660 46%	775 54%

(Table Continues)

Table Continued

Three or More Races	55 44.4%	69 55.6%
Total	7978 47.2%	8912 52.8%

Discussion

There is a complicated history interweaving access to higher education, student ethnicity, and student loan debt. Outside of age also being found as significant in this study, race, ethnicity, and GPA are themes that emerged from other studies, while transfer status contradicts others. The history of which students had access to higher education and who had to obtain student loans to attend reflects that some populations were largely underserved by public funds devoted to higher education. These individuals were more likely to assume more student loans and have higher percentage of student loan default. With many Black students and other ethnic and racial underrepresented populations having limited access to all public higher education, there is less lived experience within these families and communities about the necessary financial commitment to higher education and the repercussions from student loans. Several other studies have also identified this relationship. Houle and Warner (2017) corroborate this thought, stating that Black students face more transitions as they exit higher education than their white counterparts. Dynarski (1994) and Fredericks Volkwein et al. (1998) found predictors that indicated Black and Latino students were more likely to default on their loans than white students. Grinstein-Weiss et al. (2016) indicate that educational debt burdens are higher in Black students, and that Black, low-income families are at the greatest risk of loan default. While this study didn't indicate that EFC is a strong indicator of whether students are likely to default, race

and ethnic underrepresented populations are demonstrating higher default rates than the white students at a Predominantly White Institution (PWI).

This study demonstrated that, regardless of race or ethnicity, as GPA increases, students are less likely to default on their student loans. While previous studies didn't discuss GPA as an indicator for student loan default, persistence through higher education was seen as an indicator in other studies (Herr & Burt, 2005; Koch, 2019; Woo, 2002; Gladieux & Perna, 2005; Dynarski, 1994; Knapp & Seaks, 1992). The current study confirms these findings, showing that students with lower GPAs are more likely to default on loans. If students are obtaining lower GPAs, there is a greater chance they are not persisting through higher education, and failing to complete their studies based on their grades. One contradictory piece of findings from this study was that as GPA increases students are less likely to default, but students who fail a grade are also less likely to default. While this study does not analyze the "why" of student loan default at MPU outside of analyzing predictors, I can take guesses at why the results reflected this. One reason I could think of is that students with a failing grade could persist through higher education. Persistence is an indicator, based on the literature, and it is unclear if this dataset has students who did not persist. While I do not have the full answer on why students who fail a class and students with higher GPAs are less likely to default, information regarding persistence and quantifying the amount of failing classes from MPU could help answer that question. The gap in the data (not knowing whether a student persisted or obtained a degree) makes the full association that students who did not persist are more likely to default at MPU not possible to draw. However, students with lower GPAs are more likely to default, as well as more likely to fail to complete their degree.

A surprise found in this study was how strong of an indicator transfer status is for student loan default. Non-transfer students are three to six more times more likely to default than transfer

students are regardless of race or ethnicity. The literature did not give any indicators that there would be this strong of a likelihood of less student loan default for transfer students. Transfer students are widely assumed to be those who have completed two years of college at a community college. While student loan usage has increased at community colleges over time, McKinney and Burrige (2013) found that community college students were more likely to default if obtaining loans and more likely to persist without student loans (Baker & Doyle, 2017). The counter-intuitive nature of a public institution being labeled “community college” requiring student loans that could put students into default status demonstrates how shocking the result of transfer students being significantly less likely to default than non-transfer students really is (González Canché, 2014; 2017). The public narrative that community college could be a financial benefit and assist in reducing the likelihood of student loan debt is affirmed through the results of this study.

A unique finding from this study is that being a transfer student makes students less likely to default, but, as age increases, students are more likely to default. While some may find this counter-intuitive, the understanding that community college is financially beneficial is affecting students of all ages. Students may opt to attend community college directly after high school instead of attending a four-year institution to save as much money as possible. It may be a previous mindset that students who attend community college are older, or at least the population who only stays at community college. However, this study did not assess the age of transfer students and their default status, but a further study could study that intersection.

A further consideration for reviewing this study is understanding what transfer status fully means. Is a student considered a transfer student if they come to the institution with one class taken prior to college, or a summer course taken at a local community college, or only it

they earned an Associate degree? Additionally, were student loans used for their community college experience in addition to MPU? The parameter on what is considered a transfer student by MPU was not specified, and further information explaining transfer status and which institution loans were taken out for would help understand the scope of how transfer status can assist in preventing student loan default.

These results are fascinating. However, not all questions about student loan default can be answered by this study. A quantitative analysis cannot explain why a phenomenon occurs. Logistic regression, for this example, does not tell researchers what the cause of student loan default is. Logistic regression is looking at the likelihood of student loan default based on what identifiers or variables are present. Alternatively, a review of theories applied to the likelihoods exposed may provide some insight.

Social contract theorists would argue that student loan default is happening at MPU, at a rate of almost 53% of all borrowers during the time frame studied, due to the misinformation surrounding who is responsible for the burden of education, and how families are taking on student loans under a different assumption than the reality. Social contract theory argues that the federal government and universities are ensuring that their constituents are being treated equally, and some could argue that everyone is treated equally. All students regardless of race, ethnicity, and socioeconomic status are free and equal to take out student loans, but the effects of the student loans vary suggesting different identities are not treated equally (Douglass, 2007). The push to bring all students into higher education, seen through various policies and practices of both the federal government and universities, has created issues between different student populations and their abilities to pay back their student loans (Dunek, 2015; Newman, Couturier, & Scurry, 2014; Kezar, Chambers, & Burkhardt, 2005; Thelin, 2004; Lee et al, 2020). Thus, a

social contract theorist would interpret the results as the federal government inadequately providing federal funding to students to prevent student loan default, and MPU inadequately providing resources and information to students to prevent student loan default.

A human capital theorist would view the cause of student loan default as the benefit brought to the students attending higher education outweighed by the cost associated. Best and Best (2014) focus heavily on the personal and communal benefits of higher education, however, the high default rates (53%) at MPU call these supposed benefits into question. Cho, Xu, and Kim (2015) and Zumeta et al. (2012) refer to positive rates of return on higher education by stating that students are more likely to have higher earnings from obtaining a college degree and have access to better skilled jobs. While the obvious benefits of access to higher skilled positions and a higher wage have not changed under higher education, the rate of return is significantly reduced by rising tuition rates and amount of student loans being assumed by students (Chen & Widerspand, 2014; Woodhouse, 2015; Cho, Xu, & Kiss, 2015; Mettler, 2014). The human capital theorist would say that the rate of return from MPU is not positive for the students who are defaulting on student loans.

The monetary critique and monetary theorist would state that the failure in the present monetary system is the reason for student loan default at MPU. As previously stated, in passing the 1913 Federal Reserve Act and keeping it ever since, the federal government ceded its power to create our money to commercial banks, rendering itself impotent to keep the value or purchasing power of money stable (Huber, 2017; Hammon & Pash, 2019). This abdication of responsibility has had several repercussions, including the confused state of the current financial aid system (Eckrich, 2017). The federal government had to rely on outside resources from private lenders and investors to afford financial aid programs, and created Sallie Mae to assist in

making student loans positive investments for the wealthy (Eckrich, 2017). The federal government allowed private lenders and commercial banks to be part of federal student loans instead of reforming our monetary system to make money a public asset, which could allow student debt to be driven down and eliminated (Eckrich, 2017). Monetary critique and theory argue that the student loan default problem is caused by the bankmoney that is used in the funding of student loans, and that the privatization does not allow for the federal government to control financial aid and student loans in the same way as if they were publicly funded as part of a public money system.

The scholar critical of neoliberalism would argue that the student loan default problem at MPU is caused by the limited intervention from the state and federal government to fix the student loan problem. Through legislation, limited government oversight, and the desire to obtain higher education from society, a free-market mentality was brought to higher education, tuition rates skyrocketed, and an over-dependence on student loans was fostered (Giroux, 2008; Harvey, 2005; Mintz, 2021; Hartlep, Hensley, & Eckrich, 2017). The neoliberal political agenda allowed the student loan system to expand and become ingrained in the fabric of higher education, and that dependency creates a natural environment for student loan default to live in. If student loans are the primary vehicle for students to attend higher education, there is an inevitability that student loan default will follow.

While scholars with various lenses do and could offer various theories to explain why the student loan phenomena is happening, I believe that a combination of the aforementioned frameworks offers the most compelling explanation of how student loan default is manifesting at MPU. The present student loan system (created through a neoliberal political agenda in our present monetary system) has led to consequences in students using the resources given and/or

lent to obtain higher education. An example of how neoliberal policies and the monetary system intersect with human capital theory is how higher education and student loans have been considered a necessary evil to obtain higher wages and better job prospects (Flint, 1997). Through social contract theory, the public believes that institutions labeled as public HEIs and/or supported by public funds are going to be beneficial to students and their community. The public believes higher education and public financial aid for it allows for the desired goals of higher wages and other communal benefits to be achieved. Given our existing money system, about which most of us are oblivious, this is a deceptive narrative that has allowed for student loan default to happen not just at MPU, but on a national scale. This study demonstrates which student identifiers at MPU are most likely to predict default on their student loans, but the system that allowed for student loans to become the driving force for funding higher education is a more insidious contributor in the cause of student loan default.

The dependency on loans to attend higher education is troublesome, and should drive MPU to consider their financial aid and tuition rates for students in attendance. Student loans provide access to students who are unable to otherwise attend higher education, and more students from diverse backgrounds enrich the university in a variety of ways. MPU should find ways to ensure that the diverse students entering the university are able to attend the institution without entering a detrimental financial situation. Otherwise MPU's stated commitment to "diversity, equity, and inclusion," like that at most HEIs, is rather empty, if not outright abusive. MPU should create honest and equitable recruitment practices. A prospective student's age, race/ethnicity, dependent status, and father's education level are all identifiers that are known prior to the student ever stepping foot on campus. These factors have been shown to predict future default to a high degree of certainty. If these and other identifiers display a further

likelihood of student loan default, education or resources should be provided to the students with these characteristics and their families to forewarn about the trends seen at the institution. Based on the results of this study, MPU should encourage students to attend community college prior to attending MPU because it could help them avoid defaulting on their student loans. While this concept may run contrary to the free-market mentality in higher education, there is a necessary service to the citizens of the state and country to ensure students who attend higher education are not entering a bad agreement by attending a HEI. These findings support MPU entering into articulation agreements with community colleges in its vicinity to better serve the students who attend both and their educational and financial needs.

The results of this study impact the financial aid office at MPU significantly. Primarily, the number of students in default status is far higher and more concerning than what is communicated to the university community. As previously mentioned, MPU is described as affordable. University marketing materials proudly tout that its graduates' student loan default rates are lower than the national average. If 52.8% of students are in default on student loans at an institution that is labeled as affordable, the national student default rate is likely far more concerning and terrifying. MPU needs to examine its practices of allocating scholarships, grants, and loans to the students who attend MPU. This study should not be made to gatekeep students from higher education, but rather to find ways to bring students in a way that does not cause loan default.

The administrators and executives at MPU and other public universities should read these results and recognize the phenomena associated with student loan default at their institution. Although this unquestionably presents a challenge to administrators, the obligation is clear. Action must be taken to mitigate intense financial damage to students. Proactive steps must be

taken. It is deceptive and irresponsible to promote a misleading narrative of affordability while nearly 53% of students default on their student loans. The work to correct the issues of student loan default at MPU should become a top priority, and this work should begin with sharing a more honest narrative of the costs associated with college and lead eventually to a serious analysis of the underlying monetary system that gave rise to student loans as a main way to finance higher education for all but the wealthy.

An additional question that leaves me concerned with MPU is why there was such concern in guarding certain identifying factors to conduct this research project, and not as much concern dedicated to student loan default. Without doing the data analysis, one could already see the high numbers of student loan default taking place at MPU. Rather than analyzing the data and attempting to understand the phenomena and how to prevent it, MPU put constraints on what could be looked at. While I understand the desire to protect student identities, I believe there are several predictors that could further this study.

While the full scope of student loan default was not able to be studied based on the limited data that I was given access to or was provided by students to the institution, the results still demonstrate a concerning phenomenon happening at MPU. To see the best results and allow for the full scope of this phenomena to be examined, MPU needs to use their internal information to examine all identifiers in the regression model. I feel that pertinent information (i.e., graduation status, EFC, highest degree awarded) would help shine a light on the areas that should be considered more closely for what influences the likelihood of student loan default. Furthermore, such study would benefit from MPU staff having the most up-to-date information regarding student loan default as the country pivots away from the student loan deferment that was given during the Covid-19 pandemic. While the relief for student loans during the Covid-19

pandemic provided a brief reprieve for those in default status, the data pulled for this study reflected a high number of students in default. What the fate of these borrowers will be once the moratorium ends, which is presently scheduled to happen on May 1, 2022, is likely not going to be pretty.

This study leaves me with complicated emotions toward the career I have dedicated my life to, and the degrees I have chosen to pursue. I believe that student loans are commonly despised, but seen as an essential element for a large number of families to be able to afford higher education. If the student loan default numbers are hovering between 50 and 70%, I cannot in good conscience say that higher education is a worthwhile investment for students at MPU. The students and families of MPU are being deceived that their education is affordable when they are really entering into a negative student loan agreement. The administration has followed a national trend of increasing tuition and offsetting the cost to students, and students and their families are facing the financial ramifications. Higher education should not harm students, and student loans are doing just that. If we cannot get out of the student loan mess within the current monetary system, maybe it is time to change the system. The first step toward doing so is for students, faculty, and administrators at MPU and elsewhere to learn about it, its origins, and why and how to correct it. The second step is to work together with others to change it.

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