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A Study of the Effects of Student Loan Debt on First-Time Home Buyers in New Jersey

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New Jersey Realtors'® Issues Mobilization Fund

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Executive Summary

This report was commissioned to study the effects between student loan debt and the ability to purchase a home, specific to college graduates with student loan debt attempting to purchase a home for the first time in New Jersey.

Total student loan debt in the United States is estimated at \$1.5 trillion (as of August 2018). In New Jersey (in 2017), 61% of people graduated from college with student loan debt, and the average balance for recent graduates with debt was \$28,233—median debt for all college graduates is \$18,633 (nationally the median debt is \$16,995). Delinquency rates for student loans in New Jersey are 9.6%, which is below the national average of 11.5%.

Rising aggregate student loan debt is a combination of many factors: reduced government funding for higher education, rising tuitions (much faster than inflation), increased college enrollments and loose lending standards. The economy's changing labor market has made a college degree the minimum standard for a chance at achieving a middle-class lifestyle. As a result, in 2017, 66.7% of recent high school graduates were enrolled in college. As the labor market becomes more high-skilled, the demand for higher education may not diminish; however, an increasing number of people are questioning the value of a college degree as prices keep rising.

Homeownership has steadily fallen in the United States over the past two decades. For example, homeownership among people younger than 35 years went from 43.6% in 2004 to 34.1% in 2016. Over the same period, households aged 35 to 44 years declined from 69.4% down to 58.3%. In New Jersey from 2007 to 2016 the number of renters under 35 years old increased 17.3% and the number of homeowners decreased 7.7%. These declines in ownership among young people are often associated with the recent housing crisis in 2008; but for younger households this was an opportunity to buy—historically low interest rates, depressed home prices and a recovering economy. However, the opposite occurred, and two primary reasons explain what happened. First, family formation has fallen. Marriage ages in the United States have increased (especially in New Jersey), and marriage is a well-founded cause of deciding to buy a home. Second, the growth and prevalence of student loan debt has made securing a mortgage more difficult due to limited savings for a down payment and high debt-to-income (DIR) ratios.

Census data from 2015 shows that in New Jersey 47% of 18-34-year-olds are living with their parents—the highest in the country, and a 10.8% increase from 2005. New Jersey consistently ranks among the top 10 *least affordable* states to live in. The most often cited factor affecting the state's cost of living index is housing. In the United States first-time home buyers aged 37 years and younger are the largest group of home buyers. According to



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New Jersey Realtors® data, in 2018 (up to August) the median sales price for a house in New Jersey was \$292,500. Besides the initial costs, New Jersey has the country's highest real estate taxes (in 2018). Student loans makes New Jersey's already high cost of living even higher.

We use several sources of data in this study. To get insight from lenders who regularly deal with potential first-time home buyers in New Jersey, we developed a survey and sent it to residential mortgage lenders in New Jersey (n=802). More than half (50.9%) of survey respondents either completely agreed or mostly agreed that first-time home buyers with student loans have a harder time getting a mortgage. Almost two-thirds of respondents (63.6%) either completely agreed or mostly agreed that student loans are going to be an on-going problem for first-time home buyers. Only 9.1% of lenders completely or mostly agree that first-time home buyers with student loans pay more for their mortgage than other borrowers (60% completely or mostly *disagreed*).

Several important changes to mortgage selling guides were adopted in 2018. Probably the most important rule change for home buyers with student loans is that before 2018 student loans in deferment or forbearance could be left out of debt-to-income ratio calculations. But starting in 2018, these student loans must be included in applicants' debt-to-income ratios—by using 1% of the outstanding loan balance per month or the payment listed on a financial statement (whichever is lower). Using a sample of first-time home buyers in New Jersey in 2017, we found that 71.7% had student loan debt, of which 33% had loans in deferment or

forbearance (which was disregarded in all cases). Our sample is limited, but we found that 18% of first-time home buyers with student loan debt in New Jersey in 2017 would have had their debt-to-income ratios raised high enough to potentially risk not qualifying for a mortgage. Conservatively, we expect this new rule for student loans in deferment and forbearance by itself to reduce the number of New Jersey first-time home buyers by between 1% and 2% (among all first-time home buyers in New Jersey with or without student loans).

We present several public policies that could help reduce the burdens (and accumulation) of student loan debt and make it easier for people with student loans to buy their first homes in New Jersey. Suggestions include: (1) incentivize more New Jersey businesses to offer their employees student loan repayment assistance; (2) educate people about affordable college options in New Jersey (such as community colleges and state aid programs) and work to bring these costs down for families by, for example, expanding the NJ STARS program that provides free tuition to one of New Jersey's 19 community colleges for qualified students; (3) continue to support New Jersey's ReFi+ program that allows people from New Jersey to refinance their student loan debt; and (4) New Jersey does not provide a state income tax break for investing in its 529 college savings plan (i.e., NJBEST). This policy could encourage more savings for college, which hopefully would reduce college-graduates' debt burden and make them more likely to become first-time home buyers in New Jersey.

TABLE OF CONTENTS

| | |
|--|----|
| EXECUTIVE SUMMARY | i |
| 1. INTRODUCTION | 1 |
| 2. STUDENT LOANS | 7 |
| 2.1 History of Student Loans | 7 |
| 2.2 Student Loan Market | 8 |
| 2.2.a Student Loan Debt Balances | 10 |
| 2.2.b Delinquency | 15 |
| 2.3 Student Loans in New Jersey | 16 |
| 3. FIRST-TIME HOME BUYERS | 21 |
| 3.1 First-Time Home Buyers in New Jersey | 26 |
| 4. EFFECTS OF STUDENT LOANS ON FIRST-TIME HOMEBUYERS | 28 |
| 4.1 Summary Statistics by Homeownership Status | 34 |
| 4.2 Mortgage Selling Guide Changes | 37 |
| 4.3 Student Loans and First Time Homebuyers in New Jersey | 39 |
| 4.3.a New Jersey Mortgage Lenders Survey Results | 42 |
| 5. PUBLIC POLICY SOLUTIONS | 48 |
| 5.1 Reducing Student Loan Debt in New Jersey | 48 |
| 5.1.a Student Loan Refinancing | 49 |
| 5.1.b Student Loan Repayment as Fringe Benefit | 49 |
| 5.1.c Improve Repayment Terms | 50 |
| 5.1.d Expand NJ STARS and NJ STARS II Scholarship Programs | 51 |
| 5.1.e Free College Tuition | 52 |
| 5.1.f Enhance NJBEST 529 College Savings Plan | 52 |
| 5.2 Helping First-Time Homebuyers in New Jersey | 54 |
| 6. SUMMARY | 55 |
| REFERENCES | 56 |
| APPENDIX A | 63 |

A Study of the Effects of Student Loan Debt on First-Time Home Buyers in New Jersey

1. INTRODUCTION

This report is a study of the effects between student loan debt among college graduates and their ability to purchase a home for the first time in New Jersey. Student loan debt has grown significantly in the past two decades in the United States. The Federal Reserve estimates aggregate student loan debt at over \$1.5 trillion (as of July 2018) owed by over 44 million Americans (FRED, 2018a; Federal Reserve Bank of New York, 2018a). Student loan debt was the only category of consumer debt to steadily increase since the Great Recession. During this time when student loan debt continues to reach historic highs, homeownership rates have fallen—particularly among younger households who have traditionally been a driving force in the real estate market. This effect is particularly noticeable in New Jersey where housing is among the most expensive in the country. In this report we review the most up-to-date literature that study whether (and to what degree) there exists a causal link between student loan debt and homeownership among young people. We then estimate our own models to add to this literature and better understand the effects of student loan debt of people with at least a college degree to become first-time home buyers—extending these findings to New Jersey.

A combination of factors explain why student loan debt has grown so much so quickly: record numbers of students going to college and graduate school, rising college costs (over twice as fast as inflation in the past two decades), slower repayment rates of outstanding student loans, inability for these debts to be discharged in bankruptcy, loose student loan lending practices and shrinking state government support for colleges (see Mitchell, Leachman and Masterson, 2017). In New Jersey, per capita student loan debt increased 442% from 2003 to 2017 (nationally the

increase was 381%)—yet the percentage of people in New Jersey with at least a bachelor’s degree fell from 33.4% in 2006 to 27.2% in 2016 (a relative decline of 18.6%) (FRED, 2018b). In 2016 (the latest data available), almost two-thirds (61%) of students that graduated from colleges in New Jersey had student loan debt (The Institute for College Access & Success, 2017).¹ The average college graduate in New Jersey owed \$28,233—the median was \$18,633 (in the United States the median was \$16,995). The student loan delinquency and default rate in New Jersey in 2017 was 9.6%, whereas the national rate was 11.5% (Braga and Baum, 2018; Federal Reserve Bank of New York, 2018a). This finding might suggest that the labor market for college graduates is stronger in New Jersey compared to the rest of the country—but New Jersey also ranks highest in the country for outmigration of millennials, which could explain low delinquency rates and the fall in college educated people in New Jersey.² It could also be a result of the fact that 47% of 18 to 34-year-olds in New Jersey are living with their parents, which is the highest rate in the United States (Census Bureau, 2018a, p. 12).

While many college-educated people in New Jersey enjoy a strong labor market and higher-than-average wages, student loan debt repayment is taking up a greater percentage of their budgets. Student loan debtors have less savings (e.g., retirement, emergency etc.) and greater financial difficulty buying a home (see Hiltonsmith, 2013; 2017). Hiltonsmith (2017) finds that these effects are not temporary, but rather grow over time creating a larger financial burden long after student debts are repaid. The National Association of Realtors® (2017) found that across

¹ These students graduated from New Jersey colleges, but they are not necessarily full-time residents of the state—most of our statistics are on people residing in New Jersey without consideration for where they went to school. We are not interested in where someone received their college degree, rather our focus here is to study people who have student loan debt and are looking to buy their first home in New Jersey.

² Delinquency is defined differently by different organizations; however, this data considers people delinquent when their student loan debt balance is 90+ days past due.

the United States, 83% of non-home owning millennials (born 1980-1998) stated that student loan debt is delaying their purchase of a home—particularly curbing their inability to save for a down payment. But it is worse than people realize. The rise in student loan debt has increased most in the past decade and these are the people who are now (or soon will be) entering the prime ages to be looking to buy their first homes; yet over 70% of these college-educated potential buyers have student loan debts that constrain their budgets, thus decreasing their ability to save for down payments and the outstanding balances increase their debt-to-income (DTI) ratios.³ In New Jersey among people younger than 35 the number of renters from 2007 to 2016 increased from 30.78% to 36.12% (a 17.3% relative rise) and the number of homeowners decreased from 69.2% to 63.9% (a 7.7% relative decline). New Jersey has expensive housing compared to the rest of the country, which requires larger down payments and stronger budgets to qualify for loans. A study by Andrew DePietro (2018) ranks New Jersey the worst of all states to be a first-time home buyer—largely due to high home prices. New Jersey Realtors® (2018) shows that the median selling price of a New Jersey home in 2018 was \$292,500 (up to August 2018), which makes it one of the most expensive housing markets in the United States. New Jersey also has high taxes. The state’s top tax bracket is 8.97% (as of July 2018).⁴ New Jersey homes are expensive, but its real estate taxes are *the highest* of all states in the United States (Tax Foundation, 2018). So, the combination of expensive real estate, high taxes and rising student loan debt creates real market effects that we analyze in detail throughout this report.

³ Debt-to-income is also called the back-end ratio.

⁴ Starting in 2019, the top marginal tax rate will be 10.75% for incomes greater than \$5 million.

Student loan debt that leads to a college (and/or graduate) degree often has many positive effects both professional and personal.⁵ College graduates (especially smart and ambitious ones) enjoy many labor market opportunities. For students from households with limited financial means, student loans may be the only way they can afford to attend college. The unemployment rate among college-educated people is historically much lower than non-college educated workers. For example, in June 2018 unemployment among college graduates was 2.4% compared to 4.2% among high school graduates (FRED, 2018c). At the height of the recent recession (February 2010), the unemployment rate for people with at least a college degree was 5% and for high school graduates it was 10.7% (FRED, 2018c). Those with at least a college degree have many more job options—especially jobs that offer healthcare, retirement and other benefits. Not to mention that getting to choose your career increases the likelihood that you will enjoy what you are doing. Most college-educated people also enjoy significant income and wealth gains (see Figure 4 in Section 2 below). We discuss these and other positive aspects, but also explore how much debt is too much—becoming a barrier to people’s ability to buy their first homes. We discuss several public policy options to both ease the student loan debt burden and ensure that credit-worthy borrowers with student loans are not (a) cutout of New Jersey’s housing market nor (b) paying too much for a mortgage relative to other borrowers.

The tax reforms passed on December 22, 2017 (i.e., Tax Cuts and Jobs Act), could affect student loan-indebted first-time home buyers in New Jersey in several ways. First, there is now a \$10,000 limit on state and local tax (SALT) payments, which is 44% lower than the average

⁵ A significant problem that is rarely reported are the almost 50% of people who accumulate student loan debt but never get degrees. Sandy Baum (2016), Dora Gicheva and Jeffrey Thompson (2013) and others have studied these “non-completers” and showed they are most harmed by student debt. The present study, however, focuses on people with student loan debt who have at least a college degree.

deduction New Jersey taxpayers made in 2015 of \$17,850. Consequently, house prices in New Jersey are expected to fall—though estimates vary (Fox, 2017). If houses prices do fall in New Jersey this could help first-time home buyers by making real estate more affordable. However, there is a shortage of homes at the lower end of the price scale in New Jersey, so these house prices might not fall (or fall as much) as more expensive properties (see Orton, 2018). Further, if home prices do soften then this might dissuade some people from selling their homes, thus constraining supply further. In addition, the Federal Reserve has intoned intentions to increase interest rates as much as two more times this year, so new borrowers will pay more for their loans and might find it harder to get a mortgage if lenders decide to further tighten their requirements (Board of Governors of the Federal Reserve System, 2018).

There have been several policy changes that have shifted how mortgage lenders evaluate student loans. Prior to April 2017, loans that were in deferment for at least 12 months could be ignored by mortgage lenders (e.g., not included in a borrower's debt-to-income ratio). Now lenders in most cases must take student loans in deferment or forbearance into consideration—though it varies depending on the type of loan (details in section 4 below). Most lenders calculate debt-to-income (DTI) ratios using the repayment rate on a mortgage applicant's credit report or 1% of the outstanding student loan debt balance (whichever is higher). Based on our sample of first-time home buyers in 2017 in New Jersey, 23.9% had student loans in deferment. Of these borrowers, around 18% (or 4.3% of all New Jersey first-time home buyers in our 2017 sample) would have had their debt-to-income ratios increase enough to potentially lead to a mortgage application rejection. Using conservative estimates, we expect this one change by itself to reduce the number of first-time home buyers in New Jersey by between 1% and 2% over the year—among all first-time home buyers. However, all the policy changes were not necessarily negative,

two new initiatives can help student loan borrowers. First, if a borrower's debts (e.g., student loans) are being paid by another party (parents et al.) for at least twelve months, then this debt's outstanding balance is excluded from a borrower's debt-to-income ratio. Second, and perhaps most interesting, is the student loan cash-out refinancing option, which lets borrowers tap into their home equity to pay off student loan debts. This option will be attractive to people with high interest rate student loans. This policy could encourage earlier home purchases in the hope to build equity then discharge loans at a more financially convenient time.

Our analysis uses original and publicly-available data from the Federal Reserve Bank's Survey of Consumer Finances, Federal Reserve Bank of New York, banks in New Jersey, Federal Housing Finance Agency (FHFA) data and survey results from residential mortgage lenders in New Jersey. We found that in New Jersey first-time home buyers with at least a college degree with student loan debt buy less expensive houses—but interest rates are equivalent. Also, they are delaying home purchases—largely due to student loans (though we explore other factors such as delayed family formation).

In the following section (2) we present the history and growth of student loan debt in the United States and in New Jersey. In section 3 we explore the importance of first-time home buyers on the real estate market nationally and specifically in New Jersey. In section 4, we review the literature that analyzes the effects of student loan debt on home buying. We add to this literature by presenting new data that focuses on the effects of student loan debt on first-time home buyers in New Jersey. In section 5 we discuss several public policies that could help people with student loans become first-time home buyers in New Jersey. The last section is a summary of our findings.

2. STUDENT LOANS

In this section we present the most relevant literature on (a) the history of student loans, (b) the growth of the student loan market in the United States, (c) the changes in student loan balances over time, (d) the amount and causes of student loan debt delinquencies and defaults and (e) student loan debt in New Jersey.

2.1 History of Student Loans

Access to college increased with the GI Bill (or Servicemen's Readjustment Act of 1944) that gave soldiers returning from World War II remissions for college expenses and other benefits. It did not, however, increase college graduation rates as significantly as originally hoped. As a result, in 1965, during President Lyndon Johnson's administration the Higher Education Act (HEA) of 1965 was created (Ehrenberg, 2002). This act expanded loans to be based on the threshold of need as opposed to which industry an institution of higher learning focused on which was part of the National Defense Education Act of 1958. In 1972, during a revision of the HEA, President Nixon established the Student Loan Marketing Association (i.e., Sallie Mae), which was a "government sponsored enterprise" (GSE) designed to work with the United States Treasury in purchasing student loans, thus allowing the banks to focus on other forms of lending. This decision plays a key role in the student loan debt market today. Sallie Mae was fully privatized in 2004 yet continued to receive funding as if it were still a GSE (Collinge, 2010).

Today almost 70% of high school graduates go on to some form of higher education, while in 1965 this number was roughly 25%—and less than 15% before 1944 (Best & Best, 2014; Martin, 2011). By 1975 only 17% of college students took out loans to pay for school (and in comparatively small amounts); most students paid for college with family support, grants,

veteran benefits, Social Security assistance or working a part-time job. By 1985 the number of students funding their educations with loans tripled, so that half of government subsidies were going to fund loans. Today it is over two-thirds of students. This shift from grants to loans represents a significant change in how higher education is funded (Ehrenberg, 2002). As a result, aggregate student loan debt is over \$1.5 trillion (as of August 2018) spread across 44 million borrowers and growing at an increasing rate. Also, this shift to loans coincides with a decrease in government funding for colleges that leads to higher tuition (see Webber, 2017). Parents too have not reacted to the price increases. For example, only 3% of households with kids have a 529 College Savings Plan account (Scott and Pressman, 2017). Colleges have benefited from the increased demand for a college degree and taken advantage of the steady flow of education dollars (too often used for non-educational purposes) (Baum, 2016).

2.2 Student Loan Market

One problem with student loans is the complexity. Students often receive multiple loans of different types from different lenders, and the terms of these loans are confusing and vary among lenders. This opacity benefits lenders because students have difficulty navigating the system. Many colleges work with lenders to get students the loans they need to attend college, which can create perverse incentives for colleges to encourage more borrowing without taking students' future financial interests into account (Best and Best, 2014).

In 2014 Sallie Mae was split into two entities: (1) consumer banking, and (2) loan management, servicing and collection (called Navient Corporation).⁶ By the early 1990s, Sallie Mae controlled over one-third of the student loan market for federally guaranteed student loans.

⁶ For simplicity, throughout this report we will continue to refer to the two entities as Sallie Mae.

In 1995 Sallie Mae began to privatize and created initiatives such as school-as-lender programs where colleges profited when they sent student loans to Sallie Mae.

Sallie Mae wanted to not only control the student loan origination market, but loan collections too. In 1999, they bought Nellie Mae a non-profit student loan company, USA Group and Southwest Student Services. Then in 2002 they purchased two of the country's biggest student loan collection agencies: Pioneer Credit Recovery and General Revenue Corporation. Then in 2004 and 2005 they purchased two more collection agencies: Arrow Financial Services and GRP Financial Services. All this resulted in Sallie Mae becoming the dominant force in the student loan industry—making it four times larger than its closest competitor, Citibank.

Federally guaranteed student loans became non-dischargeable in 1976, but after five years they could be. This provision was then extended to seven years in 1990. In 1998 the Higher Education Act was amended so that federal student loans were no longer dischargeable at all. In 2005 the bankruptcy code was changed and all student loans (private and federal) could *never* be discharged in personal bankruptcy (White, 2007).⁷ In addition, the Higher Education Act amendment in 1998 removed the statutes of limitations for the collection of student loans. Student loans from earlier decades were then collectible. In addition, student loans were exempted from state usury laws and did not have to adhere to the Truth in Lending Act (TILA). The Federal Trade Commission even declared that state-run student loan agencies did not have to adhere to the Fair Debt Collection and Practices Act (Best and Best, 2014; Collinge, 2011).

Student loans differ from all other consumer loans regarding refinancing. Once a student takes a loan it is difficult to leave that lender (except by paying off the debt). All other consumer loans allow borrowers to seek other lenders that offer them better terms, but this is not the case

⁷ It is possible for borrowers to get some or all their student loans discharged in bankruptcy; however, it is very difficult and thus uncommon.

for most student loans borrowers need to find. Even with recent changes to the student loan market, standard consumer protections are still exempt from student loans.

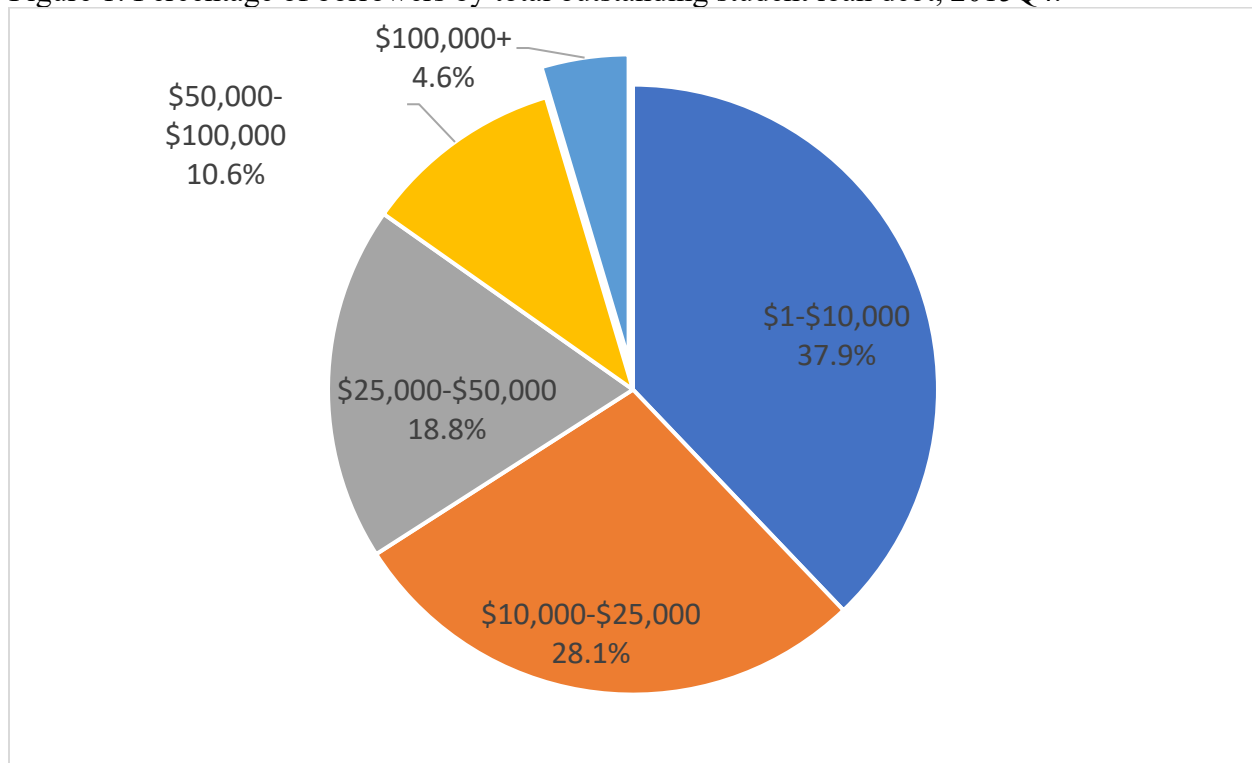
Student loan lenders have little incentive to do their due diligence ensuring borrowers will pay off their debt. Two primary reasons for this are that; first, federally guaranteed loans are backed by the federal government, which offers no default risk to lenders in most cases. Second, if students do default then the debt goes into collections and student loan debt collectors (companies often owned by the originators) can raise interest rates, collect large fees and penalties and borrowers have little recourse—borrowers cannot wipe out student loan debts in bankruptcy and if they are in financial distress they will find it very difficult (perhaps impossible) to refinance or consolidate their debt (see Consumer Financial Protection Bureau, 2014).

2.2.a Student Loan Debt Balances

In this section we look at aggregate student loan debt in the United States. We see how student loan debt is distributed among borrowers, how these distributions have changed over time and current delinquency/default rates on student loan debt. Most aggregate student loan debt figures include both student loan debts for college and graduate school at private, public and for-profit colleges and universities (as well as people who never graduate—thus not getting the benefit of a degree). In fact, almost half of all the outstanding student loan debt in the United States is for graduate education. For example, the average debt of all medical school graduates (both borrowers and non-borrowers) in 2014 was \$176,348 (Association of American Medical Colleges, 2015). With all student loan debt together, the Federal Reserve Bank of New York's latest Consumer Credit Panel (2018a), which includes over 44 million Americans shows that of

all people with student loans in the sample that only 4.6% had student loan debt balances above \$100,000. Many of these people have medical school, law school and dental school debts (in addition to any undergraduate debt they have), and many of these graduate/professional degrees have a high expected value of future income, so delinquency rates are low. Going down the distribution, 10.6% of borrowers had between \$50,000 and \$100,000 in student loan debt; and 84.8% had between \$1 and \$50,000 in student loan debt while 66% (i.e., two-thirds) of people with student loan debt in 2015 had between \$1 and \$25,000. Figure 1 below shows student loan debt balances among borrowers in the United States at the end of 2015.

Figure 1: Percentage of borrowers by total outstanding student loan debt, 2015Q4.



Source: Federal Reserve Bank of New York (2018a).

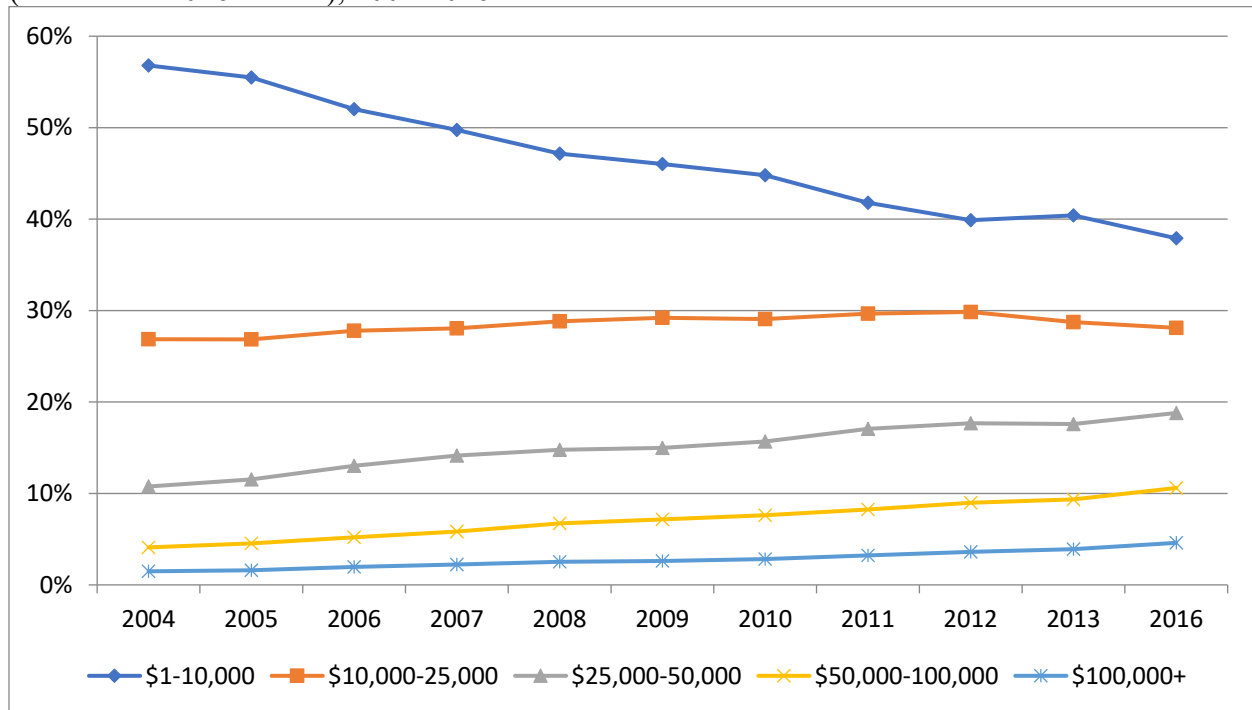
Important to note is that the student loan debt amounts in Figure 1 do not include the roughly one-third of students who go through college (and graduate school) and accumulate no student loan debt. If we included these students, the averages (and distributions) would decrease. For example, in 2012, for students graduating from public non-profit institutions with an

undergraduate degree 34% had no student loan debt; and the figure was 25% at private non-profit institutions. And these debt figures have changed little over the previous ten-year period (1% overall increase for private institutions and a 5% increase for public institutions) (CollegeBoard, 2016). In New Jersey in 2017, 61% of graduates from four-year and above schools graduated with student loan debt. However, the number of student loan borrowers in the United States more than doubled between 2000 and 2014 to 42 million (Looney & Yannelis, 2015). But during this period, the number of people going to college and graduate school also doubled (but as shown in Figure 5 in section 2.3 below, the average debt per borrower has also increased at nearly the same rate). Also, Figure 1 does not take into account the large numbers of people who accumulate student loan debt, but do not graduate, which is a serious problem because they do not get the many benefits of having a degree.⁸

Figure 2 shows the changes in the percent of people that fall into the different student loan debt categories from 2004 to 2013. The number of borrowers with at least \$100,000 in debt has increased from 1.5% in 2004 to 4.6% in 2016, but the people with \$1 to \$10,000 in student loan debt decreased from 56.8% to 40.4%.

⁸ Economists call this the sheepskin effect (or college wage premium)—where the financial benefit (and professional benefits) of a college degree is not fully realized without graduating.

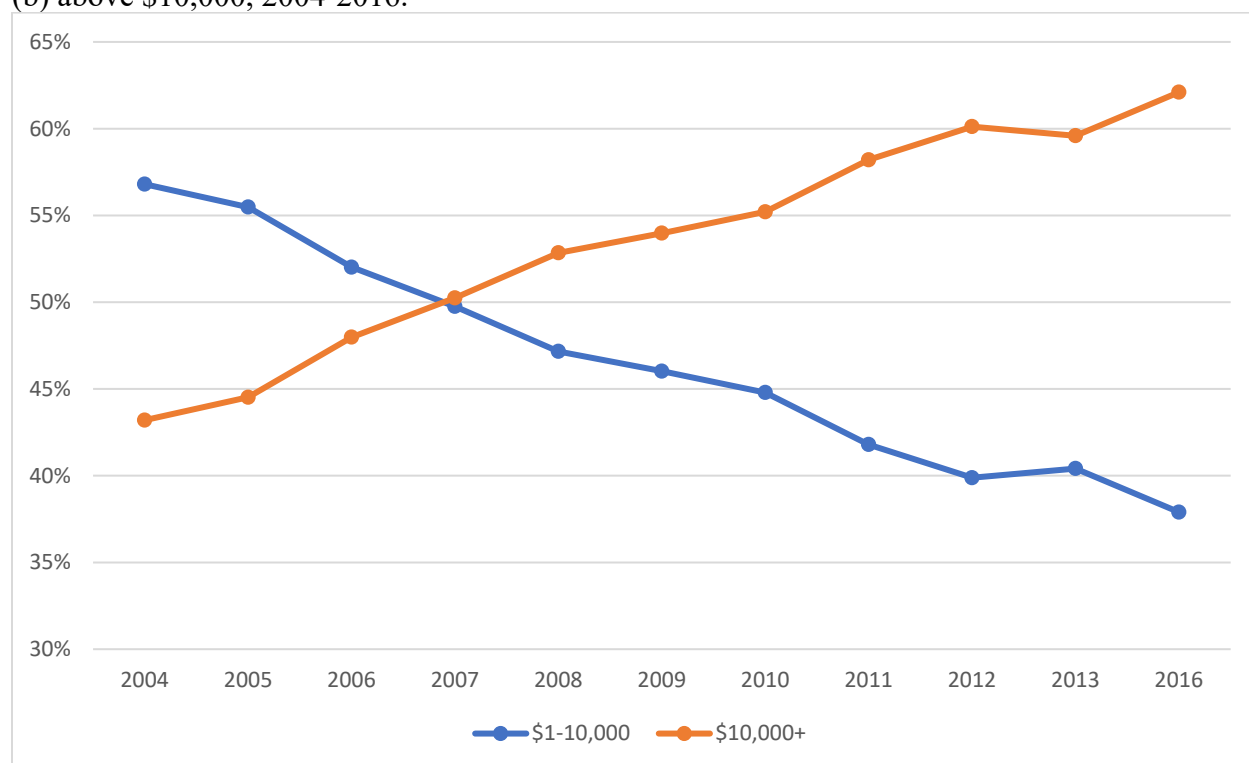
Figure 2: People with student loan debt broken down by their total amounts of student loan debt (in constant 2016 dollars), 2004-2016.



Source: Federal Reserve Bank of New York (2018a).

Figure 2 shows that fewer people have less than \$10,000 in student loan debt balances, but what is happening is that these borrowers are taking on more debt and/or taking longer to pay it off. Figure 3 below combines student loan debt balances into two categories—the percentage of student loan borrowers with (a) between \$1 and \$10,000 and (b) above \$10,000.

Figure 3: Percentage of borrowers with student loan balances (a) between \$1 and \$10,000, and (b) above \$10,000, 2004-2016.

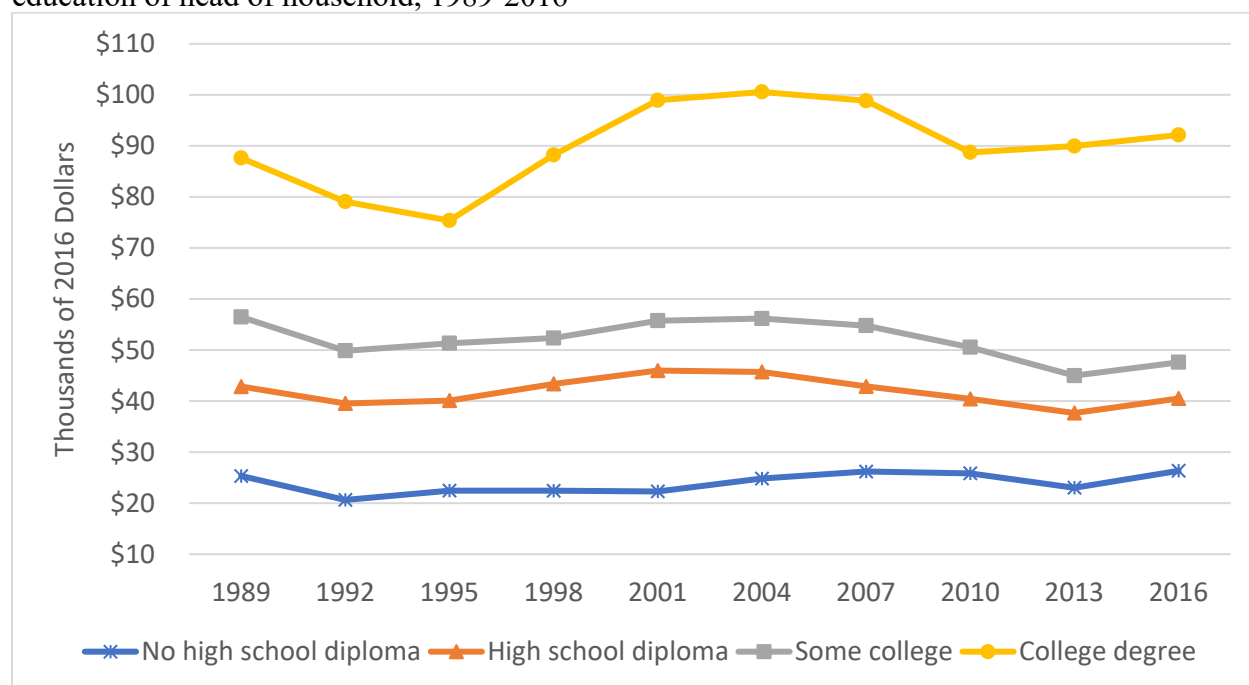


Source: Authors' calculations using Federal Reserve Bank of New York's (2018a) data.

A college degree has become the minimum requirement for many Americans to achieve a middle-class lifestyle. We can see in Figure 4 below that the income benefits, in terms of median incomes, for people with at least a college degree are significant, which is referred to as the college wage premium (or sheepskin effect). An even more dramatic difference is in wealth. College graduates in 2016 had a median wealth of \$292,100 versus \$66,000 for those with some college (a relative difference of 342%) (Board of Governors, 2018b). However, a college degree does not guarantee a higher salary (or more wealth) and as more people get college degrees this college wage premium may fall or at least flatten.⁹

⁹ For a comparison of the wage premium for men versus women from 1973-2015, see EPI's study: <http://stateofworkingamerica.org/chart/swa-wages-figure-4n-college-wage-premium/>

Figure 4. Median household incomes in real 2016 thousands of dollars based on level of education of head of household, 1989-2016



Source: Authors' calculations using Federal Reserve's Survey of Consumer Finances weighted data (Board of Governors, 2018b).

Nationwide the percent of student loan borrowers increased 87.3% (22.5 million to 42.2 million) from 2004 to 2013; however, average balances per borrower also increased 65.7% (\$15,308 to \$25,366) over the same period—see Figure 5. The increase in students pursuing college and graduate degrees does not entirely explain the rise in aggregate debt. Again, a combination of factors explains this increase: rising college costs, people taking longer to repay and an increase in non-traditional students going to schools with poor labor market outcomes and offering questionable education gains.

2.2.b Delinquency

Student loan debt delinquency is a symptom of growing debt balances. According to research by Chakrabarti et al. (2017b), “of students who left college in 2010 and 2011, 28 percent defaulted on their student loans within five years, compared with 19 percent of those who left

school in 2005 and 2006” (p. 1). If people are taking student loans but paying them back with relative ease then we could argue that the student loan lending market is efficient. However, for certain segments of student loan borrowers, increasing default rates suggest otherwise. Adam Looney and Constantine Yannelis (2015) found that most delinquencies occur among non-traditional borrowers—mainly those who attended for-profit colleges (this was also found by Chakrabarti et al., 2017b). While in the past there were few for-profit colleges and most community college students did not borrow, as a total group they made up a small portion of student loan borrowers. In recent years, however, they have come to represent half of all borrowers of federal student loans (which represents over 85% of the student loan market). “Of all students who left school and who started to repay federal loans in 2011 and who had fallen into default by 2013, 70% were non-traditional borrowers” (Looney & Yannelis, 2015, p. 2). Traditional borrowers graduating from four-year public and private institutions experienced a default rate of 8% in 2011 compared to a default rate of 21% for non-traditional borrowers. They found that the main reason for the differences in default rates was that labor market outcomes were much more favorable for traditional borrowers versus non-traditional borrowers. A two-year investigation of the United States Senate (2012) discovered that for-profit students represented 13% of college students in the United States they accounted for 47% of loan defaults. They also found that 96% of for-profit college students took out loans—much higher than community colleges (13%) and four-year public colleges (48%).

2.3 Student Loans in New Jersey

In New Jersey there are 11 public four-year colleges (four are research universities), 14 private colleges (three are research universities) and 19 county community colleges that serve 21

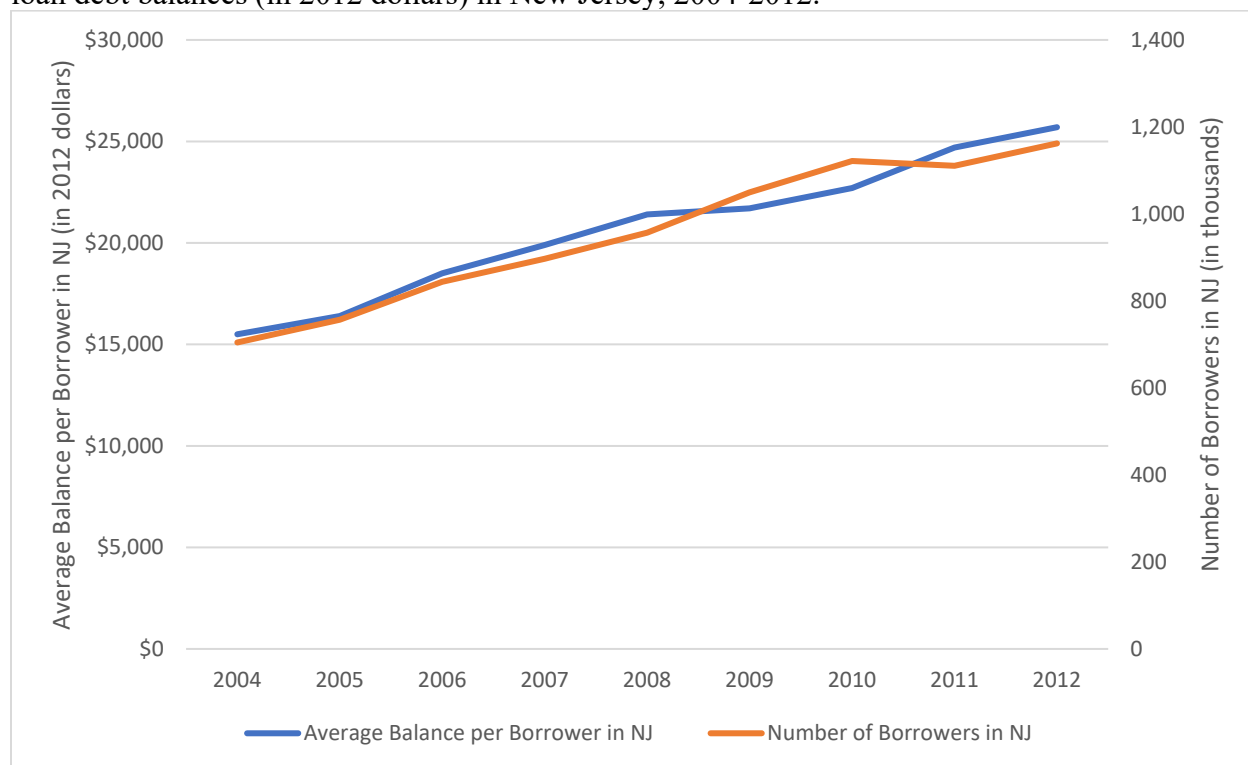
counties throughout the state.¹⁰ New Jersey offers considerable access to higher education. A study that ranked all states based on their higher education systems found New Jersey seventh best (Wallace, 2016). The survey accounted for graduation rates, accessibility, affordability and return-on-investment. Only two of New Jersey's metrics fell below top-ten: First, accessibility. They found that in 2015 only 33% of New Jersey high school students attended an in-state college. Second, the enrollment-weighted net price was the 11th highest in the country, which is likely a result of the state's high cost-of-living. But this last point shows that students at in-state New Jersey colleges are paying more compared to other in-state students throughout the United States.

According to research from the Urban Institute (2018), in 2016 the median amount of student loan debt in New Jersey was \$18,633 compared to \$16,995 across the United States. Student loans in collections is 10% in New Jersey, which is lower than across the United States at 13% (Federal Reserve Bank of New York, 2018b). According to the latest data from CollegeInSight (2018), students graduating from four-year schools or above in New Jersey had an average of \$29,878 in student loan debt, and the proportion of graduates with debt was 61%. New Jersey ranks near the middle of states regarding how much debt students graduate with and how many of them accumulate debt.

Figure 5 below shows that the number of student loan borrowers in New Jersey grew 65% from 2004 to 2012 and the average amount borrowed grew 65.8%. These growth rates are nearly identical to those for the United States over this period, and the average amount of debt across the United States was slightly lower at \$24,800 per borrower in 2012.

¹⁰ There are also several for-profit colleges, but it is unclear how many students they serve in New Jersey, so they are eliminated from this list; however, students' debts from these colleges are likely captured in our data.

Figure 5. Comparing the increase in student loan borrowers with the increase in average student loan debt balances (in 2012 dollars) in New Jersey, 2004-2012.

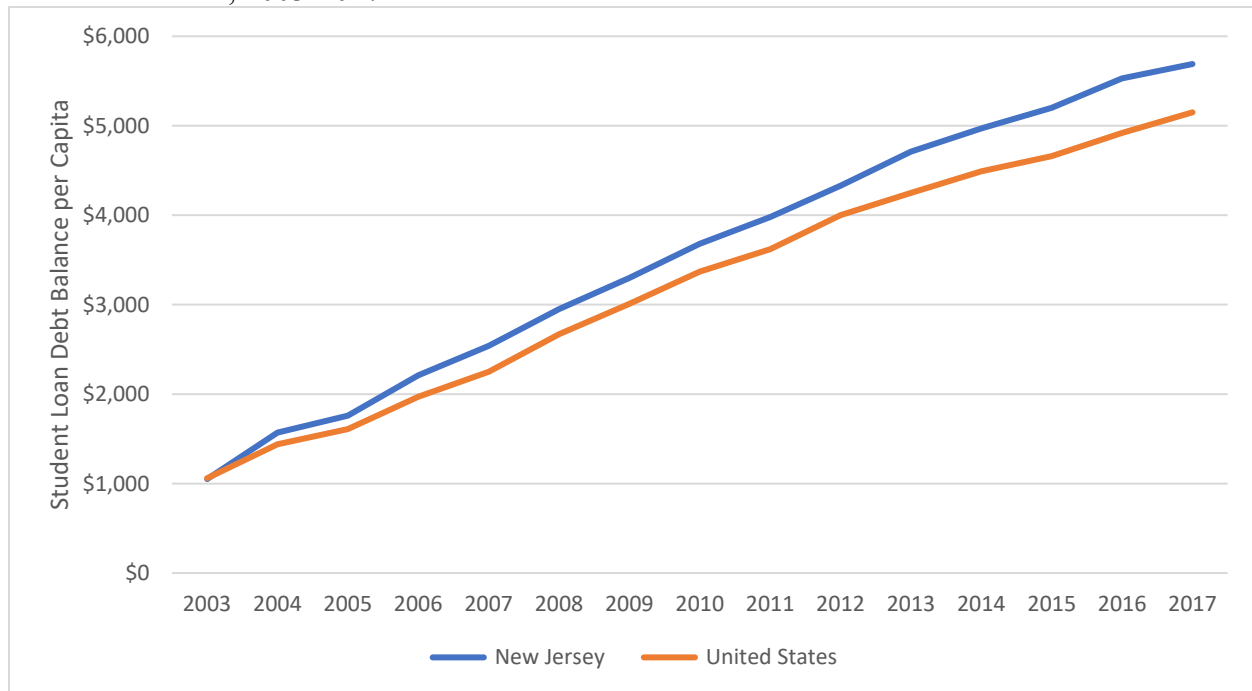


Source: Federal Reserve Bank of New York (2018a).

Mitchell et al. (2017) from the Center on Budget and Policy Priorities found that state funding for higher education fell in 44 states from 2008 to 2017. Nationwide the reduction was 16% (or \$1,448 per student). New Jersey reduced its higher education funding by 21.3% from 2008 to 2017 (or \$2,113 per student). At the same time, tuition increased by 17.5%, which is an increase in annual tuition of \$2,015. Correlation does not imply causation, and as Cooper (2017) notes, there are many factors to consider when analyzing the rise in tuition—particularly differences between institutions. But it is unlikely a coincidence that decreases in state funding occur at the same time as tuition increases—and the price difference is nearly identical. We note, however, that tuition at private colleges in New Jersey (largely separated from state funding) also increased over this period.

Figure 6 shows that New Jersey is following the same trend as the United States in general regarding the outstanding balance of student loan debt per capita (adjusted for inflation). New Jersey is growing at a slightly faster rate than the United States, but both show tremendous growth over a fourteen-year period.

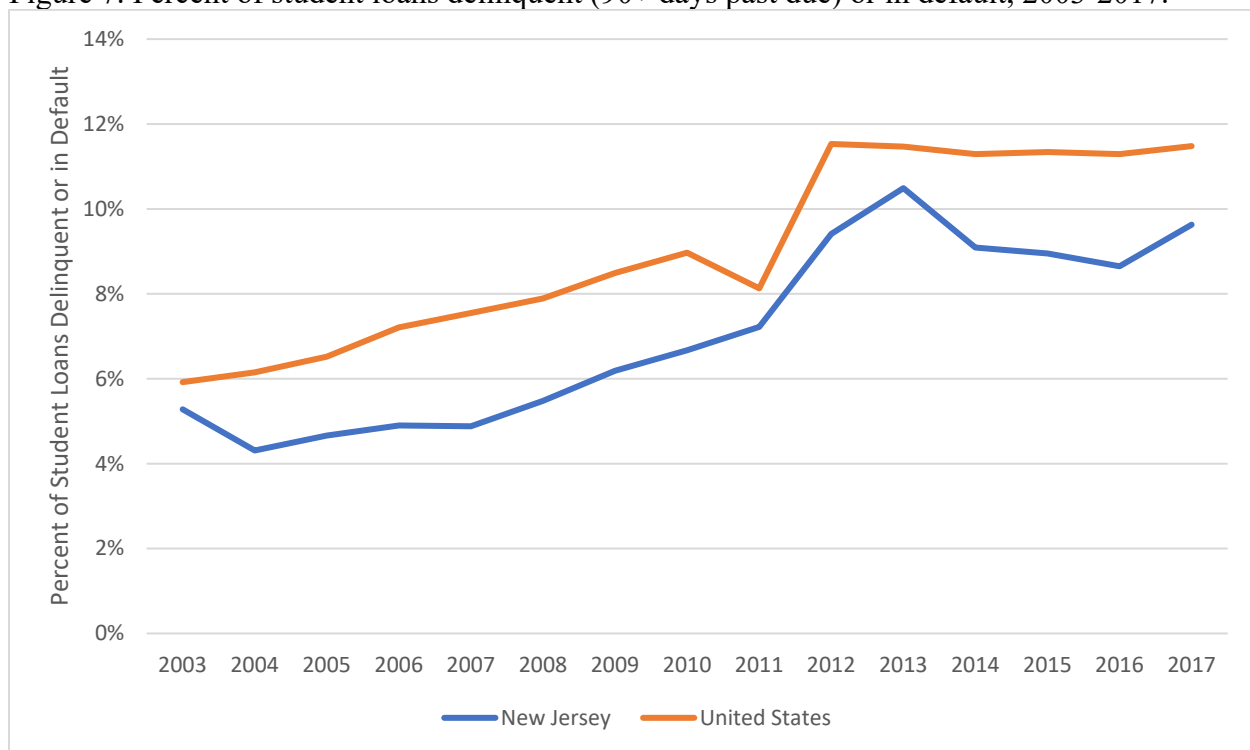
Figure 6. Outstanding student loan debt balance per capita (in 2017 dollars) in New Jersey and the United States, 2003-2017.



Source: Federal Reserve Bank of New York's (2018a).

Delinquency and default rates on student loans are one area where New Jersey is on average performing better than the United States overall. A student loan is classified as delinquent if it is at least 90-days past due. We see in Figure 7 that the percent of student loans that are delinquent or in default in New Jersey is around 9.6% and in the United States, 11.5%.

Figure 7. Percent of student loans delinquent (90+ days past due) or in default, 2003-2017.



Source: Federal Reserve Bank of New York (2018a).

Table 1 below is a breakdown of all New Jersey's 21 counties based on median single-family home sales price, median student loan debt (among those with student loan debt) and median household income (all households). This table is imperfect because it is comparing averages across different samples (e.g., median household income for people with student loans could be higher or lower than the overall median income presented). However, the importance of this table is to show that median student loan debt does not differ too dramatically across counties. House values, however, do differ significantly. We ran correlation coefficients on all three categories against each other. The only significant correlation was between median student loan debt and median household income with a coefficient of 0.74; so there is a positive, significant relationship between median income and median student loan debt. Again, correlation does not imply causation; however, there are some plausible explanations for this result. First, households with higher incomes are more comfortable allowing their kids to take on more debt.

Second, households with higher incomes are more likely college educated, which increases the changes their child(ren) will become college graduates, which means they are in school longer (perhaps attending graduate school) increasing their total debt balances.

Table 1. Median single-family home sales price, median student loan debt and median income in all New Jersey counties, 2018.

| New Jersey Counties | Median Home Sales Price | Median Student Loan Debt (of those with debt) | Median Household Income |
|----------------------------|--------------------------------|--|--------------------------------|
| Atlantic | \$189,000 | \$15,699 | \$55,456 |
| Bergen | \$495,000 | \$19,061 | \$88,487 |
| Burlington | \$220,000 | \$20,618 | \$80,034 |
| Camden | \$174,900 | \$18,106 | \$63,028 |
| Cape May | \$286,000 | \$15,958 | \$59,338 |
| Cumberland | \$129,000 | \$13,925 | \$49,537 |
| Essex | \$445,000 | \$17,317 | \$54,860 |
| Gloucester | \$185,000 | \$18,340 | \$78,592 |
| Hudson | \$362,000 | \$18,500 | \$60,894 |
| Hunterdon | \$407,000 | \$20,087 | \$108,177 |
| Mercer | \$265,000 | \$20,017 | \$73,966 |
| Middlesex | \$339,900 | \$18,974 | \$80,716 |
| Monmouth | \$430,000 | \$21,187 | \$87,297 |
| Morris | \$445,000 | \$19,597 | \$102,798 |
| Ocean | \$301,500 | \$18,304 | \$63,108 |
| Passaic | \$325,000 | \$14,989 | \$61,664 |
| Salem | \$101,450 | \$18,500 | \$61,341 |
| Somerset | \$475,000 | \$19,700 | \$102,405 |
| Sussex | \$225,000 | \$20,091 | \$87,388 |
| Union | \$350,000 | \$18,812 | \$70,476 |
| Warren | \$210,000 | \$18,739 | \$72,999 |
| New Jersey | \$316,000 | \$18,406 | \$74,408 |

Sources: Urban Institute (2018); New Jersey Realtors® (2018).

3. FIRST-TIME HOME BUYERS

The United States Census Bureau collects data biannually on changes in homeownership in the United States (Census Bureau, 2018b), but it does not identify first-time home buyers. Two datasets attempt to fix this shortcoming. First, a survey by the American Enterprise Institute

(AEI) and the Urban Institute (UI) shows little change in first-time home buyers, and that they make up a larger percent of all home buyers. Second, a survey developed by the National Association of Realtors® (NAR) shows a significant decline in first-time home buyers.¹¹ It is important to identify which dataset is more accurate because policy makers could come to different conclusions depending on which dataset they use. A recent study settles this debate: Arthur Acolin et al. (2017) from the Federal Reserve Bank of Philadelphia use a nationally representative sample from the Federal Reserve Bank of New York's consumer data to measure changes in first-time home buyers from 2002 to 2016. They find, same as NAR's survey that the rate of first-time homeownership declined significantly over this period. For example, homeownership rates among young households (younger than 35 years) fell from 43.6% in 2004 to 34.1% in 2016, and households aged 35 to 44 declined from 69.4% to 58.3% (Acolin et al., 2017, p. 3).¹² Acolin et al. (2017) found, nearly identical to NAR's survey that first-time home buyers made up 35% of home buyers in 2015, which marks a significant decline over the 2002-2015 period.

The main reason the AEI data is so different from the results by NAR and Acolin et al. (2017) is because they use different data sources and methodology. For example, AEI/UI use mortgage data from Fannie Mae and Freddie Mac, which results in excluding all cash purchases (which are mostly non-first-time home buyers) and jumbo loans—thus, first-time home buyers appear to comprise a larger share of the housing market than is true. NAR sends a survey to thousands of representative households throughout the United States—therefore, including all home buyers. Depending on which data journalists used, articles were written with quite

¹¹ For an explanation of each survey's methodology see Acolin et al. (2017).

¹² Recently released data from the Census Bureau shows that homeownership for people younger than 35 increased slightly to 36.5% in the second quarter of 2018 (Census Bureau, 2018b).

different conclusions; therefore, for this report, it is important to note these discrepancies and use the Acolin et al. (2017) paper as verification that the NAR results are what we (and others) should use. We are confident then that first-time home buyers make up a large (but not disproportionate) number of home buyers. Also, that the number of first-time home buyers has decreased over the past two decades.

An Apartment List (Woo and Salviati, 2018) survey of 24,000 renters in the United States from 2016 to 2017 showed that 80% of millennial renters (born 1982-2004) want to purchase a house. 72% of respondents noted affordability as the main problem. The survey also showed that only 15% of millennial renters will have enough savings within one year for at least a 10% down payment (based on geographic location). This is disconcerting since this age group has historically been the largest segment of first-time home buyers in America. Since the 2008 recession, home ownership has decreased across all groups, but especially among young people (Census Bureau, 2018a). This is not surprising, since well before the housing crisis researchers found that young households were credit constrained and that this constraint was a primary factor determining whether they would buy a home or not (see Doms and Krainer, 2007; Quercia, McCarthy and Wachter, 2003; and Shand, 2008). So, the tightening of lending standards after 2008 squeezed out a number of these potential buyers—particularly those with student loan debts, who happened to be the largest source of new buyers. Also, after the housing crisis the economy has improved, and interest rates were at historic lows, which should have encouraged home buying among younger people. Instead, the opposite happened.

The National Association of Realtors® 2018 survey of buyers and sellers (2018) found that buyers aged 37 years and younger were the largest contingent of home buyers comprising 36% of buyers, and 65% of them were first-time home buyers. 98% of people 37 years and

younger financed their home purchases. They also found that 60% of first-time home buyers had down payments of 6% or less. Federal Housing Administration (FHA) loans are a standard way for first-time home buyers to make a lower down payment. FHA loans require a minimum of 3.5% as a down payment. Even conventional loans (under certain conditions) can require as low as a 3% down payment.¹³ Loans for veterans from the Department of Veterans Affairs (or VA loans) are available to active-duty military, those honorably discharged, veterans of the military (assuming they meet the length-of-service requirement), reservists (and those in the National Guard) or qualified surviving spouses of deceased veterans. VA loans do not require a down payment (unless the purchase price exceeds the appraised value), no mortgage insurance is required, mortgage rates can be lower than conventional loans and various other benefits.

Laurie Goodman and Christopher Mayer (2018) studied changes in homeownership in the United States and compare it to other countries across time. They find that from 1990 to 2015, “The United States does not rank particularly high among other high-income countries when it comes to homeownership” (Goodman and Mayer, 2018, p. 33). In the United States, homeownership was 63.5% in 1985, 65% in 1995 and peaked in 2005 at 68.8% before falling down to 62.7% in 2015 (the latest data they used). They note, “We argue that neither the rise nor the fall of the homeownership rate can be explained by demographic changes alone, like the population becoming older or better educated. Rather, we argue, the vast expansion in credit contributed to the rise in the homeownership rates from 1985 to 2005, and the effects of the Great Recession, in combination with student loan debt, tight credit, and a subtle change in attitudes toward homeownership contributed to the fall [...]” (p. 35).

¹³ Fannie Mae and Freddie Mac announced in August 2018 they were allowing down payments as low as 3% in their *HomeReady* and *HomePossible* programs—if borrowers meet the requirements.

Goodman and Mayer (2018) calculated the financial returns from homeownership from 1985 to 2015 across the country and in specific geographic markets. They argue “our results suggest that there remain very compelling reasons for most American households to aspire to become homeowners. Financially, the returns to purchasing a home in a “normal” market are strong, typically outperforming the stock market and an index of publicly traded apartment companies on an after-tax basis” (p. 43). They do acknowledge that one potential downside of homeownership is a lack of mobility, in general. However, the evidence of homeownership having a negative effect on households financially (due to reduced mobility) is unclear based on conflicting research findings.

Marriage and children (or family formation) is strongly correlated with first-time home buying (Fisher and Gervais, 2009; Furman, 2014). Furman (2014) shows that since 1980 men and women get married four years later on average, which delays factors such as homeownership. Fisher and Gervais (2009) show that homeownership has fallen significantly among young people (a clear downward trend the past two decades) and that marriage rates have driven some of this change.

Houzz & Home conducts an annual survey on home renovations. Their 2017 survey (n=95,920) showed a significant increase in first-time home buyers renovating their homes and the amount spent on renovations. In 2016 (the survey asks about the previous year), they spent \$33,800 on home renovations, which was an increase of 22% from 2015. Sweat equity, or do it yourself (DIY) renovations on a house needing some repairs and updating (i.e., a fixer-upper), is one area where younger first-time home buyers may have an advantage over older generations. There is tremendous help for young people learning how to repair, update and remodel their homes at a far lower cost than outsourcing. However, this sweat equity is time consuming and

may result in living in a less than desirable home for months or even years, which people in older generations might not want. Nonetheless, most people will buy what they can afford, and if a home with potential is bought in a good neighborhood (and the house has a good inspection report that does not show major problems) then investing some time and energy can result in significant home equity gains. Also, the knowledge gained from learning how to repair, maintain and remodel a home is extremely valuable in future years.

3.1 First-Time Home buyers in New Jersey

A study by Andrew DePietro (2018) ranked New Jersey the worst state to be a first-time home buyer. His analysis was largely based on foreclosure rates, percent of first-time home buyers and median list price for a home. His research methodology is not perfect—especially since he uses Federal Housing Finance Agency (2018) data that eliminates cash purchases and non-traditional mortgages (same problem as AEI/UI data). The largest component hurting first-time home buyers in New Jersey is the cost of housing. New Jersey also has high state taxes and the country's highest property taxes. As a result, in the second quarter of 2018 total debt balances per capita in New Jersey is \$57,850, which makes it second highest to California's balance of \$70,520 (Federal Reserve Bank of New York, 2018a). New Jersey's high cost-of-living is the main reason the state regularly ranks near the top of lists that measure states based on cost-of-living. Of course, there are significant variations across the state—as seen in Table 1 above. On average, however, New Jersey is an expensive state to become a first-time home buyer.

Consequently, rents in New Jersey are also high. A study by the National Low Income Housing Coalition (2015) found New Jersey to have the fifth highest rental costs (using a two-bedroom apartment for comparisons)—only Hawaii, District of Columbia, California and New York

ranked higher. For people renting in New Jersey, the high costs will reduce disposable income that could go to saving for a down payment or paying down student loan debt.

The National Association of Realtors® (2017a) survey was separated to study only New Jersey. The report shows that in New Jersey 39% of houses were bought by first-time home buyers, which represented a slight decrease from the year before of 40%. Interestingly, among first-time home buyers with mortgages, they financed an average of 90% of their homes.

The Census Bureau (2018a) found that in New Jersey 47% of people 18 to 34 years of age are living with their parents, which is the highest rate in the country. From 2005 to 2015 in New Jersey the number of 18-34 year olds living with their parents increased from 36.1% to 47%. Over this same period, nationally the percentage of 18 to 34 year olds living at home increased from 26% to 34.1%. Not surprisingly, states with higher costs of living (especially housing) tend to have higher percentages of young adults living in their parents' homes. There is an additional concern, a report by Nicole Sandelier (2018) commissioned by the New Jersey Business & Industry Association found that more millennials are moving out of New Jersey than are moving in. More than one million millennials moved away from New Jersey, while 866,506 migrated into New Jersey—a net loss of 183,591. Consequently, Sandelier (2018) notes that “New Jersey has also been the highest millennial outmigration state in the country” (p. 1).

As mentioned in the section above, marriage and homeownership are causally linked—it is one of the few agreements found in the literature regarding first-time home buying decision making. It should come as no surprise then that New Jersey has one of the highest median ages for married couples in the country. In 2016, for women in New Jersey the median first marriage age was 29.3 years and for men 30.9 years (Census Bureau, 2018c). The Census Bureau data goes back to 2005 when the median first marriage age for women in New Jersey was 26.8 years

and for men 29.1 years. So, over an 11-year period, ages for first marriages in New Jersey increased 6.2% for men and 9.3% for women.

Education among first-time home buyers is important. While talking with many New Jersey mortgage lenders they all agreed that educating people was an important part of their jobs. Letting people know about the various types of loans, the market(s) they are looking to buy in, monthly costs of the mortgage and other considerations. There are programs in New Jersey to help first-time home buyers. The New Jersey Housing and Mortgage Finance Agency's (NJHMFA) (2018) First-Time Home buyer Mortgage Program offers a competitive 30-year fixed interest rate government-backed loan for qualified borrowers.¹⁴ The main requirements for this program are that someone has a credit score of at least 620, wants to buy a house in New Jersey and who meets the income restrictions. The income requirements are calculated based on family size and that incomes cannot exceed 140% of the purchasing-area's median income. NJHMFA (2018) also has a down payment assistance program, "which provides qualified buyers with \$10,000 as an interest-free, five-year forgivable second loan with no monthly payment that can be used to cover down payment and closing costs" (p. 1).

4. EFFECTS OF STUDENT LOANS ON FIRST-TIME HOME BUYERS

There are several ways student loans could influence whether someone becomes a first-time home buyer. First, student loan debt balances reduce disposable income that could be used to save for a down payment. Second, student loan debt can influence a borrower's debt-to-income (DTI) ratio. For example, if payments are high (because of high interest rates or large balances)

¹⁴ Interestingly, the New Jersey Housing and Mortgage Finance Agency considers someone a first-time home buyer if they have not owned a home within the previous three years (New Jersey Housing and Mortgage Finance Agency, 2018).

then you might end up with a DTI above the threshold. Third, credit scores can be affected by student loan debt, especially if a borrower makes any late payments or defaults. Fourth, there could be a psychological effect (i.e., debt aversion) that results in people deciding they want to pay off or reduce their student loan balances (and/or other debt balances) before taking on a mortgage and the various costs of homeownership. Fifth, student loans could delay marriage (see Bozick and Estacion, 2014), which, as discussed above, may be the strongest predictor of first-time homeownership. On the other hand, student loans that lead to at least a college degree is associated with higher homeownership rates (Chakrabarti, Gorton and van der Klaauw, 2017b). The college wage premium someone gets from graduating (an opportunity they may not have had without borrowing) leads to more financial security and thus a higher likelihood of homeownership (Allison, 2015).

In August 2017 the National Association of Realtors® (NAR) and American Student Assistance conducted a survey of 2,203 student loan borrowers between the ages of 22 and 35 in the United States (National Association of Realtors®, 2017b). This survey found that 40% of first-time home buyers had student loan debt. They also found that 42% of graduates delayed moving out of a family member's home and "[t]wenty-two percent were delayed by at least two years in moving out of a family member's home after college due to their student loans" (p. 1). One question in the survey was how student loan debt affects decision making and 76% (the highest category) said their debt negatively impacted their ability to purchase a home. The next three highest were to take a vacation (72%), purchase a car (65%) and continue with education (64%). 80% of those surveyed did not own a home, and of this group, 83% said their student loan debt is delaying their home buying—in particular, it is reducing their ability to save for a

down payment. Among non-home owners surveyed, 23% had been declined for a mortgage.¹⁵

The most common reason for a mortgage application denial was that their debt-to-income ratios were too high. The survey, among non-owners with student loan debt the median delay in buying a home was seven years, and 32% anticipate a delay of more than eight years.

A growing body of empirical research is developing around the question of whether and to what degree student loan debt affects homeownership (Allison, 2015; Brown and Caldwell, 2013; Chakrabarti et al. 2017a; Gicheva and Thompson, 2013; Goodman, Pendall and Zhu, 2015; Houle and Berger, 2015; Lew, 2015; Mezza, Sommer and Sherlund, 2014; Mezza et al., 2016). It is challenging to identify a clear causal link between student loan debt and home buying among young people because there are many complicating factors (i.e., spurious results). For example, student loan debt has risen dramatically at the same time as homeownership among young people has fallen. However, as noted by Houle and Berger (2015), home buying among young Americans was declining before the large run-up in student loan debt; thus, the decrease “[...]may have more to do with structural shifts in the transition to adulthood rather than the rise of student loan debt” (p. 591).

Also, this correlation might be the result of the *ecological inference fallacy*—where two variables are following a similar trend (i.e., are correlated), but no causal relationship exists. This happens when researchers try to infer something about individuals from group-level trends. Related to this concept is Robinson’s Paradox that finds associations might exist between two variables, but only under certain conditions. For example, on the one hand student loan debt might *increase* first-time home buying in low cost-of-living states where barriers to buying a

¹⁵ It is not clear from this question how many respondents who stated they had never been declined for a mortgage had tried to get one. For example, all 77% who stated they had never been declined for a mortgage may simply have never applied for one.

home are low, so the college wage premium outweighs home buying costs; but on the other hand, find the opposite effect in states with a higher cost-of-living. Even within New Jersey there are towns and counties where housing prices are much higher than other parts of the state. These differences make it challenging to identify precisely what impact student loan debt has on home buying. This heterogeneity is one reason we rely on a survey of New Jersey mortgage lenders to gain insight into the interaction between student loans and first-time home buying (see section 4.3).

Chakrabarti et al. (2017a) address some of the problems with previous research on student loan debt and homeownership. They note that heterogeneity is a problem among college graduates—e.g., type of institution attended, abilities of the students, degrees obtained, families' wealth etc. By no means are all college graduates equal. They find that “[a]t any given age, holding debt is associated with a lower rate of homeownership, irrespective of degree type” (p. 2). But “[g]raduation, measured by highest degree attained, is associated with markedly higher homeownership rates, irrespective of debt status” (p. 3). They also show that “[h]omeownership is positively associated with educational attainment,” and that families' financial backgrounds matter less for predicting homeownership than going to college (pp. 5-6). As a result, “[w]hile going to college without debt is ideal, doing so is often a financial impossibility[....] [O]ur findings highlight the increased importance of federal grant and loan programs” (p. 6). Particularly interesting is their finding that people with student loan debt are less likely to own a home in their early thirties when compared to people with little (or no) student debt. While not definitive, it suggests (along with the trend of increasing marriage ages) that the age of first-time home buyers is going to continue increasing.

Researchers have reached a near consensus (see Houle and Berger, 2015; Lew, 2015) that student loan debt among young black Americans has a particularly strong, negative effect on homeownership. This finding is disconcerting because homeownership is an important way to build wealth, and wealth inequality between white and black Americans is very high. In 2016, the median wealth for black families was \$17,600 and for white families \$171,000. And much of white families' wealth is in their homes. Even controlling for education, college-educated black households still had 70% of the median wealth of white households that *did not have a college degree* (Hanks, Solomon and Weller, 2018). We find similar results in our Logistic regressions in Appendix A where college-educated black people are much less likely to be a first-time home buyer compared to whites.

Avaro Mezza et al.'s (2016) research is probably the most comprehensive analysis available on the link between student loan debt and home ownership. They use a pooled dataset that follows a nationally representative cohort of people aged 23 to 31 years from 1997 to 2010. Their study only comprises the first five years after exiting school.¹⁶ They find that a 10% increase in student loan debt resulted in a 1-2% reduction in homeownership for student loan borrowers during their first five years after leaving school. They found no evidence that student loan debt leads to lower mortgage balances, in general. They also find that "increased student loan debt raises the probability of having very poor credit suggest[ing] that the burden of debt may be causing some borrowers to become delinquent on their loans" (p. 30). Specifically, they found that a 10% increase in student loan debt leads an increase in delinquency rates of 0.7%. The authors state that "[t]uition rates continue to rise, so the amounts student will need to borrow may increase in the future. Increased debt levels could continue to depress homeownership rates

¹⁶ Due to limited data availability they excluded in most cases people with no student loan debt, so their analysis is about changes in student loan debt among student loan borrowers.

for future cohorts of college students. Measures taken to reduce tuition—or to curb borrowing beyond what is necessary to fund attendance—could fight this trend” (Mezza et al., 2016, p. 33). They also speculate that increased lending standards after the housing crisis means student loan debt will have an increased effect on first-time home buyers.

Jennifer Shand (2008) uses the Survey of Consumer Finances to study the connection between homeownership and student loan debt. She found that “every additional \$1,000 of educational loans to repay reduces homeownership by about 0.5 percent. For a household with educational loans, the marginal effect of a one-standard deviation increase in the outstanding loan amount decreases the probability of homeownership by almost 3.7 percent” (p. 35). She was also using data that pre-dates the housing crisis, so we might expect, as with Mezza et al. (2016), that in recent years student loan debt is having a greater influence on first-time home buyers.

Melissa Allison (2015) studied the effect of student loan debt on homeownership using the 2013 Panel Study for Income Dynamics (PSID) data and found that student loan debt had little to no effect on the odds of homeownership for a person with at least a college degree. Again, as found in other studies (Chakrabarti, Gorton and van der Klaauw, 2017b), getting at least a four-year degree increases homeownership opportunities—most likely due to the college wage premium (see Figure 4 above). Disconcertingly, the number of people accumulating a growing amount of student loan debts never graduate (Delisle, 2014)—a Fannie Mae survey found that 40% of people between 25 and 44 with student loan debt did not complete a degree (Kim, 2016). In contrast, Allison (2016) found, “[t]here’s a 70-percent chance that people with medical, law and doctoral degrees will own a home. That likelihood is 66 percent with master’s degrees, 61 percent with bachelor’s degrees, and 56 percent with associate’s degrees” (p. 2). So, the most significant problem is growing student loan debt balances among people who never

graduate (see Lew, 2015). Allison (2015) found that couples who have \$30,000 in outstanding student loans but never graduated have less than a 40% chance of being a homeowner. Even an associate's degree improves homeownership likelihood (until that debt balance exceeds \$70,000).

4.1. Summary Statistics by Homeownership Status

The Federal Reserve's Survey of Consumer Finances (2018) is the most comprehensive dataset on household finances in the United States.¹⁷ The Survey of Consumer Finances is collected triennially on around 6,000 American households—the data we use is the latest, which is 2016.

Using this data, we identify first-time home buyers and present details about their debts.

Unfortunately, we cannot isolate New Jersey households.¹⁸ However, the results differ from other research by focusing exclusively on younger college-educated households. Table 2 shows a comparison of descriptive statistics for college-educated people between the ages of 23 and 40 that fall into three groups: (a) first-time home buyers, (b) renters and (c) people who own a home currently and have owned at least one other home in the past (who we call multiple home buyers).

¹⁷ We consulted with several groups about collecting a similar sample for only people in New Jersey, but our target population is so narrow that it was estimated the time and budget required to produce a useful sample would be prohibitive (significantly so).

¹⁸ The Panel Study of Income Dynamics (PSID) does allow us to separate the data by state; however, it is not possible to identify (cleanly) first-time home buyers. There also is not enough data on New Jersey alone to produce a meaningful sample. We did use the PSID by combining New Jersey, New York and Pennsylvania to run some similar tests and found the results roughly equivalent.

Table 2. Summary statistics comparing first-time home buyers, renters and home owners that own a home now and have owned at least one home previously.

| | First-Time Home buyers | | Renters | | Multiple Home buyers | |
|----------------------------|-------------------------------|-------------|----------------|-------------|-----------------------------|-------------|
| Variable | <i>Median</i> | <i>Mean</i> | <i>Median</i> | <i>Mean</i> | <i>Median</i> | <i>Mean</i> |
| Has Student Loans | - | 55% | - | 56% | - | 50% |
| Student Loan Debt Balance | \$6,000 | \$22,027 | \$10,000 | \$28,596 | \$0 | \$22,608 |
| Student Loan Interest Rate | 2.7% | 3.0% | 2.7% | 3.0% | 0.0% | 2.3% |
| Post-College Degree | 0% | 45% | 0% | 38% | 100% | 50% |
| Mortgage Interest Rate | 3.9% | 3.8% | - | - | 3.8% | 3.7% |
| Monthly Mortgage Payment | \$1,100 | \$1,188 | - | - | \$1,400 | \$2,017 |
| Owned a Home Before | - | - | - | 12% | - | - |
| Home Equity | \$61,000 | \$112,462 | - | - | \$70,000 | \$132,968 |
| House Value | \$200,000 | \$278,279 | - | - | \$285,000 | \$394,602 |
| Income | \$78,986 | \$114,556 | \$51,644 | \$76,856 | \$131,643 | \$201,032 |
| Total Debt | \$166,000 | \$204,522 | \$25,000 | \$47,206 | \$267,000 | \$366,536 |
| Monthly Debt Payment | \$1,485 | \$1,751 | \$210 | \$394 | \$2,325 | \$2,871 |
| Debt Payment-to-Income | 39% | 46% | 6% | 14% | 52% | 58% |
| Financial Assets | \$44,680 | \$117,790 | \$18,000 | \$56,826 | \$104,000 | \$214,815 |
| Have Any Financial Assets | 100% | 56% | 0% | 37% | 100% | 74% |
| Credit Card Balance | \$0 | \$2,817 | \$0 | \$1,902 | \$200 | \$5,091 |
| Vehicle Debt Balances | \$0 | \$7,351 | \$0 | \$4,301 | \$9,000 | \$14,224 |
| Other Debt Balances | \$0 | \$2,343 | \$0 | \$959 | \$0 | \$3,355 |
| Saved in the Last Year | 100% | 74% | 100% | 57% | 100% | 79% |
| Late on Any Payments | 0% | 8% | 0% | 14% | 0% | 4% |
| Every Filed Bankruptcy | 0% | 4% | 0% | 4% | 0% | 4% |
| Age | 32.0 | 32.6 | 31.0 | 30.9 | 36.0 | 34.9 |
| Sex (Male) | 100% | 82% | 100% | 68% | 100% | 94% |
| Married | 100% | 72% | 0% | 36% | 100% | 87% |
| Number of Kids | 1.0 | 0.9 | 0 | 0.5 | 2.0 | 1.7 |
| Percent White | 100% | 74% | 100% | 60% | 100% | 86% |
| Percent Black | 0% | 11% | 0% | 16% | 0% | 6% |
| Other Race(s) | 0% | 15% | 0% | 24% | 0% | 8% |
| n | 153 | | 267 | | 116 | |

Source: Authors' calculations using Survey of Consumer Finances 2016 weighted data (Board of Governors, 2018b). Data values with no explanatory value signified by -.

In Table 3 we compare people with at least a four-year college degree who are first-time home buyers between the ages of 23 and 40 who (a) have student loan debt and (b) do not have student loan debt.¹⁹

Table 3. First-time home buyers with at least a college degree who are between 23 and 40 years old with student loan debt and those without student loan debt.

| Variable | First-Time Home buyers | | | |
|----------------------------|------------------------|--------------|------------------|--------------|
| | Have Student Loans | | No Student Loans | |
| | Median | Mean | Median | Mean |
| Has Student Loans | - | 100% | - | - |
| Student Loan Balance | \$22,000 | \$40,071 | - | - |
| Student Loan Interest Rate | 5.5% | 5.4% | - | - |
| Post-College Degree | - | 52.1%** | - | 34.5%** |
| Mortgage Interest Rate | 3.9% | 3.8% | 3.8% | 3.7% |
| Mortgage Payment (monthly) | \$1,008 | \$1,051* | \$1,300 | \$1,354* |
| Home Equity | \$34,000 | \$73,142*** | \$82,000 | \$161,736*** |
| House Value | \$177,000 | \$211,282*** | \$240,000 | \$361,132*** |
| Income | \$75,948 | \$93,800 | \$92,150 | \$138,078 |
| Total Debt | \$167,400 | \$196,783 | \$140,000 | \$210,287 |
| Monthly Debt Payment | \$1,510 | \$1,809 | \$1,300 | \$1,630 |
| Debt-to-Income Ratio | 42.9% | 48.5% | 31.1% | 42.1% |
| Financial Assets | \$23,750 | \$72,088** | \$69,000 | \$172,586** |
| Have Any Financial Assets | - | 43.0%*** | - | 71.4%*** |
| Credit Card Balance | \$450 | \$4,056** | \$0 | \$1,346** |
| Vehicle Debt Balances | \$3,000 | \$9,401*** | \$0 | \$4,621*** |
| Other Debt Balances | \$0 | \$2,982 | \$0 | \$1,599 |
| Saved in the Last Year | - | 77.0% | - | 69.5% |
| Late on Any Payments | - | 14.4%*** | - | 1.1%*** |
| Every Filed Bankruptcy | - | 4.1% | - | 3.0% |
| Age | 32 | 32 | 33 | 33 |
| Sex (Male) | - | 74.5%*** | - | 91.2%*** |
| Married | - | 69.2% | - | 74.1% |
| Number of Kids | - | 87.9% | - | 100.5% |
| Percent White | - | 69.1% | - | 78.8% |
| Percent Black | - | 18.8%*** | - | 2.3%*** |
| Other than White or Black | - | 12.1% | - | 18.9% |

¹⁹ We specify this narrow range to make the group as homogenous as possible. If we include older people, then they have longer to pay down debts and may also have debts from their own kids' educations. As a result, we restricted the ages to 23-40.

| | | |
|---|----|----|
| n | 75 | 77 |
|---|----|----|

Source: Authors' calculations using Survey of Consumer Finance 2016 weighted data (Board of Governors, 2018b). * signifies t-test of mean differences with a significant level of 0.1; **0.05 and ***0.01. Data values with no explanatory value signified by -.

We ran t-tests to compare mean differences between the two groups shown in Table 3.

We see that statistically significant differences exist between the two groups for several important variables. Those with student loans are more likely to have graduate degrees (this supports findings by Delisle, 2014; Lew, 2015), have higher credit card balances and vehicle debt balances. College-educated first-time home buyers with student loans are also less likely to be a male-headed household, have a less expensive house and less home equity. They also have fewer financial assets and are more likely to have at least one late payment (on any bill(s)). No statistically significant differences exist regarding age, interest rate on mortgage, saving rate, income or debt-to-income ratios. However, some of these similarities are the result of selectivity bias—i.e., these are people who received mortgages and bought homes (people not meeting lending requirements would not be in this sample).

4.2 Mortgage Selling Guide Changes

Changes in mortgage the *Selling Guide* by Fannie Mae (and other lenders) went into effect in early 2018 (Fannie Mae, 2018).²⁰ Three important changes will likely have a significant effects on student loan borrowers. These changes could result in a dramatic change in the relationship between student loans and home buying (potentially both good and bad). Consequently, research on student loan debt and first-time home buyers may fall into two categories: before 2018 and after 2018.

²⁰ These new rules vary depending on the lender but presented here are the generally accepted changes.

First, before 2018 lenders had flexibility with how to account for student loans that were in deferment or forbearance—essentially these outstanding student loan balances could be ignored. The new rule states that lenders must either use the payment on an applicant’s credit report (assuming it fully repays the loan within the specified time) or 1% of the outstanding balance of the loan per month, whichever is lower. In our sample of New Jersey mortgage borrowers, every person with student loans in deferment or forbearance had their student loan balances eliminated from their debt-to-income ratios. Perhaps 2017 was an unusual year, or New Jersey is unique in this regard. But if we assume that it was a common practice for lenders to ignore student loans in deferment or forbearance then this new rule will have a significant negative impact on many first-time home buyers in New Jersey.²¹

Second, for people with debts that have been paid for by someone else for at least twelve months, this debt can be ignored when calculating debt-to-income ratios. This change is helpful for people whose parents (or other relatives) are paying their student loans for them—or may decide to do so at least one year in advance of buying a home.

Third, and the most interesting change to the rules is a student loan cash-out refinance. This change creates an opportunity for qualified borrowers to pay off student loan debt with home equity that they then repay at a lower interest rate (assuming the refinanced mortgage has a lower interest rate than their student loans). There are various eligibility criteria for the new policy, but one important one is that whatever student loan is being paid off it must be paid in full. In other words, you cannot pay off half of a student loan with the cash-out refinance.

²¹ It is possible there are borrowers who will benefit from this rule—i.e., people who have high balances but a low monthly payment (e.g., they are on a special debt repayment plan), but it is unclear how many people might fit into this category (probably very few).

4.3 Student Loans and First-Time Home buyers in New Jersey

In this section we explore student loan debt balances in New Jersey and the first-time home buyer market. We use data from the Federal Housing Finance Agency (2018), private banks in New Jersey and an original survey we developed for mortgage lenders in New Jersey to understand the effects of student loan debt on first-time home buyers in New Jersey. In Tables 4 and 5 below we present summary statistics of first-time home buyers in New Jersey in 2017 from several banks in New Jersey. In this sample, 71.7% of first-time home buyers had student loans with a median outstanding balance of \$23,943 and an average balance of \$46,376. On average, down payment percentages were below 5%, which tells us that many borrowers are taking advantage of Federal Housing Administration (FHA) loans or other types of loans that allow lower down payments (e.g., VA, USDA etc.). One exception to many of the lending rules are students with medical school debt. For medical doctors, who often graduate with significant student loan debt, lenders offer special terms since their expected future incomes and job security are much higher than average.

Among our sample of first-time home buyers in New Jersey with student loans (see Table 4 below), one-third (33%) had student loans in deferment. As explained in section 4.2 above, prior to 2018 lenders could ignore student loan debt balances if they were in deferment or forbearance—which is what all the New Jersey lenders did for loans in deferment or forbearance in 2017 (all those loan balances were left out of debt-to-income (DTI) calculations). The new lending rules discussed in the section above are potentially stricter in some ways and looser in others (allowing debts paid by others for at least 12 months to be ignored in DTI calculations and the cash-out refinance option). We expect that the new ruling not to ignore student loans in deferment or forbearance will have a significant effect on first-time home buyers in New Jersey.

From our sample of first-time home buyers in New Jersey in 2017, there were 23.9% of borrowers with student loans in deferment or forbearance. Of these borrowers, around 18% (or 4.3% of all New Jersey first-time home buyers in our 2017 sample) would have had their debt-to-income ratios increase enough that their mortgage applications might have been denied under the new rules.²² Our estimates are based on sample statistics that could be biased in a number of ways; however, the data is as accurate as possible—far more accurate than general survey responses. Using these estimates, our conservative calculation is that this one rule change will by itself reduce the number of first-time home buyers in New Jersey by between 1% and 2% over the first year. If our sample perfectly reflects the population (which is unlikely given the size) then we would expect reductions of greater than 4% in New Jersey. If we add interest rate hikes and tighter lending standards then expect further reductions.

Comparing the findings of first-time home buyers in New Jersey (Table 4) to the national statistics for first-time home buyers shown in Table 2 we see that mortgage interest rates are a little higher in New Jersey. Incomes are around 20% higher in New Jersey. Outstanding student loan debt amounts are much higher in New Jersey compared to first-time home buyers in the 2016 Survey of Consumer Finances—and a higher percentage of first-time home buyers have student loans in New Jersey. Not surprisingly, mortgage loan values are much higher in New Jersey than the United States, in general.

Table 4. Summary statistics from a sample of first-time home buyers in New Jersey, 2017.

| Variables | First-Time Home buyers in New Jersey in 2017 | |
|------------------------|---|-------------|
| | <i>Median</i> | <i>Mean</i> |
| Mortgage Interest Rate | 4.00% | 3.96% |
| Income | \$97,640 | \$123,020 |
| Debt-to-Income Ratio | 35.5% | 34.3% |
| Age of Borrower | 32 | 35 |

²² This is an estimate, since our sample is not large enough to make a more definitive statement. Also, each person's financial situation is unique, so this year's first-time home buyers in New Jersey are not identical to last year's.

| | | |
|---|-----------|-----------|
| Down Payment Percentage | 4.6% | 4.9% |
| Percent with Student Loan Debt | - | 71.7% |
| Student Loan Debt (among those with debt) | \$23,943 | \$46,376 |
| Student Loan Debt Monthly Payment | \$197 | \$311 |
| Student Loans in Deferment | - | 33.0% |
| Mortgage Loan Amount | \$307,615 | \$330,683 |
| Credit Score | 756 | 746 |
| n | 126 | |

Source: Sample of first-time home buyers in New Jersey in 2017 provided by several banks located in New Jersey. Data values with no explanatory value signified by -.

In Table 5 below we have separated what data we could to run t-tests on differences between first-time home buyers in New Jersey in 2017 who have student loans and those who do not. This data is by no means robust—it represents a small portion of first-time home buyers in New Jersey last year. Nonetheless, we see that the only statistically significant difference between the two groups is their age. Surprisingly, people without student loans were older on average (35 years of age) than first-time home buyers with student loans (30 years of age). All other testable comparisons were similar

Table 5. Summary statistics for first-time home buyers in New Jersey with student loans and those without student loans, 2017.

| | First-Time Home Buyers in New Jersey | | | |
|---|--------------------------------------|-------------|-------------------|-------------|
| | No Student Loans | | Has Student Loans | |
| Variables | Median | Mean | Median | Mean |
| Income | \$80,662 | \$107,264 | \$84,896 | \$109,216 |
| Age | 30 | 35** | 29 | 30** |
| Credit Score | 743 | 735 | 758 | 750 |
| Monthly Student Loan Payment | \$0 | \$0 | \$206 | \$320 |
| Number of Student Loans | - | - | 8 | 11 |
| In Deferment | - | - | - | 39% |
| Monthly Debt Payments (minus student loans) | \$294 | \$297 | \$285 | \$320 |

Source: Sample of first-time home buyers in New Jersey in 2017 provided by several banks located in New Jersey. ** signifies t-test of mean differences significant at **0.05. Data values with no explanatory value signified by -.

4.3.a New Jersey Mortgage Lenders Survey Result

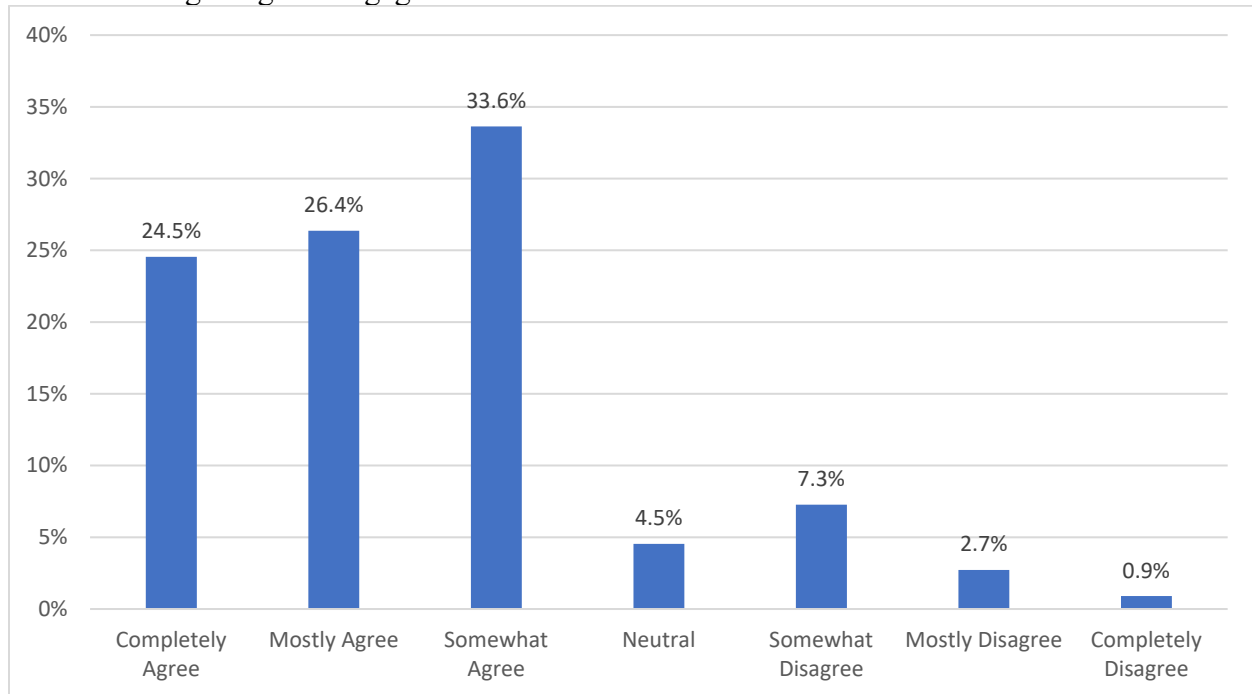
Using publicly available data sources, we compiled a target population list of all mortgage lenders in New Jersey, which totaled 802 lenders. Mortgage lenders are on the front-lines of mortgage originations, so we estimated that they would have valuable input into how first-time home buyers in New Jersey were affected by student loan debt and where the market is headed. We created a survey instrument that asked several categorical questions along with open-ended questions. We then followed-up our survey findings with unstructured qualitative interviews with more than one dozen lenders. Out of the 802 lenders contacted to participate, we received 157 completions for an effective response rate of 20%.²³ Of those lenders surveyed, the least amount of years of experience was 1 year and the maximum was 37 years with an average of 18.1 years of mortgage lending experience and a median of 18 years. This population offers a unique perspective since it is their business to understand the lending rules and regulations and understand their clients' limits, needs and wants. We talked to a number of lenders who work primarily with first-time home buyers. These professionals are less susceptible, but by no means immune, to cognitive biases. Thus, they offer us the best objective view of the first-time home buyer market in New Jersey and how student loans do (or do not) affect their clients. Lenders are especially insightful compared to more emotionally-driven home buyers with perhaps only their personal experience from which to draw inferences.

Figure 8 shows that 50.9% of New Jersey mortgage lenders completely agree or mostly agree that, in their experience, people in New Jersey with student loan debt have a hard time

²³ The surveys were confidential, and we raffled three \$100 Amazon gift cards for survey respondents who wanted to be entered (names and email addresses were collected using a different survey collection program so their responses would remain confidential). This survey was approved by Monmouth University's Institutional Review Board on May 7, 2018. Survey data was collected from May 8, 2018 to May 22, 2018.

getting a mortgage. Only 15.5% were either neutral or disagreed (at any level) with the statement.

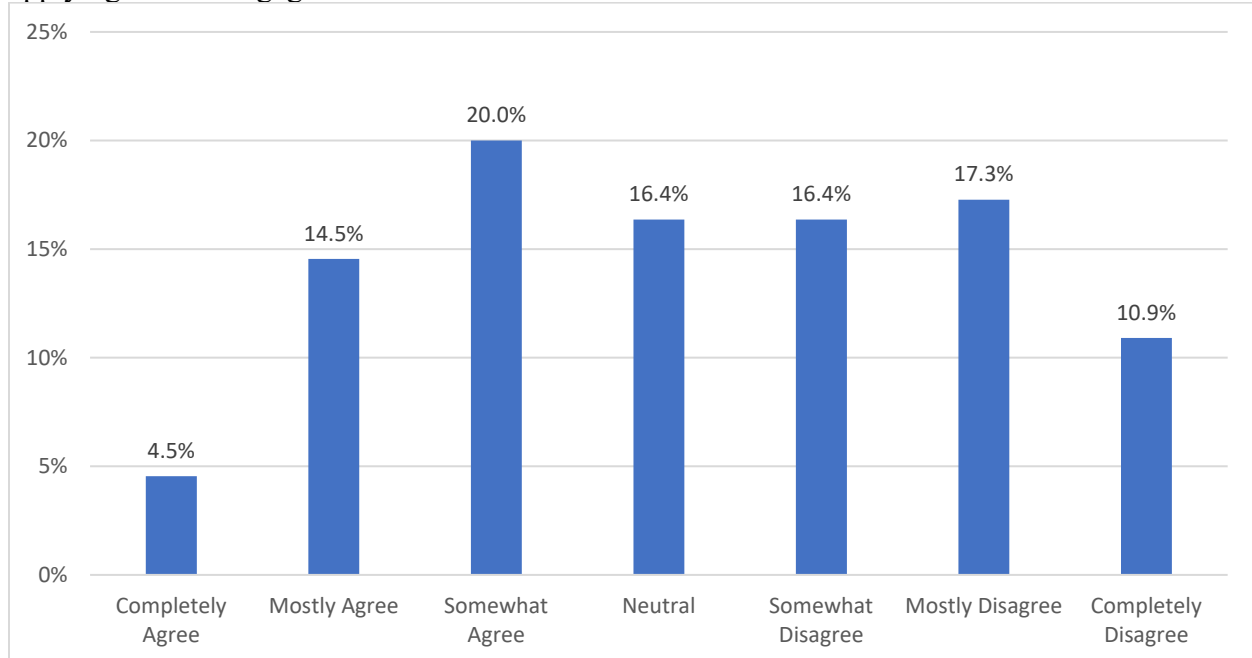
Figure 8. Do you think that first-time home buyers in New Jersey with student loan debt have a difficult time getting a mortgage?



Source: Authors' calculations using Monmouth University New Jersey Mortgage Lending Survey, 2018.

Figure 9 shows mixed results on whether lenders think student loans discourage potential first-time home buyers. 16% of lenders were neutral with 39% leaning toward agreeing and 44.6% leaning toward disagreeing. This result may be a reflection of the differences in borrowers regarding student loan debt. For example, people with large student loans from medical school, law school or dental school are not problematic because of the wage premiums from these degrees (and others).

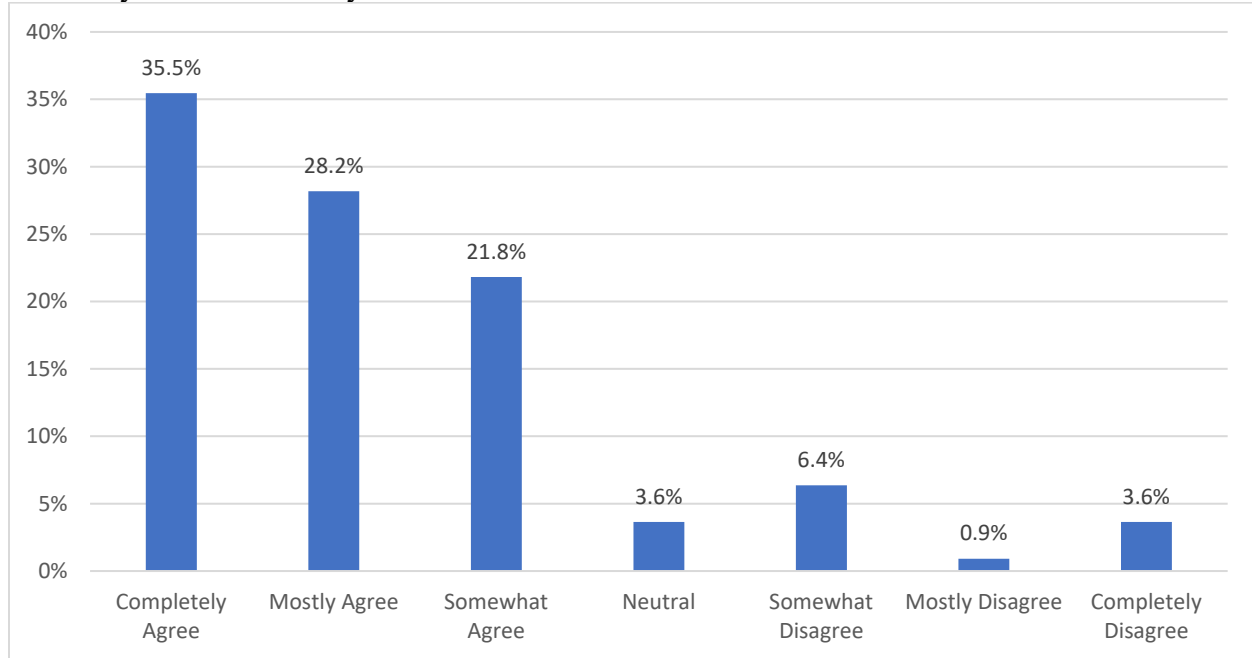
Figure 9. Do you think that many people in New Jersey with student loans are discouraged from applying for a mortgage?



Source: Authors' calculations using Monmouth University New Jersey Mortgage Lending Survey, 2018.

In Figure 10 we see much stronger agreement (85.5% agree completely, mostly or somewhat) that student loans are going to be an on-going problem for first-time home buyers in New Jersey. Many lenders noted increasing interest rates, rising home prices, lending rule changes and limited housing supply as issues that are (and will continue to) limit home buying options for certain people with student loan debt. But still, 11.2% of lenders disagree on some level.

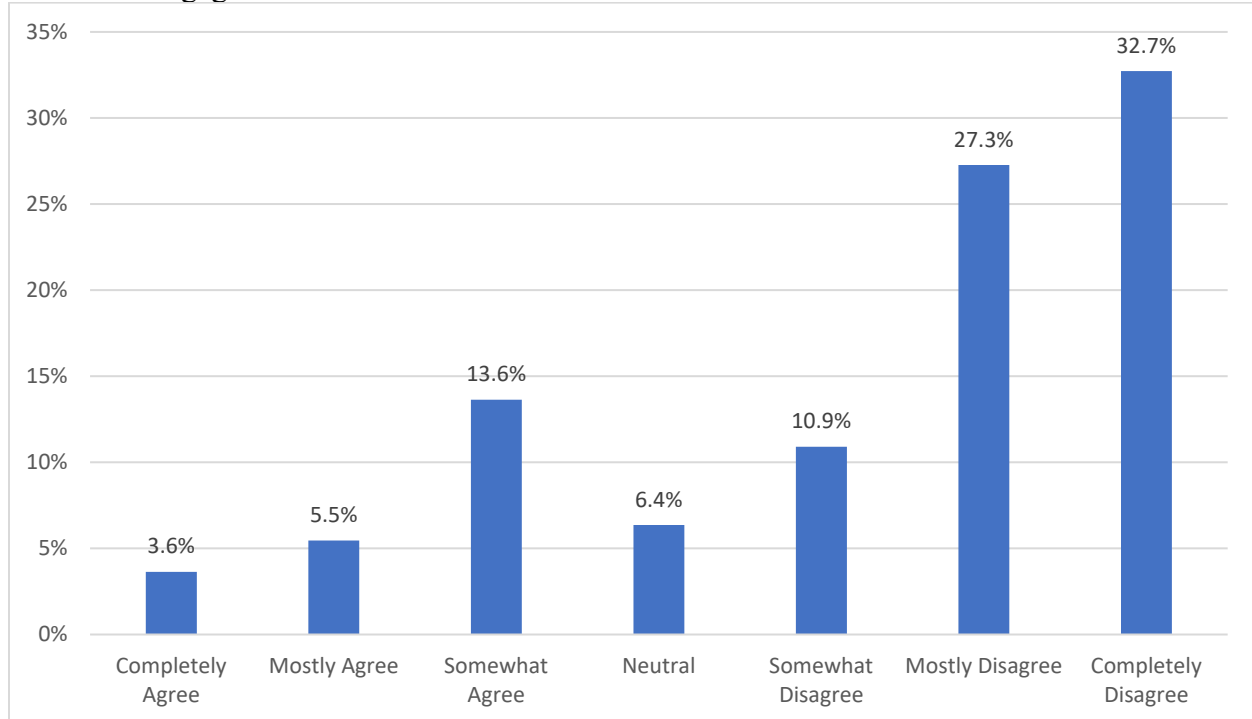
Figure 10. Do you think that student loan debt is going to be an on-going problem for first-time home buyers in New Jersey?



Source: Authors' calculations using Monmouth University New Jersey Mortgage Lending Survey, 2018.

In Figure 11 it is clear that New Jersey mortgage lenders do not think that first-time home buyers in New Jersey with student loans are paying more for their mortgages. This is supported by empirical findings in Table 3 above and Appendix A—and other researchers. The most often cited reason for higher mortgage costs is that many first-time home buyers had to pay primary mortgage insurance, which can run hundreds of dollars each month. This cost constraint, again, limits how much house people with student loan debt can afford.

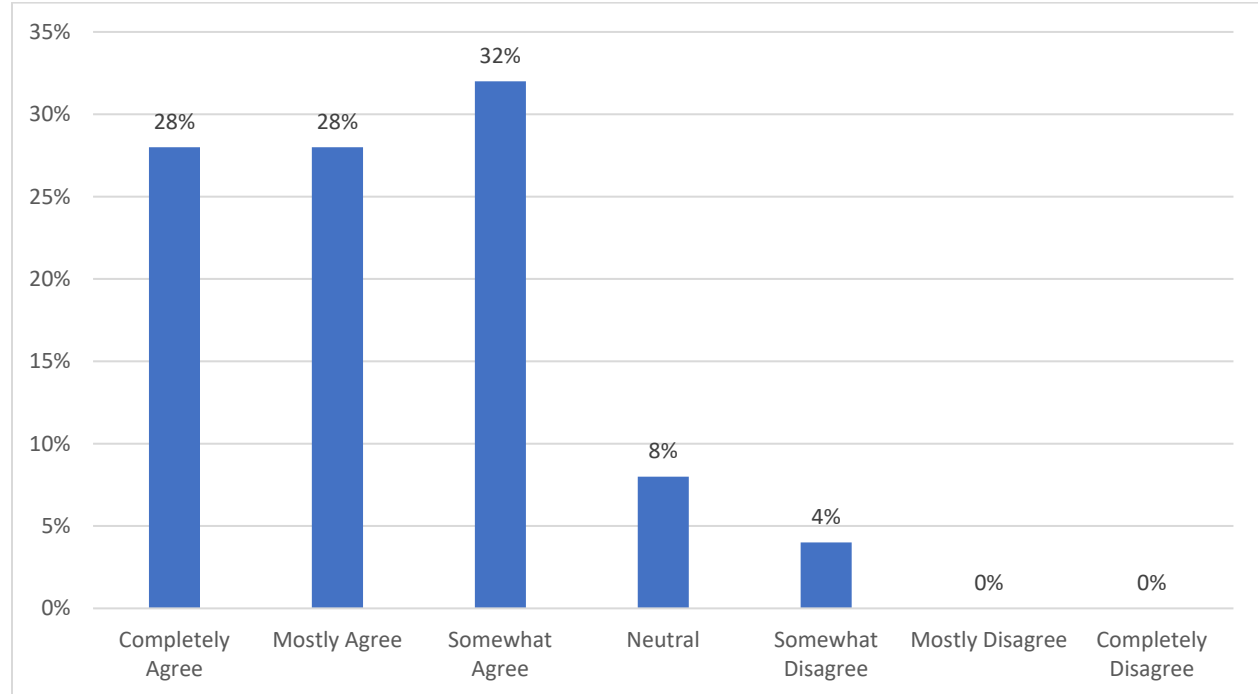
Figure 11. Do you think that first-time home buyers in New Jersey with student loans pay more for their mortgage loans than other borrowers?



Source: Authors' calculations using Monmouth University New Jersey Mortgage Lending Survey, 2018.

Figure 12 picks up another aspect that is largely agreed upon in the literature—that people with student loan debt are delaying (to some degree) buying a home because of their debt. The National Association of Realtors® (2017b) captured this effect nationally showing that the delay is many years for a large percentage of student loan borrowers. *Every* mortgage lender we interviewed stated that either (or both) student loan debt delayed home buying or reduced how much house someone could afford (below what applicants estimated beforehand).

Figure 12. Do you think that first-time home buyers in New Jersey are delaying a home purchase until later in their lives because of their student loan debt?



Source: Authors' calculations using Monmouth University New Jersey Mortgage Lending Survey, 2018.

We also asked a series of open-ended questions about down payments and what could be done to help first-time home buyers in New Jersey. What we learned from most lenders is that many potential first-time home buyers in New Jersey had to change their expectations of what types of houses they could afford. For example, many young couples wanted four bedroom homes, but then adjusted their expectations to buy three bedroom homes. Most lenders stated that people in this group either (a) delayed buying a home for at least a year or two and/or (b) looked for less expensive homes that fit their budgets. Responses were mixed from people about the financial capabilities of New Jersey potential first-time home buyers; but a majority of lenders stated that first-time buyers were aware of their household budget, had a general sense of what they could afford and approached buying as a serious long-term financial commitment. Almost all the lenders discussed concerns with the rising prices of housing in New Jersey. Many voiced

concerns that prices are far outstripping incomes and that the market is becoming unsustainable relative to incomes. Almost everyone highlighted four primary concerns for New Jersey’s real estate market for first-time buyers (and others): First, the changes in lending rules (see section 4.1 above) would on balance negatively affect first-time home buyers with student loan debt—this was a serious concern among the lenders we talked to. Second, the Federal Reserve discussing plans to raise interest rates will lead to fewer mortgage application. Third, the recent changes to the federal tax code (namely the reduction in state and local tax (SALT) deductions) will put significant downward pressure on house prices. Fourth, house prices have risen quickly, which has put buying a home out of reach for many people. Even if the tax changes lead to lower house prices, they do not expect this downdraft to affect “starter” home prices as much.

5. PUBLIC POLICY PROPOSALS

While student loan debt alone may not explain falling homeownership rates among young people in New Jersey—there is enough evidence to suggest that student loans explain some of the reason people are delaying first-time home purchases and putting down lower down payments. Consequently, our public policy proposals are broken into two categories: First, how to reduce the amount of student loan debt people in New Jersey have already accumulated or will accumulate. Second, how to help people with student loan debt in good financial standing buy their first homes in New Jersey—without taking on risky mortgages or paying exorbitant fees.

5.1 Reducing Student Loan Debt in New Jersey

The following public policy proposals (or current policy enhancements) are presented in no particular order. In addition, some of these policies may be more politically sellable than others

or more financially viable. We have used our review of the current literature as well as our own research findings to develop the following public policy suggestions.

5.1.a Student Loan Refinancing

As discussed in section 2, student loans are not dischargeable in bankruptcy and refinancing student loans can be complicated (if it is even possible). As a result, New Jersey is running a pilot program called ReFi+ Loan Program to help students who are New Jersey residents, was a resident when the Parent PLUS loans were issued or attended a New Jersey school with Parent PLUS loans.²⁴ New Jersey also offers their NJCLASS Consolidation Loan that allows borrowers with higher NJCLASS debt balances consolidate their loans into a longer (up to 30 years) loan with a lower interest rate.²⁵ While there are no definitive conclusions on the effectiveness of these programs (to our knowledge), if they do show evidence of effectiveness then this is a great way to reduce some New Jersey residents' student loan debt burdens. Letting people know this is an option and supporting the program should be well worth the effort.

5.1.b Student Loan Repayment as Fringe Benefit

More companies are providing benefits in the form of student loan repayment, or partial repayment. New Jersey could incentivize companies to adopt this benefit and gain a few advantages by doing so. First, it could encourage businesses to offer this benefit and provide tax considerations as an incentive to encourage it. This initiative could help businesses get more

²⁴ This explanation is not exhaustive, for more details on the ReFi+ Loan Program go to: <https://www.hesaa.org/Pages/ReFi+Info.aspx>.

²⁵ This explanation is not exhaustive, for more details about NJCLASS Loan Consolidation go to: <https://www.hesaa.org/Pages/NJCLASSLoanConsolidation.aspx>.

quality applicants and early research has shown that it can reduce employee turnover and improve morale—thus leading to better business performance that then feeds back to the state. Second, as mentioned above, New Jersey ranks first in the country for outmigration of millennials. A policy that encourages more student loan forgiveness might reduce (or even reverse) the trend of many young people leaving New Jersey (Census Bureau, 2018a). This policy is something that could be studied in isolation in other states.²⁶

5.1.c Improve Repayment Terms

Susan Dynarski (2014) found that there is not a student loan debt crisis, but rather a student loan repayment crisis. Her findings show that a college degree is still an excellent investment for most people; however, the primary problem is that students have to start paying back their loans right after graduation, which is not necessarily when they are best positioned financially to take advantage of their college education. This problem is compounded by the fact that the most common time period is ten years to pay back the loans—but it usually takes several years (at least) after graduation to reach a point where a degree is paying financial dividends. There are a couple solutions to this repayment crisis. First, extend the time period and/or start date of when student loans are repaid, which would let students start jobs without fear of financial ruin if they do not make enough money (as many graduates do not in their first jobs out of college). Second, and the method applied in many other countries and supported by considerable research is an income-based repayment plan. For example, students pay ~12% of their income toward student loan debt repayment—and in England whatever balance remains after twenty years is forgiven. The United States does have a variety of similar programs, but it only applies to certain loans

²⁶ For example, look at large employers in other states who adopted a similar policy and weight the costs and benefits. But early evidence looks promising.

under certain circumstances. An income-based repayment program could be extended to all student loans. While income-based repayment plans are not ideal for everyone, for the right borrowers it is a sensible alternative to the rapid payment model that is common and causes unnecessary financial hardship. New Jersey should support these initiatives at the national level since it will likely have a larger impact in high cost-of-living states.

5.1.d Expand NJ STARS and NJ STARS II Scholarship Programs

New Jersey residents that rank in the top 15% of their high school class in either junior or senior year are eligible for the NJ STARS Scholarship that offers free tuition to any of New Jersey's nineteen community colleges. Other requirements include standardized test score minimum, GPA minimum, specified coursework in high school etc.²⁷ This program is an excellent way to get two years of college coursework completed with no tuition cost. There is also the NJ STARS II program for NJ STARS students who earn their associate's degree and have at least a 3.25 GPA may get up to \$2,500 as an annual scholarship to attend a participating college (both public and private). The NJ STARS program is encouraging, but it is limited in its reach. In 2015 Tennessee became the first state to offer free community college tuition. Since then Arkansas, Hawaii, Indiana, Kentucky, Minnesota, New York, Oregon and Rhode Island have all passed similar legislation (Mercer, 2018). A free community college tuition program for all New Jersey residents that meet certain criteria would be an excellent way to encourage more education beyond high school and perhaps help combat the rise of student loans. It is beyond the scope of this report to forecast the projected impact this policy might have on New Jersey's budget; however, studying states such as Rhode Island (where students can attend community college

²⁷ For more details on NJ STARS go to: <http://www.njstars.net/>

with no tuition or fees regardless of income) and New York (see section 5.1.e below) could give New Jersey an estimate of the financial and social costs and benefits. NJ STARS already exists, it is simply a matter of expanding it to more people in New Jersey.

5.1.e Free College Tuition

In the fall of 2017 New York started awarding its Excelsior Scholarship that makes college tuition free at all City University of New York (CUNY) and State University of New York (SUNY) two- and four-year colleges. To be eligible for the scholarship students must be New York State residents, attend a CUNY or SUNY college, take 30 credits per calendar year and plan to live/work in New York after graduation for the same amount of time they received the scholarship.²⁸ We are not so bold as to suggest New Jersey adopt New York's model. It is worth following what happens in New York and thinking about a similar strategy if New York's program proves successful. A program like this could reduce the outmigration of young college-educated people and increase the pool of educated workers in New Jersey.

5.1.f Enhance NJBEST 529 College Savings Plan

529 College Savings Plans allow parents (and other relatives) to save for their children's education in a way that allows the money to be invested and grow with tax-free distributions if used for approved education purposes. 529 College savings plans were approved by the United States Congress in 1996. "The Taxpayer Relief Act of 1997 permitted 529 plans to cover room and board and other qualifying education expenses. In 2001 the Economic Growth and Tax Relief Reconciliation Act made distributions tax-free rather than tax deferred" (Pressman and

²⁸ For more details go to: <https://www.ny.gov/programs/tuition-free-degree-program-excelsior-scholarship>

Scott, 2017, p. 376). With the increasing cost of college, 529 plans have grown in popularity. Over \$319 billion is invested in the various 529 plans. Every state has a 529 plan along with Washington D.C. Some states started offering 529 plans right away and other were slow to adopt one. Many states offer state tax reductions for contributions to their 529 plans (some states even offer state tax breaks if you contribute to another state's plan)—however, New Jersey is not one of these states. New Jersey's 529 plan is NJBEST.²⁹ NJBEST currently has over \$5 billion under management—comparatively, Virginia has the most invested in its plan at \$68.7 billion.³⁰ With such a large population, New Jersey could boost contributions to its plan by offering a state tax break for New Jersey citizens investing in NJBEST. This would encourage more college savings—thus hopefully reducing debt later.³¹

Low and moderate-income students with at least \$1-\$499 dedicated to college savings are three times more like to go to college and four times more likely to actually graduate, compared to their peers without college savings (Thomas, 2017). Some states are experimenting with giving each kindergarten student a college savings account. Nevada's College Kick Start, started in 2013 offers a \$50 deposit into its 529 plan for all kindergarten students enrolled in its public schools. Some states have focused on providing college savings at birth, like in Connecticut's Baby Scholars program started in 2014, where newborns receive an initial \$100 deposit into a 529 college savings plan. However, this system places responsibility on the parent to open the account and receiving the benefit is limited to accounts opened during the first year of a child's

²⁹ For more details go to: <https://www.njb主.com/>

³⁰ To see how all states' programs from 2006-2017 go to: <https://www.federalreserve.gov/releases/efa/total-529-assets.pdf>

³¹ Currently \$25,000 can be saved in a New Jersey 529 College Savings Plan and not have it count against Financial Aid Federal Student Aid (FAFSA) application for federal aid. However, the rules change regularly.

life. Started in the same year, Rhode Island's College Bound Baby works similarly by checking a box on the child's birth certificate to receive an automatic \$100 deposit into a 529 savings plan.

Ten states offer matching funds on at least one of their 529 college savings plans (West Virginia, Utah, Texas, North Dakota, Nevada, Maine, Louisiana, Kansas, Colorado, and Arkansas). The maximum yearly amount matched varies by income level, state, and type of plan, but most plans have a clear emphasis on promoting college savings for lower and middle-income families. These are policies New Jersey should follow.

5.2 Helping First-Time Home buyers in New Jersey

If researchers are correct (see Houle and Berger, 2015) that family formation is an important factor in home buying and family formation has been falling and continues to fall then the precipitous decline in homeownership among young people may continue unabated. Public policy should not (or cannot) boost family formation to increase home sales. It is clear, however, that family formation is one of several factors leading to falling homeownership among young people in New Jersey. Several studies show that student loans affect home buying in a few ways: (a) reducing a household's disposable income so they cannot save as much for a down payment, (b) raising debt-to-income ratios in excess of lenders' requirements and (c) creating *debt aversion* because adding more debt (a mortgage) on top of already existing debt (student loans etc.) creates financial anxiety—thus leading to renting versus buying. All these factors are compounded in states with high housing prices, such as New Jersey. The most important public policy that can help first-time home buyers in New Jersey is education. Not the kind of education that leads to student loans, but rather more/better education about mortgages, buying options and an understanding of real estate market conditions. We know from several surveys that large

majority of young people want to buy homes—it is a matter of matching expectations to personal financial considerations that will help lead to stable homeownership for young people in New Jersey.

6. SUMMARY

In this report we summarized the literature that studies the effects of student loan debt on first-time home buyers. We focus our research findings on people with student loans who want to become first-time home buyers in New Jersey. Student loans can influence homebuying in several ways. First, it reduces disposable income that make saving for a down payment difficult. A National Association of Realtors® (2018) survey found that 98% of people 37 years old and younger finances their homes, and 60% of first-time home buyers had down payments of 6% or less. Second, significant student loan debt balances increase debt-to-income ratios. Prior to 2018, student loans in deferment or forbearance could be ignored when considering loan applications. But starting in 2018 one of the new mortgage selling guide rules is that these loans must be taken into account when evaluating mortgage applications—by factoring into debt-to-income ratios either 1% of the outstanding balance per month or a reported monthly payment that will fully repay the loan. Using a sample of first-time home buyers in 2017 we found that 71.7% had student loan debt. Of these borrowers, 23.9% had student loans in deferment or forbearance and of these borrowers 18% had student loan debt balances that could push their debt-to-income ratios up high enough to jeopardize their mortgage approvals (or 4.3% of all first-time home buyers in New Jersey in 2017). Using these estimates, we forecast that first-time home buyers will likely fall 1% to 2% over the next year.

Our survey of mortgage lenders in New Jersey show that student loans delay home buying by several years and reduce the amount of house people can afford—not surprising given that homes in New Jersey are some of the most expensive in the country. Falling homeownership (and delayed homeownership) among younger people could reduce wealth accumulation since homeownership is how many people build wealth. Also, the financial burden of student loans often delays investments into retirement and other savings that create long-run household financial stability. Recent research by the Federal Reserve Bank of St. Louis (2018) shows that households in the youngest cohort (born in the 1980s) are at risk of becoming a “lost generation for wealth accumulation.” In high cost-of-living states such as New Jersey, this problem is particularly pronounced.

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APPENDIX A

As explained in section 4 above, there exists a body of research that attempts to measure the impact of student loans on homeownership. The following models attempt to fill some gaps in this literature. We use the Federal Reserve Bank's Survey of Consumer Finances (2018) 2016 weighted dataset (the latest data available). First, we limit our sample to people who completed at least a four-year degree. As mentioned earlier, people who accumulate student loans but do not graduate are the least likely to be homeowners—and the more debt they have the lower the likelihood. We eliminate this complicating factor since this study focuses on college-educated first-time home buyers. Second, we only consider first-time home buyers. For our analysis there are four potential home owning categories: first-time home buyers, renters who have never owned, renters who have owned a home in the past and current owners who have owned at least one other home previously (i.e., multiple home buyers).

Our first three Logistic regression models use a binary dependent variable, *student loans*.³² We created quintile multinomial variables for financial assets (e.g., cash, stocks, retirement accounts) where *financial assets1* are all the financial assets of a households equaling less than \$10,200 (i.e., the first quartile); *financial assets2* is \$10,201-\$38,200; *financial assets3* is \$38,201-\$141,000; and *financial assets4* is above \$141,000—the highest financial asset category (4) was removed to serve as the reference variable. *Post-College Degree* is a binary variable to capture if the person has any degree(s) beyond a four-year college degree. We have a series of control variables for *age*, *income* (natural log of income), race, employment status, sex etc. We highlight the most relevant variables. We only report odds ratios (based on maximum likelihood estimation) from the regressions to ease interpretation. For example, in model I in

³² Where *Have Student Loans* is the log-odds ratio: $\ln \left[\frac{p(\text{student loans})}{1-p(\text{student loans})} \right]$

Table 6 we see that the less financial assets you have the more likely you are to have a student loan—people in *financial assets 1* (i.e., less than \$10,200 in financial assets) is 5.4 times more likely to have student loans compared to someone in the highest financial asset category (4—i.e., greater than \$141,000). The important finding in model I is that renters and first-time home buyers were both over 20% more likely to have student loans compared to people who are multiple home buyers. In model II we see that first-time home buyers are around 7% more likely to have student loans compared to renters. In model III we compare first-time home buyers to both renters and multiple home buyers as a group. We find that first-time home buyers are over 10% more likely to have student loan debt compared to every other group.

Table 6. Logistic regression results of college graduates (23-40 years of age) with student loans vs. no student loans

| Variable | Student Loans vs. No Student Loans | | |
|---|------------------------------------|-------|--------|
| | Odds Ratios | | |
| | I | II | III |
| Log of Income | 1.027 | 1.083 | 1.016 |
| Financial Assets1 | 5.433 | 6.59 | 5.565 |
| Financial Assets2 | 2.361 | 2.583 | 2.443 |
| Financial Assets3 | 1.223 | 1.442 | 1.252 |
| Age | 0.985 | 0.983 | 0.984 |
| Post-College Degree | 2.819 | 2.428 | 2.823 |
| Has Outstanding Credit Card Balance | 2.288 | 2.208 | 2.259 |
| Has Vehicle Debt Balance | 2.004 | 1.827 | 1.957 |
| Employed vs. Not Employed | 0.531 | 0.477 | 0.529 |
| Late on Any Payments | 3.219 | 4.418 | 3.18 |
| Black (vs. White) | 1.579 | 1.99 | 1.619 |
| Other Race (vs. White) | 0.447^ | 0.428 | 0.457^ |
| Has Kids (1=yes) | 0.804 | 0.942 | 0.779 |
| Married (1=yes) | 0.679 | 0.741 | 0.688 |
| Sex (1=Male) | 0.478 | 0.474 | 0.477 |
| Saved in the Last Year (1=yes) | 1.372 | 1.314 | 1.36 |
| First-Time Home buyers vs. Renters | - | 1.07 | - |
| First-Time Home buyers vs. All Others | - | - | 1.109 |
| Renters vs. Multiple Home buyers | 1.214 | - | - |
| First-Time Home Buyers vs. Multiple Home buyers | 1.254 | - | - |

| | | | |
|----------------------------------|------------|------------|------------|
| n | 528 | 412 | 528 |
| Hosmer-Lemeshow Test Significant | Yes (>0.1) | Yes (>0.1) | Yes (>0.1) |

Source: Authors' calculations using Survey of Consumer Finances 2016 weighted data (Board of Governors, 2018b). Data values with no explanatory value signified by -. Variables are significant at 1% unless noted by a ^.

Table 7 includes the odds ratios from our Logistic regression where we use being a first-time home buyer as the binary dependent variable. We created five categorical variables for outstanding student loan debt: *Student Loan Quintile1* is where they have no student loan debt; *Student Loan Quintile2* is \$1-\$14,500; *Student Loan Quintile3* is \$14,501-\$34,000; *Student Loan Quintile4* is \$34,001-\$70,000; and *Student Loan Quintile5* is above \$70,000—the highest category (5) was removed to serve as the reference variable. In Table 7 we see that those with no student loan debt are 86.7% more likely to be first-time home buyers compared to those with student loans in the highest quintile. However, even those in the next three student loan debt categories were much more likely (over twice as likely) to be first-time home buyers compared to those with greater than \$70,000 in student loan debt. Similar to other research, we see that black college-educated people between the ages of 23 and 40 are 48% less likely to be first-time home buyers compared to white people—and the same is true of people from all other races compared to white people. Also supporting earlier research, we find that having at least one child almost doubles (95%) the chances that someone is a first-time home buyer.

Table 7. Logistic regression of first-time home buyers vs. renters between 23 and 40 years of age

| Variable | First-Time Home buyers |
|----------------------------|------------------------|
| Log of Income | 1.199 |
| Student Loan Q1 | 1.867 |
| Student Loan Q2 | 2.759 |
| Student Loan Q3 | 2.323 |
| Student Loan Q4 | 2.283 |
| Financial Assets Quartile1 | 0.712 |
| Financial Assets Quartile2 | 0.773 |

| | |
|----------------------------------|-------|
| Financial Assets Quartile3 | 0.919 |
| Age | 1.029 |
| Post-College Degree | 1.114 |
| Credit Card Balance | 1.614 |
| Vehicle Debt Balance | 1.659 |
| Employed | 1.738 |
| Late on Any Payments | 0.883 |
| Black (vs. White) | 0.52 |
| Other Race(s) (vs. White) | 0.494 |
| Have Any Kids (1=yes) | 1.95 |
| Married | 0.434 |
| Saved in Last Year | 1.394 |
| n | 408 |
| Hosmer-Lemeshow Test Significant | Yes |

Source: Authors' calculations using Survey of Consumer Finances 2016 weighted data (Board of Governors, 2018b). Variables are significant at 1% level unless noted by a ^.

To capture the creditworthiness of college-educated people between the ages of 23 and 40, we created a binary dependent variable *Late Payments*, which asks if someone was late on any payments over the past year—regression output in Table 8. Renters and first-time home buyers were both over 60% less likely to be late on any payments compared to multiple home buyers. This is not surprising since first-time home buyers need to have strong credit histories to get mortgages—otherwise they are not likely to become first-time home buyers. We also see that people with no student loans (Student Loan Q1) are the least likely of this group to have student loans—but also all other three student loan groups are less likely to have late payments compared to those with the highest student loan debt amount (greater than \$70,000). Also, the fewer financial assets someone has the more likely they are to have late payments. In fact, those in the lowest financial assets category (less than \$10,200) are over 16 times more likely to have a late payment compared to people in the highest financial asset category (those with greater than \$141,000).

Table 8. Logistic regression results of credit worthiness.

| | |
|--|----------------------|
| | Late Payments |
|--|----------------------|

| Variable | <i>Odds Ratios</i> |
|-------------------------------------|--------------------|
| Log of Income | 1.029 |
| Student Loan Q1 | 0.231 |
| Student Loan Q2 | 0.917 |
| Student Loan Q3 | 0.542 |
| Student Loan Q4 | 0.734 |
| Financial Assets1 | 16.389 |
| Financial Assets2 | 12.327 |
| Financial Assets3 | 3.221 |
| Post-College Degree | 0.332 |
| Credit Card Balance | 0.967 |
| Vehicle Debt Balance | 0.681 |
| Employed | 0.789 |
| Black vs. White | 3.342 |
| Other Races vs. White | 0.614 |
| Have any Kids (1=yes) | 0.789 |
| Married | 0.92 |
| Saved in Last Year | 0.716 |
| Renters vs. Multiple Home Owners | 0.355 |
| First-Time Home buyers vs. Multiple | 0.317 |
| n | 521 |
| Hosmer-Lemeshow Test Significant | Yes |

Source: Authors' calculations using Survey of Consumer Finances 2016 weighted data (Board of Governors, 2018b). Variables are significant at 1% unless noted by a ^.

Primary takeaways from our Logistic regression results are that college-educated first-time home buyers between the ages of 23 and 40 are less likely to become first-time home buyers the more student loan debt they have—particularly those in the top quartile (top 25% of student loan debtors). However, simply having student loan debt was not a deterrent to becoming a first-time home buyer—though it could delay purchasing a home, or as found in Table 3, result in a less expensive home and less home equity. We also find, like other researchers that black households are less likely than white households to become first-time homeowners (even though both groups are college-educated and in prime home buying ages). As for lending risk, those with high student loan debts (greater than \$70,000) are at a greater risk of being late on any type

of payment in the last year compared to those without student loan debt and even those with less than \$70,000 in student loan debt.