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Higher Education and Student Debt: How Structural Flaws Affect Rational Investment

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Abstract

Overwhelming debt for college students is an increasing phenomenon. When one plans to make a rational investment into their future through higher education, one simultaneously plans for the unavoidable debt load that accompanies the pursuit of academic knowledge. While tuition rates are on the rise, some scholars look to the financial aptitude of students as a key variable in understanding the accumulation of debt by college graduates. Various studies have been conducted to understand how fiscal knowledge affects the debt load of students. The studies, including those of Javine (2013) and Heckman and Grable (2011), have consistently determined that financial know-how does not affect loan usage or debt load. This study, conducted at the University of Wisconsin-Stout through a survey of 1,000 student participants, arrives at a similar conclusion. The variables drawn from the survey, including whether the respondent took a financial planning class, dependency status, past financial experiences, and GPA, had no correlation with the amount of student debt each participant had accumulated. However, analysis of historical and economic constructs has been included to give a better understanding of the financial dilemmas at hand. With the collective information and research, the issue of growing student debt can be looked at in a holistic and interdisciplinary way.

Keywords: financial knowledge, student debt, higher education, state funding

Introduction

Individuals attending higher education programs are making a rational choice to invest in their future, but graduating from college debt-free is becoming an unattainable goal for most students. Over two-thirds of college students graduate with an accumulated debt of over $20,000 (Javine, 2013, p. 368). Trying to improve one's future in the job market through education is often seen as a wise investment, but students are suffering large debt burdens that cause financial instability and insecurity for years after they receive their diploma. Although the rising cost of tuition plays a role in the unavoidable student debt issue, many scholars have looked at students' comprehension of financial planning as a main factor in rising student loan debt. There is a

common theory that comprehensive financial understanding and student debt have an inverse relationship: the more a student understands personal finance, the less likely that student will be to utilize burdensome loans and compile exuberant amounts of debt (Avard et al., 2005). In order to understand the issue at hand, the entire higher education system must be looked at. Research was conducted at the University of Wisconsin-Stout to test that inverse relationship of incompetence in personal finance and student debt load and to bring forth a new and relevant conversation. Students were surveyed about their debt load and financial knowledge. Along with the surveys, financial information from the university was gathered to broaden the scope of this debt issue. The students' financial knowledge, tuition rates, historical context of the university, and other economic factors playing a role in university affairs must be considered in the topic of growing student debt.

Literature Review

It is no secret that students coming from middle class families take out student loans to obtain a bachelor's degree even if they are not attending an Ivy League institute. More students, and their parents, are utilizing student loans to invest in a four-year degree, which has now become what some call a prerequisite for even a modest chance at economic success. The students and families putting money towards higher education are making the rational decision to purchase an education that gives them the opportunity to rise in socioeconomic status, gaining access to future development and growth. While costs for these investment opportunities have increased, we must wonder if it is enough to cause two-thirds of college graduates to come out of school with a student loan debt of roughly $24,000 (Javine, 2013, p. 368), and enough to leave approximately 37 million students in a collective debt that surpasses $1 trillion (Cohen-Kurzrock, 2015, p. 1199). It must be noted that the act of investing in higher education with loans is generally seen as a rational choice as it leads to high returns through increased job opportunities. The current problem with student debt, however, is the rising amount of debt accumulated and the proportion of students that default on their loans after graduation, which in 2012 was around 12% nationally for four year colleges (Federal, 2015). We can be sure that something is askew, but what is causing this concerning usage of student loans? Many scholars have pointed out a lack of financial planning skills on the students' part; there is a theory that current students are inept when dealing with monetary issues. They have not been advised on issues of personal investments and finances, and therefore continue to take out loans, despite the potential risks. Considering financial incompetence as a lead cause in the trend of rising student debt has led scholars to examine other variables that may affect a student's usage of loans, such as their GPA, dependency status, year in school, and gender.

Even though the price of attending college is increasing faster than

the average income and ascending two to three times the inflation rate (CNBC, 2010), scholars have taken financial knowledge as a key factor in college student's monetary activities and personal investment trends. Regardless of the fact that attending a four-year institution today costs almost twice as much as it did ten years ago, the general scholarly theory explained within the literature is that the more financially competent a student is, the better the decisions they make, and the less debt will be accumulated during college. Javine (2013) argues that there is plenty of evidence saying that students lack satisfactory financial knowledge. Avard et al. (2005) arrives at a similar conclusion, stating that the results of their surveys "validate the fact that recent high school graduates are not knowledgeable about everyday financial matters", leading to financially ill-prepared college students (p. 326). The area of finance that students are most uncomfortable with seemed to be credit. Late high school and early college students were not familiar with how credit worked. This led the academic researchers to be worried about student loan usage (Avard et al., 2005).

The researchers began with the general agreement that the more financial knowledge a student has the less debt they will accumulate while in school. Javine (2013) claimed that fiscal responsibility on behalf of students would encourage safe financial practices (p. 369). Avard et al. (2005) states that the new generation of college graduates are "flunking personal finance" (p. 322), and are therefore emerging from their institutes with debt loads much larger than their starting salaries can afford. While the students are trying to invest in a future full of career opportunities, they find themselves crushed by a debt that hinders any chance of upward economic mobility. The researchers shared a common theory that the students' lack of knowledge in financial matters will lead to financial downfall after they get their diploma. Financial aptitude was predicted to be the variable that directly impacted the student's ability to financially plan their education (Heckman et al., 2011, p. 52).

Many of the researchers gathered data on financial knowledge by presenting financial aptitude tests to high school seniors and early college students. Some researchers stopped there; other researchers went on to gather the loan and financial information of the college students that participated in the tests. Most of the research was conducted through email surveys on college campuses, although the research that strictly focused on seniors in high school or freshmen in college was usually done in-person. The researchers would then analyze the data to see if having financial knowledge correlated with the college student's debt load. Although most of the scholars included in this literature review began with the working thesis that financial aptitude had an inverse relationship with student debt load, the tables turned once the data analysis had been finalized. All of the literature collected came to a startling conclusion that financial knowledge most likely does not affect

the debt load of students. Financial knowledge was not significant when looking at students' monetary behavior; being financially competent had minimal effect on the amount of tuition debt a student carried (Borden et al., 2007, p. 36).

Since financial knowledge was not significant in determining students' debt loads, the scholars had to consider other variables in their research. However, the variables included in the research had similar results to that of financial knowledge. For example, it was theorized that the students who were more financially independent should be better able to manage their finances and keep track of their funds (Heckman et al., 2011, p. 52). The correlation between student monetary practices and dependency status turned out to be insignificant. Gender was looked at as a possible variable that could have an effect on students' loan usage, but it did not have an impact on financial knowledge or loan usage (Avard et al., 2005). Yoon (2012), who conducted a national study on Masters of Social Work students' attitudes toward debt, found that ". . .the educational debt amount does not have any significant relationship with race, gender, parent's income level, or mother's or father's educational attainment" (p. 116). Yoon goes on to state that ". . . participants of this study indicated no significant association between educational loan amounts and their GPA" (2012, p. 118). The only correlation that was significant throughout the research was that more years in school coincided with more debt, pointing to the idea that the possible routes of financing a higher education, not the students' ability to invest wisely, are flawed.

Financial competence, along with variables such as gender, dependency status, and taking financial courses, had no correlation with student debt load. This total lack of correlation between the independent variables and student debt led the researchers in a new direction. As Javine (2013) states, ". . . students are taking higher levels of loans even when they have a good understanding of financial topics, perhaps because they cannot afford to finance their education any other way" (p. 377). Researchers took the lack of correlation and interpreted it by saying education was just too expensive. Perna (2008) supplements this point by including research on high school students' attitude toward debt, noting that ". . . the likelihood of applying to a university increased with the students' tolerance for debt even after controlling for educational achievement, social class, ethnicity, age, and mother's educational attainment" (p. 590). Regardless of knowledge on finance and investing, students have to take out loans to get through college. All of the research found began and ended the same, leading me to believe that this data is valid and significant.

Methods

The research began with a simple preliminary question: do University of Wisconsin-Stout students fully understand the risks of their financial investments toward education? The initial hypothesis was that students who had a higher level of financial competence would have less debt through student loans. Perhaps the students that were more financially proficient had found ways to avoid taking out large student loans that would collect a substantial amount of interest. Victoria Javine's (2013) study on college students' financial knowledge and debt load was the primary guiding resource throughout the data collection process due to the similar demographics and size between the university she studied and University of Wisconsin-Stout. Her survey, which she included in her final research report, was used as a guideline for the data-collection process. While Javine ended up rejecting her hypothesis, this research wanted to test Javine's validity and discover if the data collected from University of Wisconsin-Stout would follow the same trend.

Variables not found in Javine's research were added to this study as additional predictors of debt load of students. The dependency status of a student was an independent variable. The idea was that students independent from their parents may be more financially wary of loans because they have no parental safety net. The participants' various years in school were a potential predictor of debt. It was hypothesized that more experienced students would have a greater sense of financial competence, and therefore make different investment choices than younger, less experienced students. Gender was an independent variable, although it was not predicted to have any effect on debt load. If the participant had a personal finance course in high school or college was an independent variable. It was theorized that courses in finance would lead to better understanding of loans and personal investment. The participants' majors were recorded to try to decipher who was more prone to taking risky loans. The number of credits being taken and cumulative GPA was asked. The hypothesis was that students doing well in school may also do well in real-world issues, such as personal investment. All variables were designed to decipher who was more knowledgeable fiscally, and if it mattered when it came to student loans.

The survey used in data collection was created using Qualtrics and distributed through email. The survey consisted of 20 questions including demographics, multiple choice, and true or false. There were a total of seven demographic questions. Demographics included gender, year in school, dependency status, if they were first generation college students, and their cumulative GPA. The other 13 questions focused strictly on the participant's finances and their financial knowledge. Some of the questions asked the participant specifics such as what type of financial aid they had, how much debt they accumulated, and if they made payments on their loans. Other questions were more test-like, such as asking the respondents if they knew exactly what the FAFSA was, how much it costs to attend University of Wisconsin-Stout, and which aid options had compounding interest. There were 1,000 random recipients assigned to the survey through a university database. The survey

was emailed to all recipients on one occasion.

There were 42 respondents to the survey (4.2% response rate). However, the sample generally reflected the overall distributions of students at UW-Stout. Freshman composed 21.4% of the respondents while 26.2% were sophomore, 23.8% were juniors, 14.3% were seniors, and another 14.3% were five-year students. Males consisted of 40.5% of the participants, while females made up the other 59.5%. Of all respondents, 33.3% did not have a job. Of the remaining 66.7%, only 9.5% worked over 25 hours. According to the data, 54.8% of the participants had never had a personal finance course, and of the remaining 45.2% that did, only 7.2% had their financial course in college. It was found that 57.1% of students did not make payments on their loans. The students were spread out among majors, with engineering having the largest share of the participants at 26.2%. Of the respondents, 57.1% were taking between 12 and 15 credits, and 33.3% were taking between 16 and 20 credits. Regarding GPA, 40.5% of participants ranged between 3.0 and 3.5, while 38.1% claimed a GPA between 3.6 and 4.0. Only 4.8% of respondents had a GPA at or below 2.5. The independent students made up 31% of the data, while 61.9% were dependent and 7.1% were unsure of their dependency status. Notably, 85.7% said that they wished they had been provided with more financial knowledge prior to entering college.

The participants were asked to select all types of aid they acquired to help pay for school. It was reported that 7.14% had no aid or loans, 59.52% used Stafford Subsidized Loans, 64.28% used Stafford Unsubsidized Loans, 33.33% had private loans, 57.14% had a scholarship at some point in time, 35.71% participated in the Federal Work Study program, and 2.38% did not know what kind of aid they had used. Of the respondents, 26.19% said that they have no student debt, while 4.76% say their debt range is between $1 and $999, another 4.76% say their debt range is between $1,000 and $4,999, while 30.95% claim debt between $5,000 and $9,999. 4.76% say they owe between $10,000 and $19,999, 23.8% have debt ranging from $20,000 to $49,999, and 4.76% have debt of over $50,000.

Of the students with scholarships, 66.67% of them had both a Stafford Subsidized Loan and a Stafford Unsubsidized Loan. 13.63% of scholarship students reported having no other aid, while the rest had some combination of subsidized or unsubsidized loans, work study, Perkins grant, or private loans.

Results

When running bivariate correlations in SPSS there was a significant positive correlation (0.322) between year in school and amount owed in loans at a 0.05 level. The longer a person was in school, the more debt they would probably have. There was a significant negative correlation (-.353) between being a first generation student and amount of debt a student had

in loans at a 0.05 level. Having parents that went to college affected the amount of money a student borrowed through loans. No significant relationship existed between the participants' GPA and how much debt they had. Dependency status of the respondent and their debt load had no significant correlation. There was a very weak positive correlation (0.163) between how well a person believes they understand financing a college education and how much they currently owe. However, the weak correlation was not statistically significant. There was almost no correlation between having a class that taught personal finance or investment and the amount the student owed in student loans (-.019), and the minuscule correlation was not significant (0.905). Having knowledge about how much interest loans accumulate was not a significant factor in how much debt a student had. There was almost no correlation (0.058) between whether the student knew how much debt they had accumulated and their total debt load; this was not statistically significant.

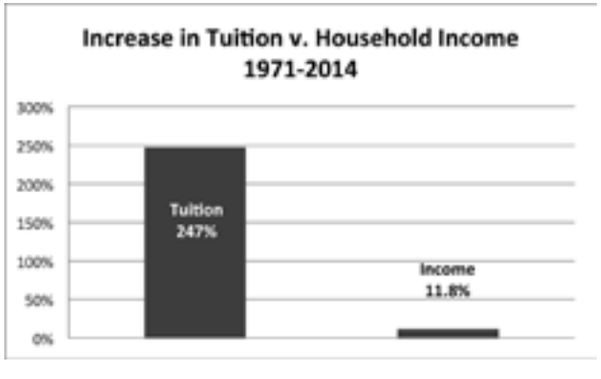
Discussion

Similar to the previous research conducted by scholars mentioned in the literature review, there were no significant links to financial knowledge, or the other independent variables, and the amount of debt students had via student loans. The only variables that seemed to be connected to student debt were the number of years they were in college and if they were a first generation student. It is apparent that the longer a person is in college the more expenses they accumulate, and therefore more debt. The most essential piece of information for this research is that first generation students had more debt compared to students who had parents that received higher education. The first assumption may be that the correlation exists because the first generation students do not have parents that experienced college or the financial challenges of college - leaving the students with little financial competence. However, because financial knowledge was not a significant factor in debt, perhaps the first generation students had more debt because they simply could not afford to pay for it. Students with college-educated parents may have access to more funds due to their parent's higher education and presumably higher paying jobs compared to the parents that did not acquire a college degree. According to these data, it is not a matter of knowledge, but a matter of the pocket.

Being that there was no correlation between financial knowledge and student loan debt, it is necessary to look further into the situation. If student monetary know-how is not the cause of the rising student debts, as was predicted by multiple scholars, then what is? The debt from student loans in the U.S. is nearly one trillion dollars (Price, 2010). Looking deeper into this issue is an essential task that must occur before college students can no longer carry the heavy burdens of large tuition debt. Considering that asking the

students about their financial knowledge and debt load only led to very basic and rudimentary answers (financial knowledge plays no role in how much a student will owe in debt), it seemed necessary to take a different approach and search elsewhere for answers. The other parties in these college finance issues are the colleges themselves. To work toward solving the student debt issue, we must better understand the topic of college finance by studying a state university and looking for trends in their finances that may lead to student debt.

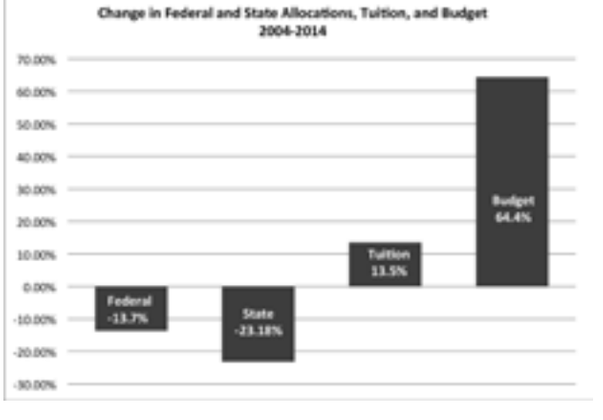
The University of Wisconsin-Stout offers a template to look at trends of college budgets, tuition, and state and federal government allocations to the institutions. Although Stout is not identical to other campuses in the University of Wisconsin system, it can act as a rough guideline to understand the full picture of higher education finances. From the archives of Stout Fact Books it can be noted that tuition in 1971 was roughly $438 (University, 1971). Using the Consumer Price Index (CPI) to adjust for inflation, this translates to $2,622 in 2014 dollars. Current tuition is around $9,096, according to the University of Wisconsin-Stout website. Those numbers mean that tuition has risen around 247% in real terms the last 43 years. But those numbers are meaningless without something to compare them to. The median household income in 1971 was $7,805 (United States Census Bureau, 2015). CPI transforms this number into $45,641 in 2014 dollars. Since median income in 2014 was $51,017, we can conclude that median household income in the U.S. has only increased by around 11.8% in the last 43 years. An 11.8% increase in income and 247% increase in tuition do not work well together. The price of tuition is rising much faster than income can rise. This may lead students into debt because their parents are unable to support the rising costs of education with their relatively fixed income.



We can look at more recent fiscal matters to create a better understanding of the rising student debt load in the U.S. According to the University of Wisconsin-Stout Fact Book (2005, p. 64), the state government allocated $34.4 million to UW-Stout in 2004, while it allocated $33.5 to

UW-Stout in 2014 (University, 2014, p. 77). The numbers look similar but when inflation is factored in, the CPI calculates that the $34.4 million in 2004 was the equivalent to $43.61 million in 2014 dollars. This means that in 10 years state funding of University of Wisconsin-Stout has decreased by 23.18% in real terms. A similar trend can be seen in the federal allocations. University of Wisconsin-Stout received $4.89 million in 2004 from the federal government, which is $6.199 million in 2014 dollars (University, 2005, p. 64). In 2014 the federal government assigned $5.35 million to Stout (University, 2014, p. 77). This means that there has been a decline in federal funding by 13.7% in the last 10 years. State and federal funding of University of Wisconsin-Stout have both gone down a significant amount in the last 10 years. While the state and federal governments are simultaneously pulling their resources from the investment of higher education, the students are being forced to utilize once unnecessary loans in hopes of future economic mobility and security. However, the cost of this essential higher education is weighing too heavily on students, creating unsustainable amounts of student debt.

Tuition for full-time University of Wisconsin-Stout students in 2004 was around $6,300, which is equal to $7,987 2014 dollars (University, 2005, p. 71). Current 2014 tuition is $9,069. Tuition has increased around 13.5% in the last 10 years. To get a more precise picture of what is going on, we will look at the changes in the University of Wisconsin-Stout budget over the last 10 years. The University of Wisconsin-Stout budget for 2004 was $100.8 million (Sorenson, 2004), which is $127.79 million in 2014 dollars. The 2014 budget was $210.12 million (University, 2014, p. 77), meaning that between 2004 and 2014 there was a 64.4% increase in the overall budget at Stout.



We have found that lack of financial knowledge among college students is not a significant factor in the increasing student loan debt. Re-

search from Javine (2013), Avard et al. (2005), Heckman and Grable (2011), Borden et al. (2007), and many others working on this specific topic back this conclusion. It is time to look in a new direction to find the real root of the debt crisis, starting with the institutions. University of Wisconsin-Stout has increased tuition by 13.5% in the last 10 years, accompanied by rapidly decreasing federal and state aid and an institute budget that has risen 64.4%. Funds need to fluctuate with the ups and downs of the economy, but to keep pushing tuition up to cover the lack of funds colleges experience can only work for so long. The slow rise of income cannot keep up with skyrocketing educational costs. With a college education becoming a prerequisite for a successful life (Price, 2010), tuition must stop its upward climb before students and their parents can no longer afford that imperative phase in life.

Limitations

Although this research did reflect the end results of larger studies, the small sample size can be seen as a limitation in this study. The response rate was only 4.2%, and even though the small response rate is normal in this topic (Javine, 2013), having more respondents would have helped validate the research. In future studies, questions asking the respondents about their income or their parent's income should be included. This would have helped to confirm or deny the idea that a college education has become too expensive. It then would have been possible to gauge if the students with access to more monetary funds have less student debt. Getting access to institute funding information was a limitation. The archives proved helpful, but they did not have all the necessary information. When asked for funding information of the university, multiple administration personnel were quick to state that they knew nothing of the records and did not know where to find them. Many figures from the budget desired for this research seemed to be unobtainable, which hindered the overall analysis of the institute.

Conclusion

Many scholars have looked into the growing debt load of college students, hypothesizing that the students' financial illiteracy is causing mass loan usage that leads to overwhelming debt. However, through their research, and the research done at University of Wisconsin-Stout, it can be concluded that financial knowledge does not seem to be a factor in the amount a student has in debt. This does not seem to be a problem of lack of education in personal finance, but an issue of not having any good options. With the growing costs of higher education and the relatively fixed income, students and their parents can no longer pay for college tuition. They are depending on student loans to get them through the vital years at the university.

Rather than looking to students to try solving the increasing debt load, political pundits, researchers, and everyday citizens must begin to look

at the lack of financial support for universities and the school system itself. The fact that there is a nearly trillion dollar debt held by American college students means that there is a flaw in the system. Since federal and state allocations to University of Wisconsin-Stout have declined, tuition has to rise to foot the expenses of the university. Scarcity of money is not an uncommon issue in our economic landscape; universities must acknowledge that they cannot keep asking for more when there is no more to give. While students are struggling to pay their tuition, university budgets cannot continue to increase. Although professors need to get their paychecks and the facilities needs to keep their lights on, the institutes must understand that students are being crushed by their financial burdens. Students want their education and want to be a part of their great institute, but they also want to be free from the burdens of debt after graduation so they can focus on utilizing the tools that the university has given them.

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