The Impact of Student Loan Debt on Homeownership Rates

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Introduction

In the last 30 years, homeownership rates have fluctuated significantly, reaching a peak of 69.2% in Q4 of 2004 before steadily decreasing to a low of 62.9% in Q2 of 2016. (Federal Reserve Bank of St. Louis, 2024). This downward trend of subsequent decrease in homeownership rates suggests a significant shift in the housing market aided by various economic and social factors. Most Americans' wealth comes from owning their homes. However, low homeownership rates lead to considerable wealth discrepancies between homeowners and renters, with a median wealth gap of $390,000 in 2022. (Choi & Zinn, 2024). Enabling significant issues, including wealth inequality.

The substantial increase of post-secondary education costs in recent years has aided this phenomenon since it subsequently led to an increase in the amount of student loan debt among students. The cost of post-secondary education in the last 60 years has increased college tuition by 197.4% since 1964 (Hanson, 2024). It subsequently led to an increase in the average amount of student loan debt among students, increasing by 40% from 2010 through 2020 (Welding, 2024). Ultimately, this impacts the homeownership rates per state due to increased student loans, inhibiting post-secondary education graduates' ability to purchase homes.

This creates a paradoxical dynamic since those with higher student loan debt pursued and achieved higher education, therefore significantly increasing their earning potential. However, their debt may hamper their ability to purchase homes. Individuals who do not pursue higher education may avoid student loan debt and, with steady incomes from their jobs, may be more capable of purchasing homes, especially in the short run, despite potentially lower wages. This dynamic further complicates the relationship between education, student loan debt, and homeownership.

Homeownership is a crucial pathway toward wealth accumulation since it is a long-term investment that can facilitate economic security and generational wealth. However, the recent surge in student loan debt has served as a significant inhibiting barrier for college-educated individuals with student loan debt aiming to purchase a home, which could ultimately lead to negative societal structure shifts, including wealth distribution and economic mobility.

This study analyzes the effect of student loan debt on homeownership rates to determine whether the financial burden of student loan debt associated with pursuing higher education impedes homeownership among higher-educated individuals and facilitates wider wealth inequality. This study ultimately informs policymakers if there is a need for significant government intervention through enacting policy revolving around loan forgiveness programs, tuition regulation, or real-estate market regulations. This study contributes to the previous literature by estimating the impact of student loan debt on homeownership rates.

Literature Review

Past literature analysis of the effects of student loan debt on homeownership rates has numerous conclusions. However, most past literature has concluded with the general consensus argument that having any amount of student loans, on average, decreases the likelihood of an individual owning a home. This is concluded by Price (2016, pp.22 - 23). In this study, the created model found that having any amount of student loans decreases the likelihood of an individual owning a home by 7% in 2004 and 5% in 2013. This conclusion is further validated by Park and Miller

(2023), who conclude that a high amount of student loan debt negatively affects homeownership rates since a high amount of student loan debt impedes home-buyers ability to acquire and sustain payments towards a mortgage.

On the other hand, other literature analyses have concluded that student loan debt does not affect homeownership rates. This is validated by Houle and Berger (2015), who conclude that there is no relationship between the declining homeownership rates in recent years and student loan debt as the responsible party, instead listing other factors as the major contributors to this trend, such as recession indicators.

However, the consequences of having a higher amount of student loans on homeownership status are not overly apparent, as a higher amount of student loans correlates with an increased earning potential associated with completing a college degree. Therefore, having the funds to purchase a home. This conclusion is argued by Black et al. (2020) that the major earning discrepancies between the earning potential of college and high school graduates make college graduates more likely to purchase homes despite their high amounts of debt through student loans, especially later in life when the earning potential of college graduates significantly increases compared to that of high school graduates.

Empirical Model

The following regression model is used to estimate the relationship between student loan debt and homeownership rates:

$$\text{Homeownership} = \alpha + \beta 1\text{Debt} + \beta 2\text{Income} + \beta 3\text{Unemployment} + \beta 4\text{Index} + \beta 5\text{Value} + \beta 6\text{Education} + \beta 7\text{Region} + u$$

In this regression model, the dependent variable, Homeownership, measures the homeownership rates for each state.

The independent variable Debt measures each state's average student loan debt amount.

The Income variable measures the median household income for each state in dollars. The Unemployment variable measures the proportion of the unemployed state population, as defined by. The Index variable measures the cost-of-living index for each state. The final control variable is Value, which measures the median house price for each state in dollars.

Data

This study utilizes publicly available state-level data from 2023 and 2024. The data for the dependent variable, homeownership rates, was retrieved from the United States Census Bureau, available at Homeownership Rates by State | United States Census Bureau.

The homeownership rates data was gathered from the Current Population Survey/Housing Vacancy Survey (CPS/HVS) conducted jointly by the United States Census Bureau and the United States Bureau of Labor Statistics. The homeownership rate is defined as the percentage of occupied housing units currently owner-occupied. To ensure survey integrity and accuracy, the U.S. Census Bureau and the U.S. Bureau of Labor Statistics employ various methods, including diversifying their survey methods to mail-in surveys, telephone surveys, and in-person surveys.

The independent variable of interest, student loan debt, measures the average student loan debt by state as of 2024. This state-level data was obtained from the Education Data Initiative and is available at Education Data Initiative | Student Loan Debt by State.

The control state-level variables data, including median household income by state in 2024, was obtained from the United States Census Bureau, Median Income in the Past 12 Months | U.S. Census Bureau.

The unemployment rates by state data for August 2024 were obtained from the United States Bureau of Labor Statistics, Unemployment Rates for States | U.S. Bureau of Labor Statistics.

The cost of living index data for each state in 2024 was obtained from World Population Review, Cost of Living Index by State 2024 | World Population Review.

The median house price data by state for July 2024 was obtained from The Mortgage Reports, which was constructed utilizing Redfin and Zillow housing data available at From Coast to Coast: Median Home Prices in Every State | The Mortgage Reports.

Table 1: Descriptive Statistics

Variable	**Mean (St. dev)**	**Minimum Value**	**Maximum Value**
Homeownership Rate	67.68	39.70	79.40

Average Student Loan Debt	34982.49	28921	53782
Median Household Income	69238.47	48716	90203
Unemployment Rates	3.69	2	5.7
Median House Prices	409760.90	244100	836100
Cost of Living Index	104	85.30	179
Education Attainment	35.75	24	65.9
West	0.2549	0	1
South	0.3137	0	1
Midwest	0.2549	0	1
Northeast	0.1764	0	1

Table 1 demonstrates the mean and variance of homeownership rates as the dependent variable and student loan debt as the independent variable.

The mean Homeownership Rate is 67.68%, with a minimum value of 39.70% in the District of Columbia and a maximum value of 79.40% in West Virginia.

The mean Average Student Loan Debt is $34,982, with a minimum average loan debt value of $28,921 in the state of North Dakota and a maximum average loan debt value of $53,782 in the District of Columbia.

Empirical Results

The regression results in Table 2 demonstrate that average debt is not a statistically significant determinant of homeownership rates. Suggesting that student loan debt does not necessarily lead to either higher or lower homeownership rates. When student loan debt increases by $1000, the homeownership rates would change by 0.14% (p-value > 0.10).

Table 2. Regression Results

Source	SS	df	MS			
				Number of obs	=	51
				F(9, 41)	=	7.88
Model	1319.74063	9	146.637848	Prob > F	=	0.0000
Residual	763.272312	41	18.6163979	R-squared	=	0.6336
				Adj R-squared	=	0.5531
Total	2083.01294	50	41.6602588	Root MSE	=	4.3147

Homeownership	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
StudentLoanDebtThousands	.1409803	.3310831	0.43	0.672	-.5276556	.8096163
Income	.0002143	.0001235	1.74	0.090	-.0000351	.0004637
Unemployment	-2.663154	.802992	-3.32	0.002	-4.28483	-1.041479
MedianHousePrices	-.0000253	.0000124	-2.04	0.048	-.0000503	-2.84e-07
CostofLivingIndex	-.0897401	.0716402	-1.25	0.217	-.2344204	.0549401
Education_Attainment	-.3662233	.2600773	-1.41	0.167	-.8914601	.1590134
Region_West	6.29644	2.685627	2.34	0.024	.8727069	11.72017
Region_South	2.77022	2.200639	1.26	0.215	-1.67406	7.2145
Region_Northeast	5.926827	2.219236	2.67	0.011	1.44499	10.40866
_cons	87.01883	7.973868	10.91	0.000	70.91527	103.1224

The unemployment rate is an important determinant of homeownership rates ($p<0.01$). Suggesting that the unemployment rate significantly impacts homeownership rates.

Another moderately important determinant of homeownership rates is median house prices, suggesting that higher median house prices per state, moderately decreases homeownership rates ($p<0.05$).

Finally, other moderate important determinants of homeownership rates are regional variables such as Region West and Region Northeast, suggesting that residents of states in these regions have higher homeownership rates compared to residents of Midwestern states ($p<0.05$).

Conclusions and Policy Implications

The empirical results indicate that increased student loan debt does not necessarily indicate an increase or decrease in homeownership rates.

This conclusion is consistent with Houle and Berger (2015), who determined that there are no real indicators suggesting a relationship between student loan debt and homeownership rates.

Therefore, while reducing student loan debt remains essential for financial well-being, policymakers should focus and give importance to other factors such policies focusing on increasing median incomes, stabilizing employment, and addressing regional disparities in housing costs which might prove more effective in promoting higher homeownership rates. Additionally, policies focusing on affordable housing options and reducing cost and other burdens of purchasing a home, may offer more direct results towards increasing homeownership rates.

There are many potential limitations for this study since this model does not account for other financial obligations, regardless of student loan debt, that could potentially impact homeownership rates. Additionally, this study does not explore the nuances associated with student loan debt, including repayment terms, which may impact financial behavior and homeownership rates.

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