United States Student Financial Aid: Student Loan and Default
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Abstract

Prior to presenting the existing research on student loan default in the United States, the paper explores the student financial aids and the reasons why student loan is essential for students here in the United States. This paper explores research from several published, peer-reviewed articles that report on research conducted by researchers and practitioners on student loan debt and default in the United States. The articles, however, vary in their period and the explanation of student loan in the United States. The most recent article by Pew Research Center (Cilluffo, 2017) states that four out of ten adults under age 30 have student loan debt. Other articles also discuss the consequences of defaulted student loan borrowers. This paper finally examines that there are more female students than male students apply for student financial aids. Majority of the borrowers have the Stafford Combined loan and borrow the amount between 10 thousand and 25 thousand dollars in 2015. The result of the study using data mining implies that the United States student loan default trend has been increasing since 2003 and also the 90+ day delinquent trend is not decreasing.

Keywords: United States Student Loan, student debt, financial aid, student loan default

Introduction

About forty million people in the United States hold student loan debt totaling \$1 trillion. Defaults on student loan debt also rose during the Great Recession. In 2008, about 3.4 million federal student loan borrowers entered repayment, and about 240,000 borrowers defaulted on their student loans by the end of 2009 (Student Loan Default Rates Increase, 2010). Seven million student borrowers are now in default, with more behind on their payments (Dynarski, 2014). There were 6.5 million borrowers in default as of the third quarter of 2013. On June, 2014, there was an executive order for the Pay as You Earn program that offers reduced payments to student loan borrowers in financial distress. This policy has included reduction in interest rates, forgiveness of student loan debt, more flexible repayment plans and increase regulation of college prices (Dynarski, 2014). However, it is found that the increasing trend of student loan default is not slowing down in this study.

Literature Review & Research

To be qualified for federal student loan options, a student has to complete the Free Application for Federal Student Aid (FAFSA). The qualified students will be considered for federal student aid programs authorized under Title IV of the Higher Education Act, including direct subsidized and unsubsidized loan and Pell grants. Eligibility for student loans is limited to U.S citizens, permanent residents and eligible noncitizen such as granted asylum with high school degrees or who passed the General Educational Development (GED) test. Eligibility for subsidized government loans is further restricted to students with demonstrated unmet financial need or those whom cost of attendance minus grant aid minus the "Expected Family Contribution (EFC)" calculated through analysis of income and assets is positive. This level of unmet need serves as a limit on the amount that a student will be permitted to borrow through federal loan programs and is the total cost of attendance less any grant aid such as federal, state, or institutional (Federal Student Aid).

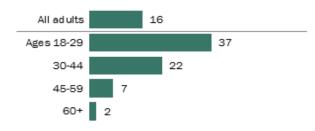
The additional financial aids other than federal student loan are from state and local governments, institution and private loan from private sources such as banks. The percentage of students awarded aid at public and private non-profit 4-year institution in 2014-2015 were higher than in 2009 - 2010 (Snyder and Dillow, 2016).

Majority of students who applied for federal financial aids such as grants, and loans are degree seeking undergraduate students. About four out of ten adults under age 30 have student loan debt. Among them, age 18 to 29 have outstanding student loans for their own education (Cilluffo, 2017).

Figure 1

About four-in-ten of those ages 18 to 29 currently have student loan debt

% of adults saying they currently have outstanding student loan debt for their own education



Source: Pew Research Center analysis of Federal Reserve Board's 2016 Survey of Household Economics and Decisonmaking.

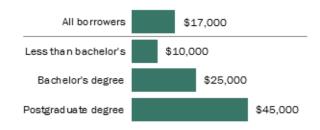
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Borrowers with bachelor's degree owned an average of \$25,000 while borrowers with postgraduate degree owned an average of \$45,000 in 2016 (see below figure 2). In comparison to 1% of the adult population, about 7% of current student loan borrowers have at least \$100,000 in outstanding debt. It is also said that having student loan balance of \$100,000 or more is common among postgraduate degree holders. About 23% of postgraduate degree holders reported owing \$100,000 or more. About half of the student loan borrowers think the lifeline financial benefits of their bachelor's degree compensate the cost (Cilluffo, 2017).

Figure 2

Median amount of outstanding student debt varies widely by education level

Median reported outstanding student loan debt among those with student loan debt, by educational attainment



Source: Pew Research Center analysis of Federal Reserve Board's 2016 Survey of Household Economics and Decisonmaking.

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Price for Higher Education: Academic Investment and Income Dispersion in Earnings

Education is an investment. As all other investments, education creates costs in the present, but brings benefits in the future. The overall educational attainment in the population increased between 2002 and 2012, for example, at least a bachelor's degree grew by 10.1 million (Baum, S., Ma, J., & Payea, K., 2013). The average earnings of college graduates have increased as well as the discrepancy in earnings. The increase has been greatly concentrated among graduates with professional degrees and those with earnings outcomes in the top ranks. There has been rising relative wages for college degree workers compared to their non-college degree workers. Within the college graduate group, there is a distinction between those workers who have a bachelor's degree and those who go further on in university and obtain advanced qualification higher than a college degree. The postgraduates or the most educated group of workers wage advantage has continued to grow and has done significantly better in terms of their economic rewards compared to their counterpart non-college educated workers (Ma, Pender and Welch 2016).

Earnings vary and greatly depend on the degree type, age, gender, race/ethnicity and occupation. Yet, more education gets individuals more money even within the same occupation. For example, elementary and middle school teachers with 4-year college degree make \$1.8 millions over a lifetime, compared with \$2.2 million for those with master's degree (Carnevale, Rose and Cheah, 2013).

Researchers stated, "4 -year college degrees have paid off more and more in terms of earnings over the past 40 years and the earning premium continues to rise" (Baum, Kurose & Ma, 2013). The growing college earnings premium over past decades has been widely studied. Also, there are several research studies that focus on differences in earnings over single years or across a few points in time such as Brand and Halaby 2006; Brand and Xie 2010; Kim and

Sakamoto 2008. One noticeable thing that is found in one of the studies is that the returns to those who attended the elite college or university are small by comparison to students who attended non-elite institutions and achieved (Brand and Halaby, 2006).

Student Loan Delinquency and Default

It may be expected that the type of institution attended or graduated could affect the ability to repay student loans. It was found that borrowers who attended for-profit institutions are more likely behind on repayment than borrowers who attended public or nonprofit schools. The survey found that 6 percent of borrowers who attended a public institution and 8 percent of those who attended a nonprofit institution are behind on their student loan payments and also 22 percent of those who went to a for-profit institution report that they are behind (Report on the Economic Well-Being of U.S. Households in 2016, 2017)

Even if more than one loan payment plans are available to avoid the default, unexpected circumstances can sometimes make it tough for borrowers to repay their student loans. The federal student loan normally becomes default when borrower does not make a payment for 270 days. Student loan is different from consumer loans because student loans cannot be dismissed through bankruptcy. The results of defaulted student loan are obviously dreadful. Payment of entire loan balance including both principal and interest becomes due immediately and deduct wages and federal and/ or state tax refunds when the borrowers default on their student loan. Retirement benefits such as social security and disability benefits will be withheld. There are also additional charges such as late fees and collection costs. Borrowers will be ineligible for additional student financial aid. It will also damage the borrower's credit scores that could prevent obtaining a mortgage, buying a car or borrowing consumer loans in the future.

Borrowers will not be eligible for loan deferments plan such as for in-school, unemployment, etc. Lastly, the lawsuit is the worst thing that can happen to borrowers. However, there are

several opportunities to avoid the above situations such as loan repayment, loan rehabilitation and loan consolidation (National Association of Student Financial Aid Administrators (NASFAA), 2013) Although loan default has unpleasant consequences, one study argues that student debt levels are not large relative to the estimated payment to a higher education in the United States (Dynarski and Kreisman, 2013).

About 15 percent of student loan borrowers in 2005 became delinquent before defaulted on their loans during first five years of the repayment term (Cunningham and Kienzl, 2011).

According to Looney and Yannelis (2015), the increasing debt among non-traditional borrowers is larger than borrowers from 4- year public and private universities or graduate borrowers. Half of the borrowers who graduated from a for-profit university or a 2-year college in 2011 represented 70% of defaults. Therefore, default rate is low for borrowers at most 4-year public and private non-profit institutions regardless of the recession and relatively high loan balances. Although the improvements such as many features of the federal loan system that contributed to lessen the student loan debt burden are available, loan delinquency and default have not dropped.

The Consumer Credit Panel or Equifax of Federal Reserve Bank of New York Consumer (FRBNY) stated that outstanding student loan balances increased to \$1.11 trillion in March 31, 2014 and that shows that \$125 billion increase over the past year. About 11.0% of combined student loan debt is 90+ days delinquent and in default. (Household Debt and Credit, 2014)

Key Findings

This study found that there are more female student applicants than male student applicants for Free Application of Federal Student Aid (FAFSA) from 2014 to 2016 academic years. The number of female students applied for FAFSA is about 119 million and male students is about 77 million and 197 million in total applied for federal student aid in 2015-2016 academic year (see below figure 3).

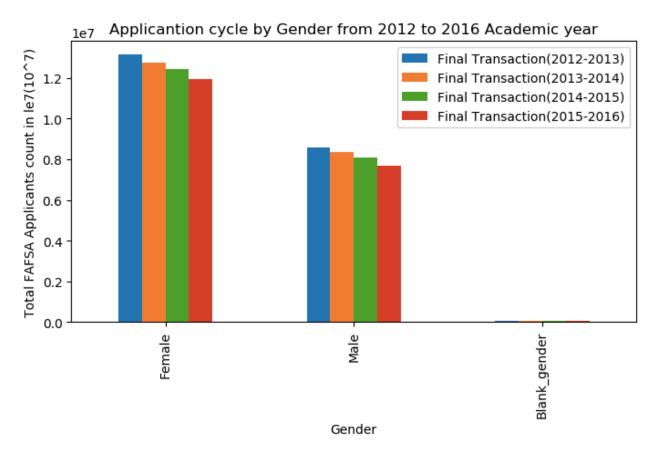


Figure 3

The largest numbers of student loan borrowers from 2004 to 2015 are under the age of 30. However, student loan borrowers between the age 30 to 39 have largest total student loan balance from 2004 to 2015. In the following graph, loan borrowers between 30 to 39 have the total loan balance of 408 billion dollars in 2015 while borrowers under the 30 has 373 billion dollars in 2015 (see below figure 4).

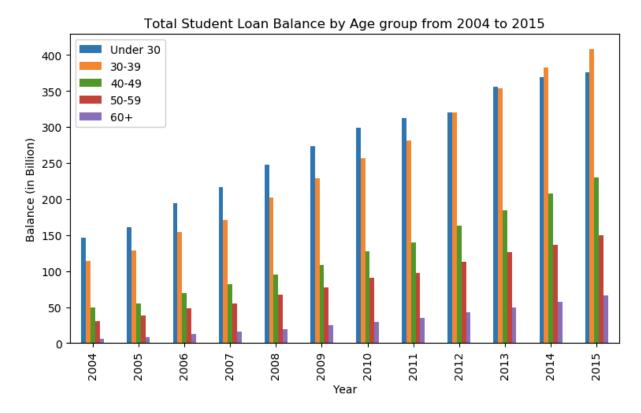
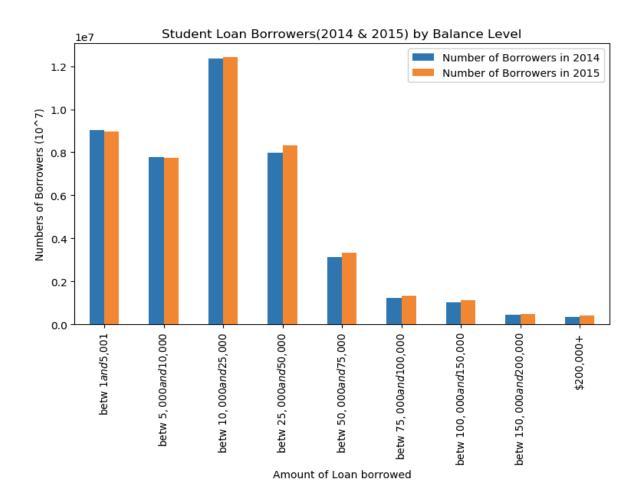


Figure 4

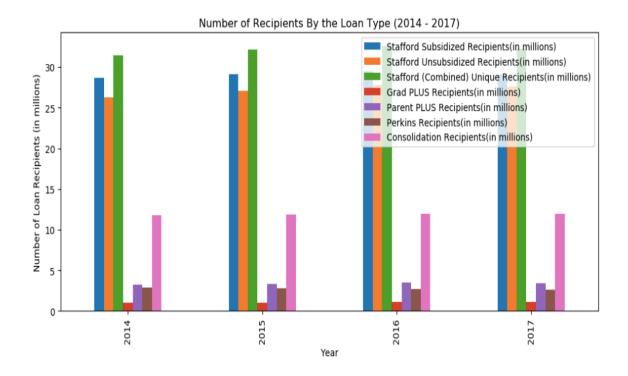
Additionally, using the data from the Consumer Credit Panel or Equifax of Federal Reserve Bank of New York Consumer (FRBNY), among those with debt, about 12 million (12,434,400) student borrowers had the amount of student loan balance between \$10,000 and \$25,000 in 2014 and 2015 while about 8 million student borrowers had the amount of \$5,000 and below in 2014 and 2015. This data includes both federal and non-federal loans and also includes with graduate and professional school debt as well as debt associated with undergraduate degrees. (See below figure 5)





Following figure 6 shows that majority of the students have both Stafford Subsidized and Unsubsidized loans and Students will exhaust borrowing from the lowest cost of capital first that is Subsidized loans if the student is eligible, then followed by Unsubsidized loan, Graduate PLUS loan for graduate students and private loan. There were 32.2 million Stafford Combined loan recipients in 2017 (See below figure 6).

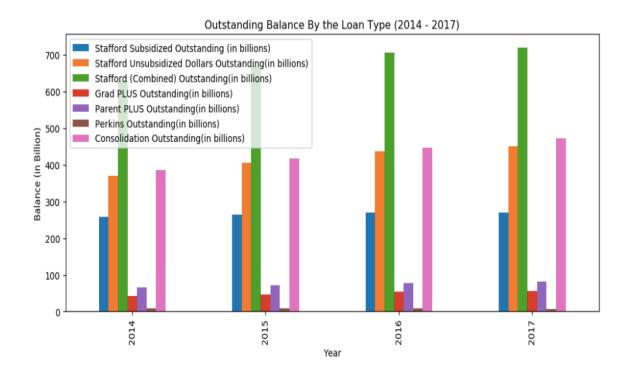
Figure 6



One federal loan is not enough to cover the tuition alone especially for students in private or for-profit institutes and graduate schools. For example, Stafford Subsidized loan is not available for graduate students of Columbia College of Arts & Science in the George Washington University. Graduate students who need financial aids borrow Stafford Unsubsidized loan first and then Graduate PLUS loan to cover the rest of the tuition fees. Stafford Unsubsidized loan is available up to \$20,500 per Academic Year. As of 2018 – 2019 academic year, one credit course is \$1710 for Columbian College of Arts & Sciences graduate school. Student carrying 9 credits hours is considered a full-time student and the total tuition for a semester is about \$15,717 including student association fees and matriculation fees (Graduate Tuition and Loans, 2018). Also, students need to pay for loan origination fees depending on the amount they borrow.

becomes capital for them while they are in school. In 2017, the outstanding balance of Stafford Combined loan is \$720.2 billion (see below figure 7).

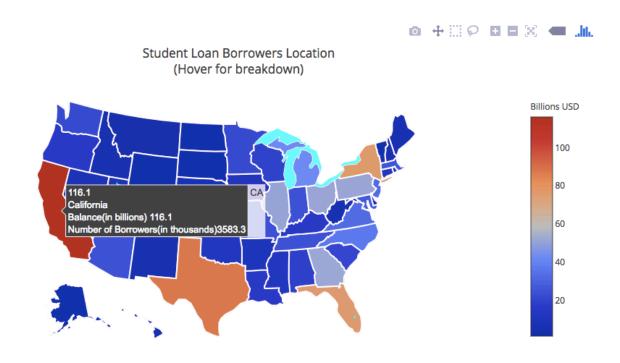
Figure 7



As of May 2017, California has the largest number of borrowers about 3583 thousand with highest student loan debts about \$116 billion and followed by Texas. Texas has 2,989 thousand (2.9 million) borrowers with the debt of \$87.9 million and New York has 2,247 thousand (2.2 million) borrowers with \$75.8 billion debt. On the contrary, Wyoming has the smallest number of student loan borrowers about 48 thousand with the lowest student loan balance about \$1.3 billions in 2017 (see below figure 8).

Figure 8 Student Loan Borrowers Location with Loan Balance and Number of Borrowers

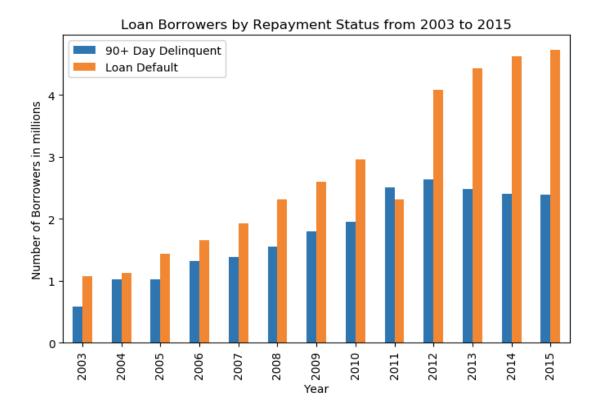
Information Map



Increasing Student Loan Default Trend

Another interesting finding is that the loan default trend has been increasing since 2003 until 2015. In 2015, 4.7 million borrowers went into default compared to 1 million borrowers were in default in 2003. Besides, there is a dip in 2011 in the default trend graph. Number of loan borrowers in 90+ Day delinquent trend is not decreasing. In 2015, 2.3 million loan borrowers were loan delinquent (see below figure 9).

Figure 9



Conclusion

Student loan as a financial aid plays a significant role for many student borrowers' future goals. This study finds that there are more female students financial aids applicants than male students from 2014 to 2016 academic years. Largest numbers of student loan borrowers are under the age of 30, but age 30- 39 has the largest total amount of student loan balance from 2004 to 2015. Majority of the borrowers borrowed the amount between 10 thousand and 25 thousand dollars in 2014 and 2015. Many students have Stafford Combined Loan that includes Stafford Unsubsidized and Subsidized loans from 2014 to 2017. The Stafford Combined loan has the highest outstanding balance compares to other loan types. California, Texas and New York have the largest number of borrowers with largest amount of loan balance as of May, 2017.

Despite having different types of loan repayment plans, the 90+ day loan delinquent trend has not decreased. Moreover, the student loan default trend has been increasing since 2003.

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