United States Federal Student Loan Asset Backed Securities (SLABS) Effect on the Macroeconomy and Financial Markets

University of California, Irvine
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Macroeconomics and Financial Stability

I. Abstract

Recent political events around student loan debt have raised concerns about the economic future for the United States. Some academics believe that increased regulation will destabilize the financial sector while others believe that it will stimulate growth and promote economic equality. This paper will formalize a model that helps illustrate the effect of student loans on the macroeconomy and financial markets through interest rates data and time series analysis. I aim to further research the impact of asset backed securities and its characteristics.

Keywords: Financial economics, macroeconomics, financial markets, political economics, asset backed securities

II. Introduction

Federal student loans are a type of installment loan that are issued by the United States Department of Education that finance college tuition and its related costs such as fees, books, and living expenses. Borrowers submit the Free Application for Federal Student Aid application, known as the FAFSA which does not require a credit check (with the exception of PLUS loans). Student loans are borrowed funds that are eventually repaid with interest and associated fees.

According to the Federal Reserve Bank of New York, Student Loan debt is the second highest form of consumer debt in the United States. In quarter one of 2022, student loan debt stood at $1.59 trillion, a $14 billion increase from quarter four of 2021. Within the last decade, student loan debt has increased by an average of $78.7 billion per year, yet 35% of student loan debt holders find it difficult to buy necessities because of their loans. As a result, student loan debt reduces spending, inhibits business growth, and hampers housing markets.

Certain political events have shown the significance of student loan debt both socially and economically. Namely, President Biden’s executive order to cancel $10,000 of student loan debt for low-to middle-income borrowers has prompted controversial debates about the equitability and accessibility of education as a whole. College Board research found that even during the COVID-19 pandemic, from 2020-2021 to 2021-2022 there was roughly a 1.8% price increase in tuition and fees at four year public universities including: public instate, out of state, and private. As a result of the rising cost of college tuition and fees, more students take out loans to finance their education.
However, the financial benefits of a bachelor’s degree decline 0.98% annually for men and 0.75% for women with an estimated 14% return on investment (ROI). Growing concerns around student loans and the value of college have led investors to question the profitability of SLABS, making it an increasingly volatile market.

SLABS are securities based on outstanding student loans. These loans are packaged into securities that the federal government sells to investors to buy, which deliver scheduled coupon payments much like an ordinary bond. Their main purpose is to diversify the risk for lenders across several investors to spread around the default risk and give out more and larger loans. This guarantees more students access to loans, diversified investments for investors, and consistent cash flow for investors.

III. Purpose

I find this topic interesting as a current UCI undergraduate student because I see the effects of economic inequality nearly every day on campus. Student loan debt affects nearly one in seven Americans (nearly 13.5%) according to the January 2022 census data and continues to be a concern with the evolving political climate and looming recession. I believe that everyone should have access to higher education and that certain areas need to be reformed to ensure equal access.

IV. Responsibilities

I will be tasked with creating, designing, and executing an original honors senior thesis through the department of economics. I will meet with the research cohort twice a week through seminar and dedicate time outside of class to research and meet with advisors to continue progress. This includes identifying original, narrow research questions, formulating hypotheses, performing literature reviews, developing data collection procedures, data analysis, statistical interpretation of results, and evaluating the significance of the research outcomes in relation to existing literature on similar research topics.

V. Methods

A. Design

Collect data from online sources such as The Federal Reserve of Economic Data (FRED), The United States Department of Education, The Federal Reserve Bank, and Bloomberg Terminal on student loan debt, student loan asset backed
securities, and interest rates. Compare data across asset classes including auto loan, mortgage, and credit card to student loan debt to understand the significant changes. Gather information and draw general conclusions from trends in the data to see what questions can be asked and answered.

B. Data Analysis
Run statistical analysis and regressions to understand the economic data; these include: gap analysis models, economic value of equity / net economic value models, and net interest income simulation models. Also, analyze time series analysis to understand the effects over a long period of time with a focus on event studies. Economic theories of importance include: moral hazards, nominal interest rates, real interest rates, inflation rate, and the discount function. Statistical softwares include: R, STATA, SQL, Python, and Tableau.

VI. Timeline

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<thead>
<tr>
<th>Quarter</th>
<th>Tasks</th>
<th>Checkpoint</th>
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| Fall 2022     | - Identify research topic and advisor  
                 - Preliminary research  
                 - Literature reviews  
                 - Develop research methods  
                 - Data collection       | ECON H190A    |
| Winter 2023   | - Run regressions and data analysis  
                 - Draw conclusions and compare to hypothesis  
                 - Identify research findings  
                 - Begin drafting thesis paper        | ECON H190B    |
| Spring 2023   | - Continue progress on thesis draft  
                 - Check in with advisors to ensure accuracy and formality  
                 - Complete thesis final  
                 - Create presentation poster for UROP symposium       | ECON 199      |
VII. Budget

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<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Poster</td>
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<td>Economics textbooks</td>
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<tr>
<td>License for statistical software</td>
<td>$100</td>
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<tr>
<td>Subscription to databases</td>
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<tr>
<td><strong>Total</strong></td>
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References


