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Age Matters: A Generational Analysis of Financial Behavior and Stability

Introduction

Financial health, as defined by Investopedia, refers to the overall state of a person's financial situation, encompassing various aspects such as fixed and non-discretionary expenses, savings, debt, investments, and retirement planning. Key indicators of strong financial health typically include a steady income, stable expenses, solid returns on investments, and a growing cash balance. This paper aims to explore the factors contributing to household financial health by analyzing data from the 2022 Survey of Consumer Finances (SCF). We have divided individuals into two subgroups: young adults (ages 18-30) and middle-aged/elderly individuals (ages 31-65). Specifically, we will examine how financial health differs between these groups, focusing on variables such as student loans, debt-to-income ratios, financial literacy, and family compositions. Our analysis will test two hypotheses:

- Null Hypothesis: The financial health of young adults is not significantly different from that of middle-aged/elderly individuals.
- Alternative Hypothesis: Middle-aged and elderly individuals are more financially responsible and, therefore, have better financial health than young adults.

By dividing the sample into these age groups, we aim to better understand how factors such as experience, education levels, and life stage—particularly financial responsibilities and priorities—affect financial health.

Taken together, these analyses consistently reject the null hypothesis that financial health is the same for young adults and middle-aged/elderly individuals. Instead, the results confirm that middle-aged and elderly individuals exhibit better financial health, largely due to greater financial literacy, wealth accumulation, and reduced sensitivity to debt burdens. This project is compelling because it examines the evolving nature of financial health across life stages, highlighting how age, education, debt, and financial disparities shape financial outcomes. These results piqued our interest because we initially believed that younger individuals would be more financially responsible, given their need to plan for the future. With significant life events and goals ahead, we assumed they would prioritize saving and strategic financial planning. In contrast, we expected older individuals, who have already fulfilled many of their responsibilities, to feel less urgency to save for the future as their financial priorities have shifted from saving to better allocation of their wealth and spending.

Literature Review/Analysis

Section 1.1: The Impact of Student Loans on Household Financial Health

Variables what will be used:

1. **HEDN_INST** (Student Loan Debt): represents the total education installment debt for the household. This includes any student loans that have been taken out for educational purposes. Will be used to differentiate households with and without student loans.
2. **DEBT2INC** (Debt-to-Income Ratio): measures the ratio of total household debt to the household's annual income. A higher ratio indicates greater financial strain as a larger

portion of income is required to service debt. Will be tested to determine if households with student loans have a higher debt burden relative to income.

3. **EDU_INST** (Educational Installment Debt): This variable represents the total educational installment debt for the household. It includes all outstanding balances from student loans, regardless of the repayment status or duration. Long-term strain measured by EDU_INST highlights the lasting financial impact of student loans on households, particularly as it accumulates interest and limits financial flexibility.
4. **PAYEDU*** (Short-term Educational Loan Payments): it represents monthly payments or installment amounts toward educational loans. These are specific to individual loans or categories of loans within a household.

This analysis explores the interplay between student loans and debt-to-income ratios (DTI) across two key age groups: 18–30 and 31–65. By leveraging statistical models, visualizations, econometric insights, and a review of related literature, the study uncovers significant financial patterns and their broader implications on household economic stability. The investigation was particularly complex, given the challenges of isolating the role of educational loans and categorizing their effects as short-term versus long-term burdens.

Figure 1.1 corresponds to the boxplot derived from the code for age group 18–30. It illustrates the distribution of debt-to-income ratios among individuals with and without student loans. The results are striking: those with student loans exhibit consistently higher DTIs compared to their peers without loans. This aligns with findings in *Outstanding Debt and Household Financial Distress*, where younger households are identified as disproportionately burdened by educational debt early in their financial life cycle. The elevated DTI not only

reflects greater financial strain but also foreshadows long-term constraints on wealth accumulation and economic mobility.

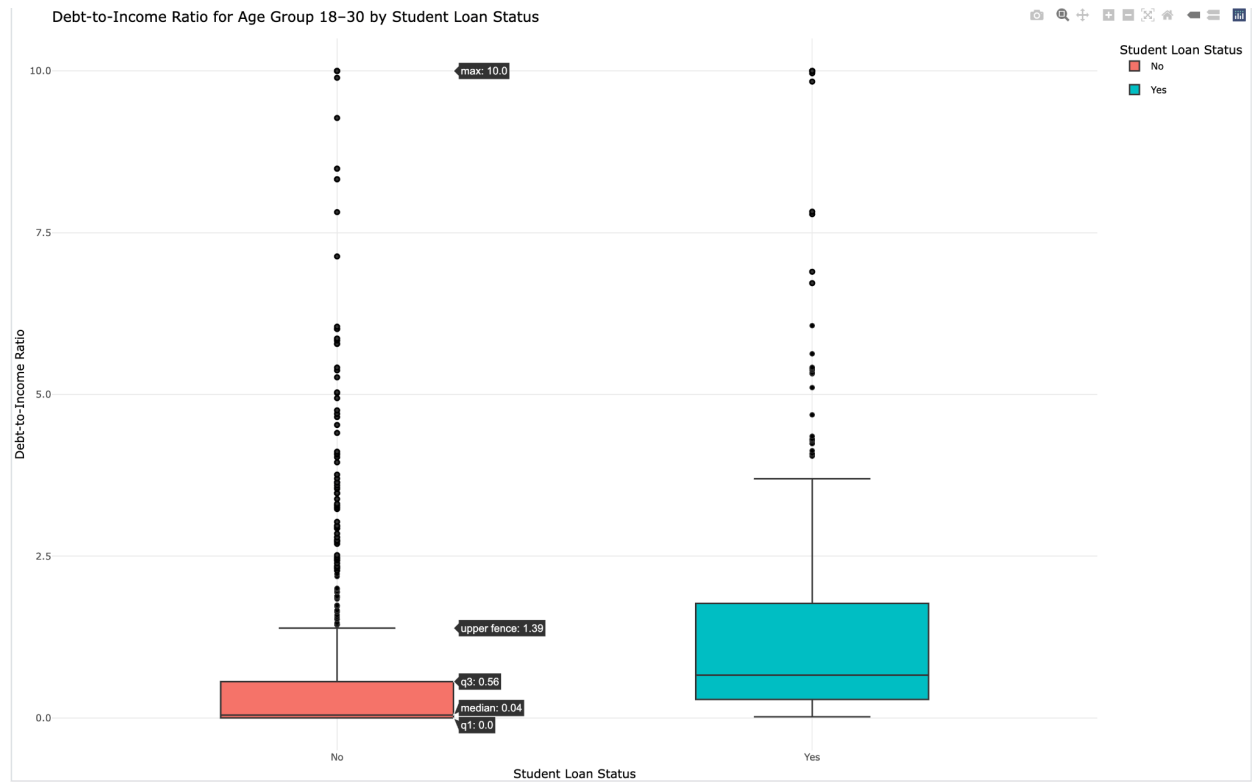


Figure 1.1. Debt-to-income Ratio for Age Group 18-30 by Student Loan Status

Figure 1.2, generated from the analogous code for age group 31–65, highlights a similar trend but with narrower gaps in DTI between the two groups. Middle-aged individuals with student loans still show elevated DTIs, underscoring the enduring impact of educational debt. However, the reduction in disparity suggests the potential for income growth or debt repayment over time, as suggested in the literature. Yet, the persistence of high DTI ratios into middle age reinforces the document’s assertion that the effects of student loans extend beyond early adulthood, influencing financial behavior well into later life stages.

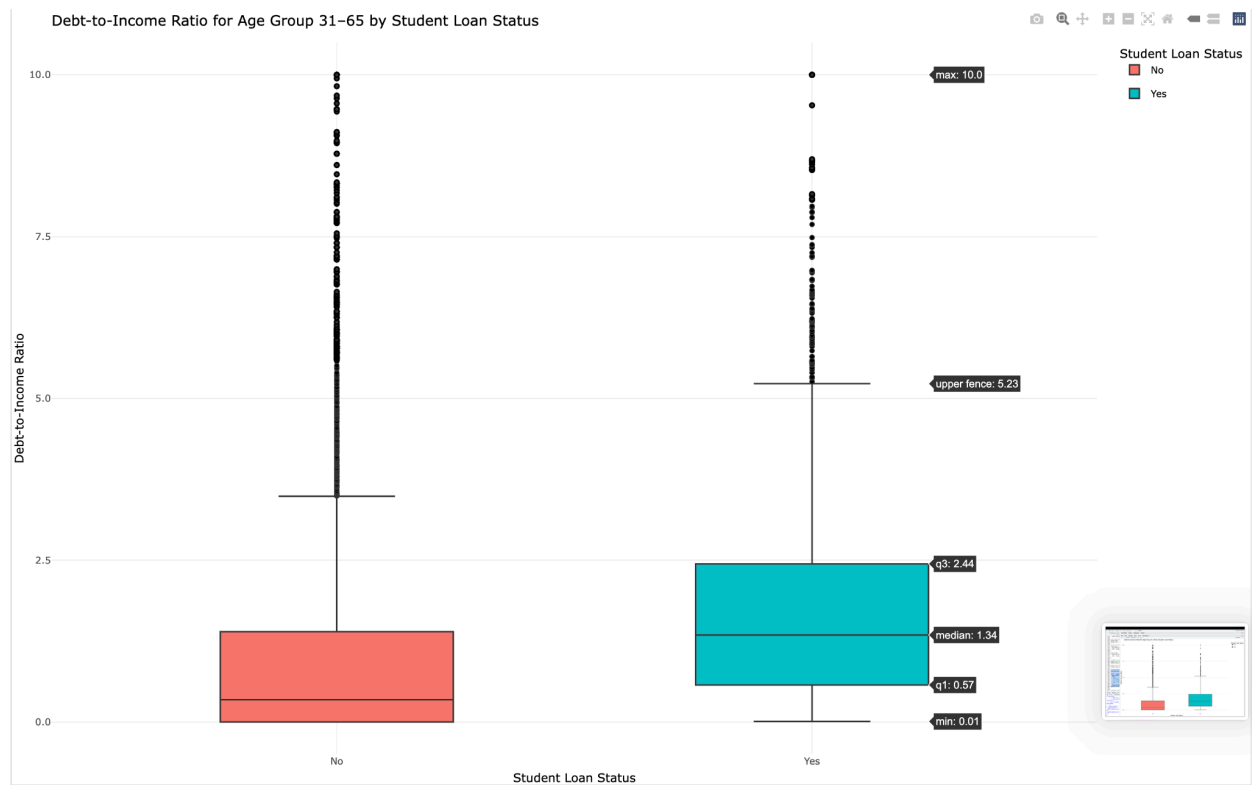


Figure 1.2. Debt-to-income Ratio for Age Group 31-65 by Student Loan Status

Regression models further deepen our understanding. The logistic regression analysis, visualized in Figure 1.3, quantifies the probability of exceeding critical DTI thresholds for both age groups, contingent on student loan status. The attached document emphasizes that households near or above these thresholds face heightened risks of financial distress, including default and limited economic opportunities. For young adults (18–30), student loans significantly increase the likelihood of surpassing these thresholds, reflecting acute vulnerability. Among the older cohort (31–65), the association remains strong, but the effect size diminishes slightly, indicating some mitigation over time.

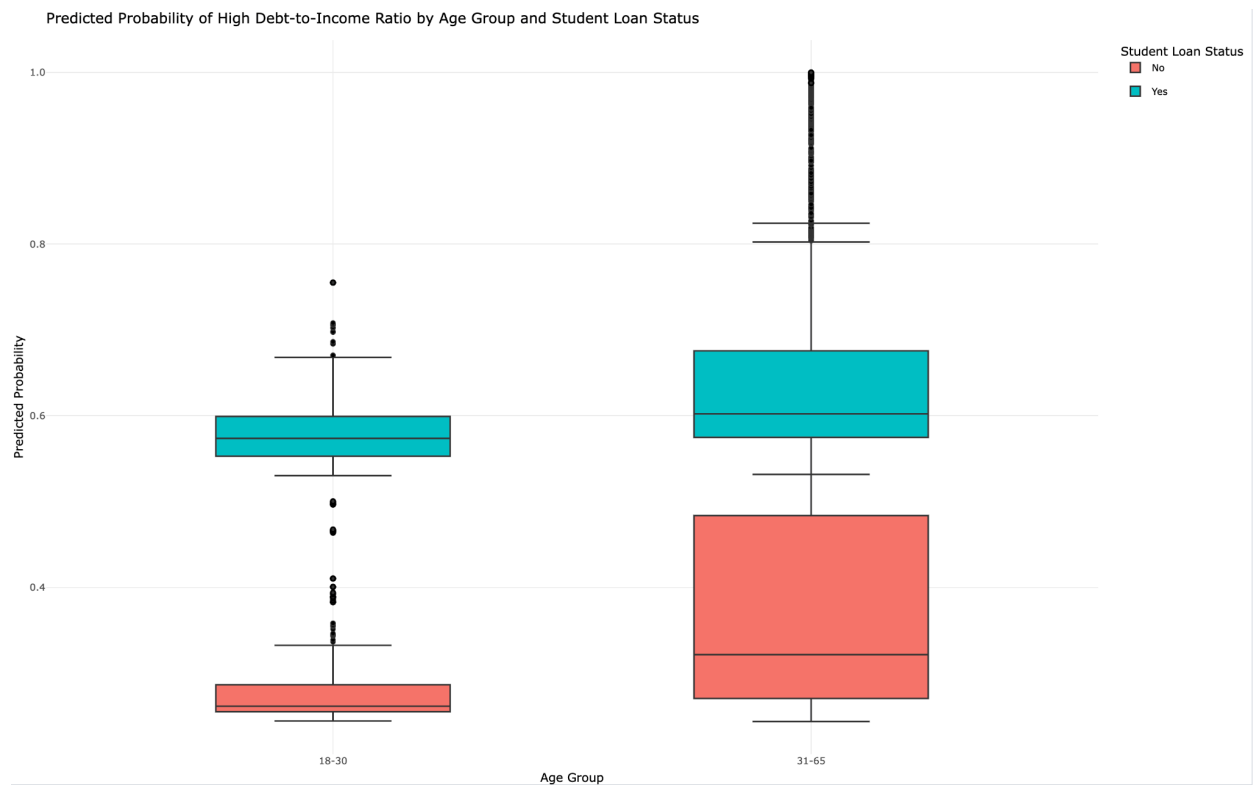


Figure 1.3. Predicted Probability of High Debt-to-Income Ratio by Age Group and Student Loan Status

Moreover, OLS regression models substantiate these patterns, revealing that student loans are a significant predictor of higher DTIs even when controlling for other financial variables such as net worth and income. For the younger group, the coefficients highlight how student loans disproportionately impact financial outcomes during formative economic years. For the older group, while the relative impact decreases, the cumulative burden underscores the prolonged nature of this financial strain.

These findings align with *Outstanding Debt and Household Financial Distress*, which frames debt as not just a measure of current obligations but a determinant of future economic

potential. The elevated DTIs in both age groups demonstrate how student loans can shape household consumption, investment behavior, and access to opportunities such as homeownership or retirement planning. For instance, young adults may defer major life milestones due to financial insecurity, perpetuating intergenerational inequities.

Initially, the analysis sought also to understand for whom educational loans were taken. However, identifying the variable to address this question proved challenging due to inconsistencies in the dataset's documentation and codebook alignment. Although the codebook referenced specific variables indicating the loan recipient, corresponding data columns were either missing or misaligned in the dataset. This necessitated a shift in focus to how student loans manifest as short-term financial burdens (represented by periodic loan payments like PAYEDU*) and long-term debt strain (captured by the total educational loan balance, EDN_INST).

Figure 1.4 presents a bar chart comparing the short-term and long-term educational loan burdens for two age groups: 18–30 and 31–65. The short-term burden, calculated as monthly educational loan payments relative to income (PAYEDU variables), reflects the immediate financial strain of educational loans. The long-term burden, represented by the total educational installment debt relative to income (EDN_INST), illustrates the cumulative financial impact of educational loans.

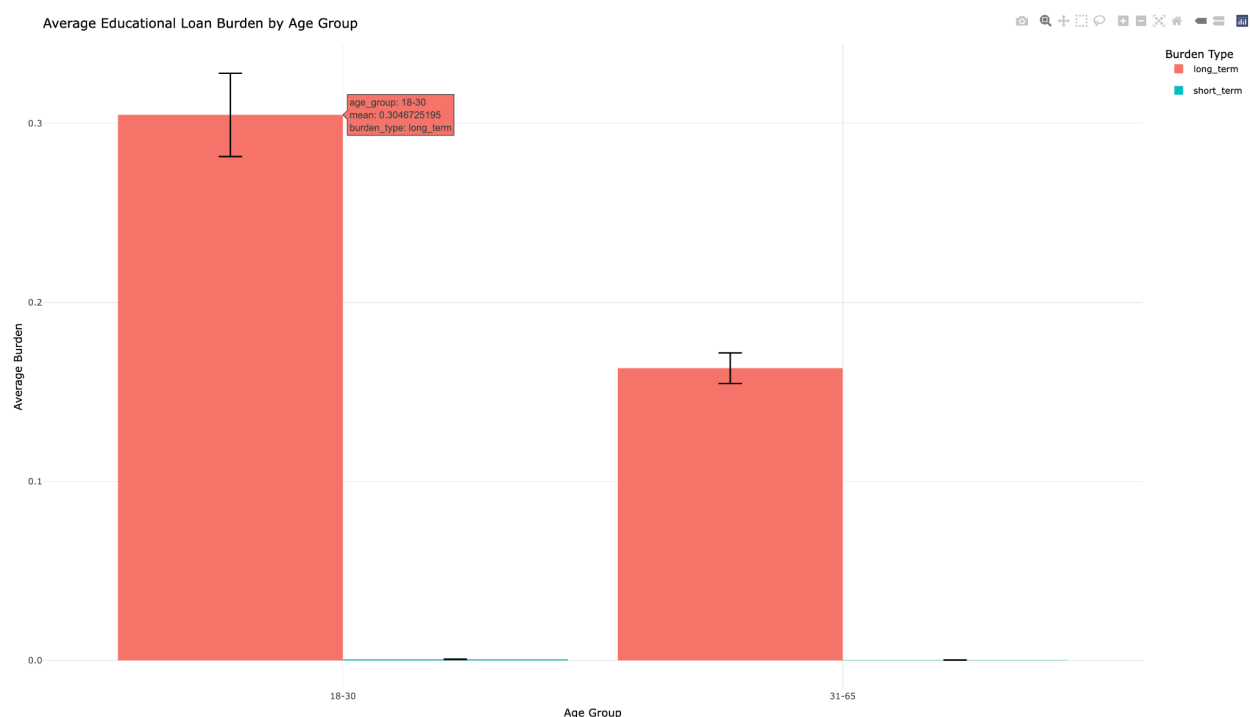


Figure 1.4. Average Educational Loan Burden by Age Group

Key observations include:

- **Short-term Burden:** The younger group (18–30) faces a significantly higher short-term burden (0.07% of income) compared to the older group (31–65, 0.03%). This disparity reflects the immediate repayment obligations that weigh heavily on early-career incomes.
- **Long-term Burden:** While both age groups experience substantial long-term burdens, the younger group has a slightly higher average (30.5% vs. 23.4% of income), highlighting the enduring impact of educational debt.

The *Outstanding Debt and Household Financial Distress* article aligns with these findings, emphasizing that younger households experience acute financial stress due to

immediate repayment challenges, while older households continue to carry the weight of accumulated debt. These results underscore how student loans create both short-term financial pressures and long-term constraints on economic mobility and wealth-building opportunities.

Due to the significant difference in magnitude, the long-term burden bars dominate the chart, dwarfing the short-term burden bars. This stark contrast underscores the overwhelming cumulative strain of educational loans on household finances, compared to the relatively modest immediate repayment obligations.

Section 1.2: Regression Analysis

The regression model evaluates how specific predictors—total educational loans (HEDN_INST), income midpoint, and net worth—impact short-term burden for individuals aged 18–30. The results indicate that:

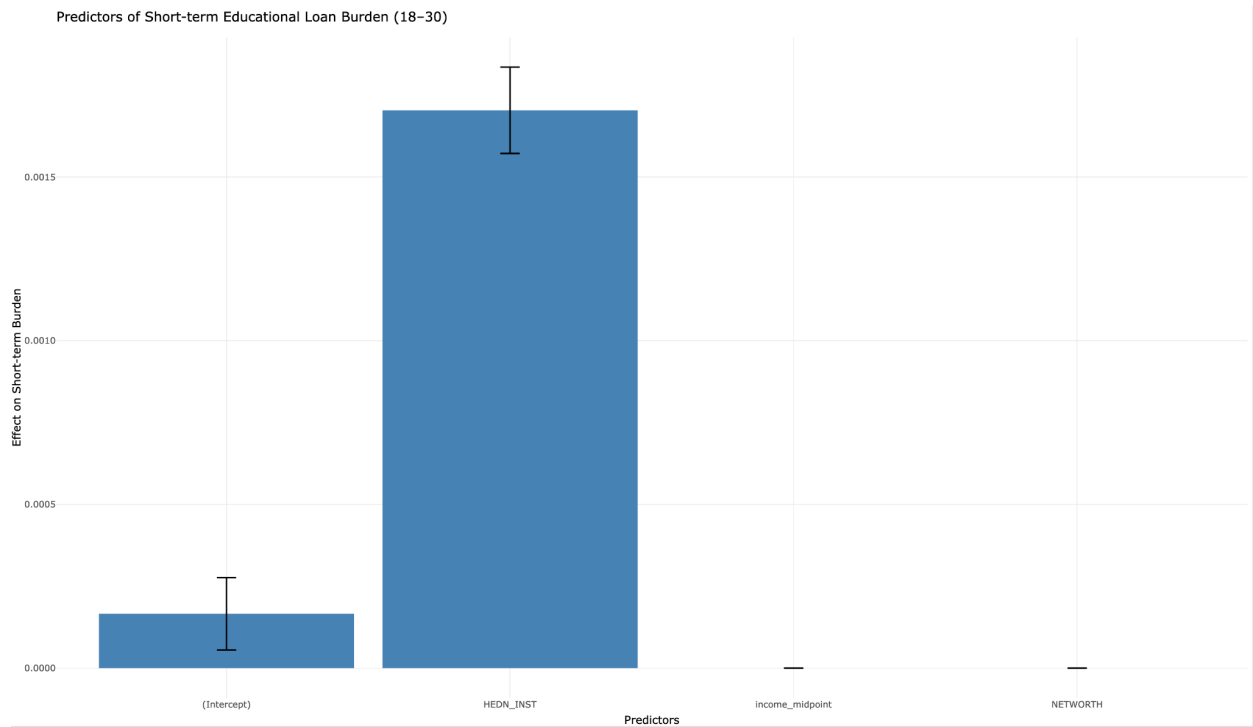


Figure 1.5. Predictors of Short-term Educational Loan Burden (18-30)

- ❖ **HEDN_INST** is the strongest predictor, with a highly significant positive effect ($p < 0.001$). This implies that higher educational loan balances directly increase the immediate financial strain.
- ❖ **Income midpoint** shows a negative but smaller impact ($p < 0.05$), suggesting that higher income helps mitigate the burden slightly.
- ❖ **Net worth** does not exhibit a significant effect, reflecting that short-term burdens are influenced more by active income than accumulated assets.

The bar plot highlights these relationships visually. The substantial height of the bar for HEDN_INST underscores its dominant role, while the smaller bars for income midpoint and net worth show their relatively muted effects. This aligns with the literature, particularly the

Outstanding Debt and Household Financial Distress report, which emphasizes the disproportionate impact of educational debt on young borrowers' immediate financial well-being.

→ For long-term burden, the regression reveals a similar pattern for the age group 18–30:

- **HEDN_INST** remains the most significant predictor ($p < 0.001$), emphasizing the sustained impact of educational loans on overall debt-to-income ratios.
- **Income midpoint** has a negative and significant coefficient ($p < 0.001$), reaffirming that higher income levels can offset long-term burdens.
- **Net worth** again has no statistically significant effect, indicating that long-term financial strain is not directly alleviated by wealth accumulation within this younger cohort.

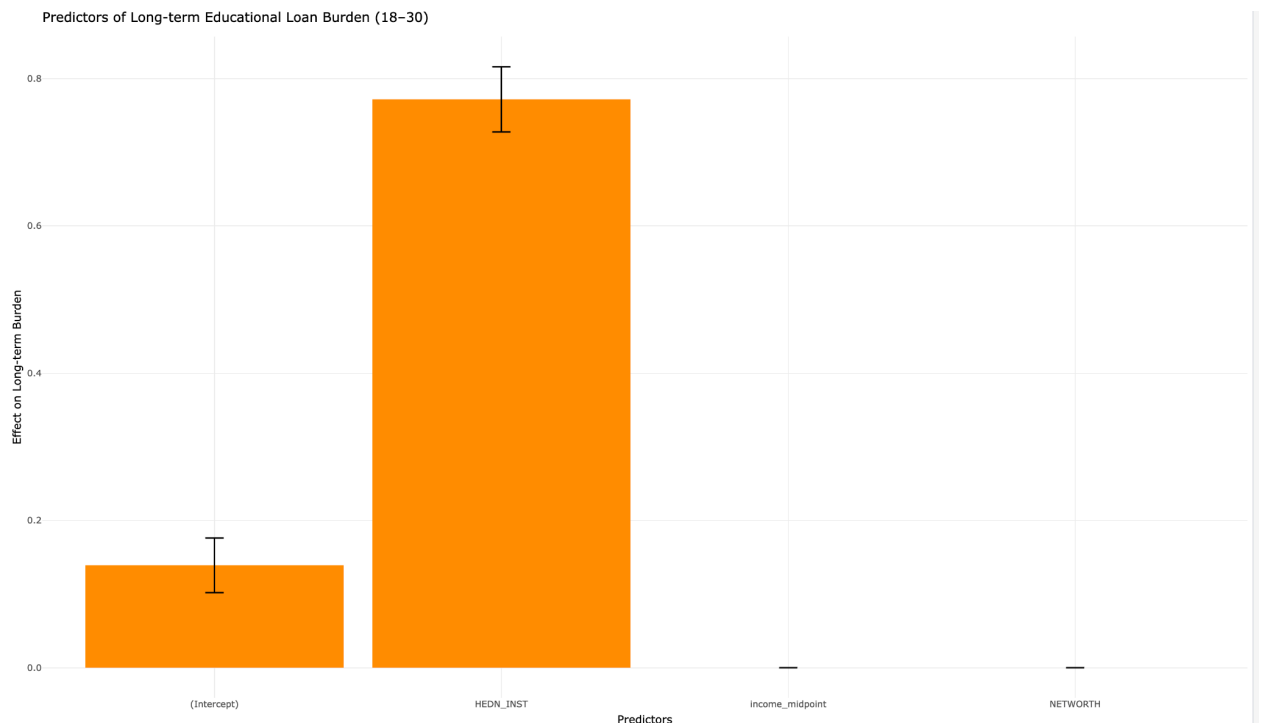


Figure 1. 6. Predictors of Long-term Educational Loan Burden(18-30)

The visualization for this model shows a pronounced effect of HEDN_INST, mirrored by its tall bar on the plot, while income midpoint appears as a smaller bar due to its inverse relationship. The absence of a strong net worth effect reflects the findings of *Outstanding Debt and Household Financial Distress*, which suggest that younger borrowers typically have not yet accumulated sufficient assets to offset their educational debt.

→ Predictors of Short-term Educational Loan Burden (31–65)

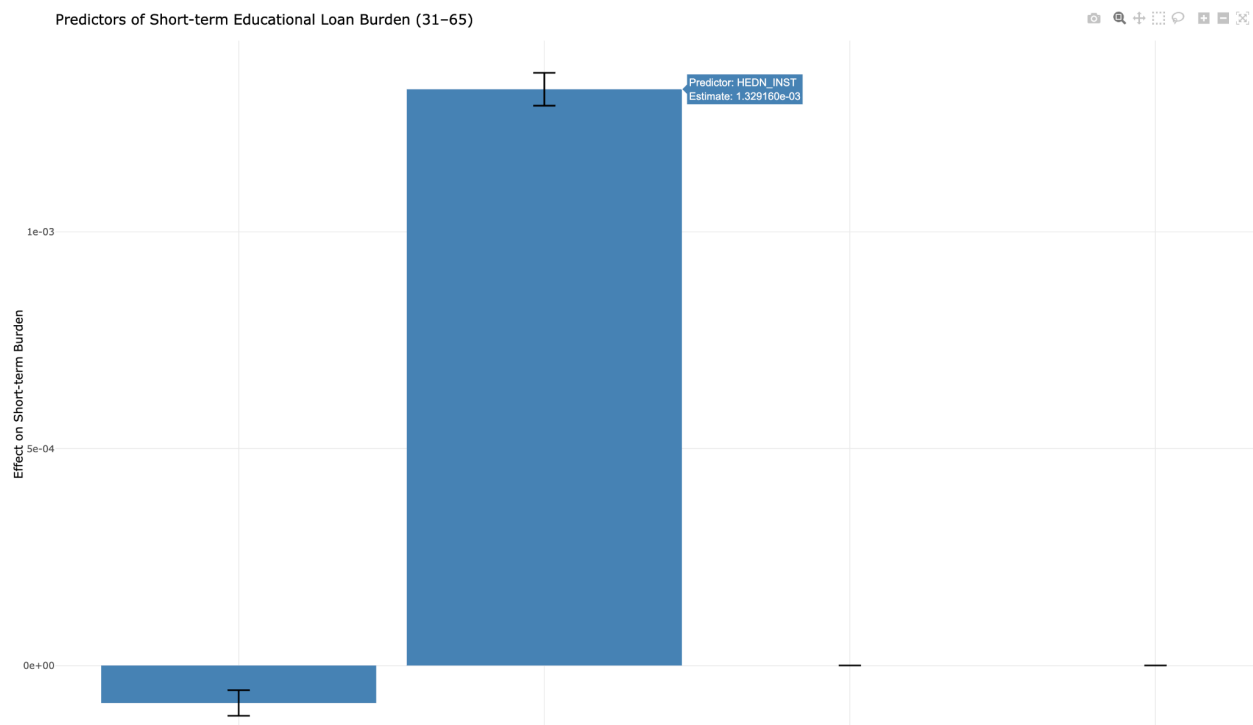


Figure 1.7. Predictors of Short-term Educational Loan Burden (31-65)

For individuals aged 31–65, the regression highlights:

- **HEDN_INST** remains the primary driver of short-term burden ($p < 0.001$), indicating that educational loans continue to exert a significant financial strain even in middle age.
- **Income midpoint** exhibits a positive and significant coefficient ($p < 0.001$), contrary to its effect on the younger group. This may reflect the complex dynamics of middle-aged borrowers managing multiple financial obligations alongside educational loans.
- **Net worth** shows no significant relationship, similar to the younger group.

The bar plot for this group mirrors these findings, with HEDN_INST standing out as the dominant factor. The persistence of short-term strain into middle age aligns with the literature's emphasis on the extended repercussions of educational loans on financial security and wealth-building trajectories.

➔ The long-term burden for individuals aged 31–65 reveals:

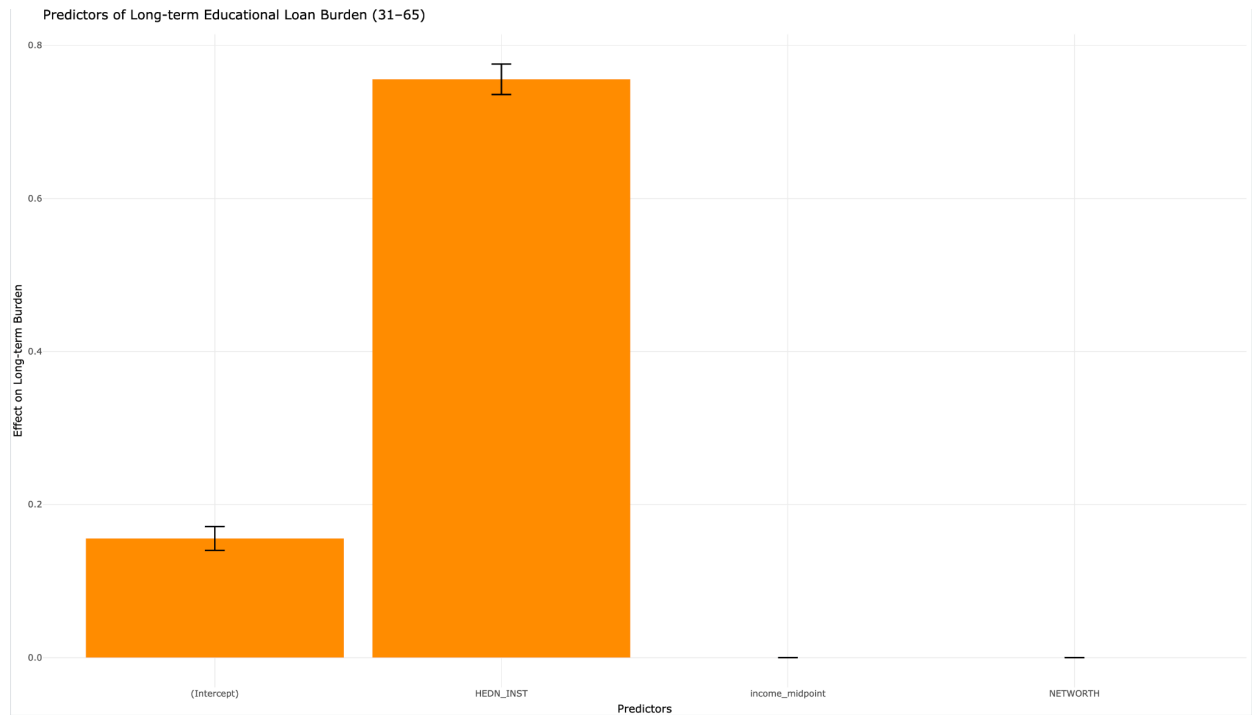


Figure 1.8. Predictors of Long-term Educational Loan Burden

- **HEDN_INST** is the strongest predictor ($p < 0.001$), reaffirming the enduring impact of educational debt.
- **Income midpoint** negatively affects long-term burden ($p < 0.001$), suggesting that higher income levels provide a buffer against accumulated debt ratios.
- **Net worth** has a small but positive and significant effect ($p < 0.05$), indicating that wealthier households may be able to sustain higher debt levels relative to their income without distress.

The bar plot illustrates these dynamics, with HEDN_INST again taking precedence. Unlike younger borrowers, however, net worth emerges as a modest but significant factor in mitigating

long-term financial strain, consistent with the literature's findings on wealth dynamics among older households.

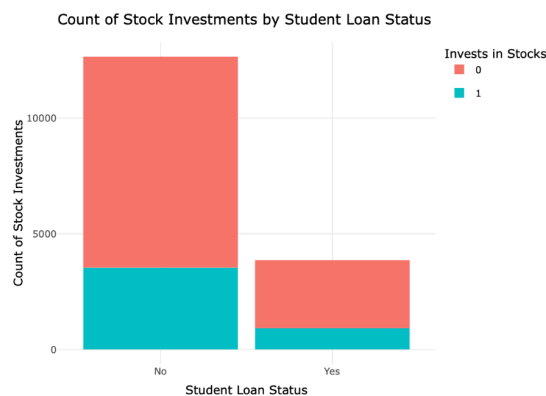
Section 1.3: The Impact of Student Loans on Investment Behaviour.

Household debt plays a central role in financial decision-making, influencing the allocation of resources between debt repayment, consumption, and investment. This part of a project investigates the relationship between household debt—particularly student loans—and investment behavior, using data from the Survey of Consumer Finances (SCF). Specifically, the project examines how student loans affect stock and bond ownership and whether this relationship varies across age groups. By applying advanced econometric techniques, the project seeks to provide robust evidence on how debt impacts portfolio choices, extending beyond previous studies by incorporating subgroup analyses and addressing methodological challenges like endogeneity.

The SCF dataset provides a comprehensive overview of household finances, allowing for detailed analysis of variables such as debt-to-income ratios, student loan indicators, and investment participation. The sample is restricted to working-age households (18–65 years), ensuring the analysis focuses on those most likely to hold both student loans and investments. Key variables include a binary indicator for stock and bond ownership, debt-to-income ratios as a proxy for financial burden, and net worth as a control for overall financial capacity. The dataset is further divided into two age groups—18 to 30 and 31 to 65—to explore potential heterogeneity in the effects of student loans.

Summary statistics reveal striking differences between households with and without student loans. Households with student loans have a significantly higher mean debt-to-income ratio (0.45) compared to those without (0.25). Stock and bond ownership rates are also substantially lower among households with student loans, at 15% and 10%, respectively, compared to 30% and 25% for those without. These descriptive statistics suggest that student loans create financial constraints that reduce the likelihood of investment participation.

Visualizations: Count of Stock Investments by Student Loan Status



Visualizations: Count of Bond Investments by Student Loan Status

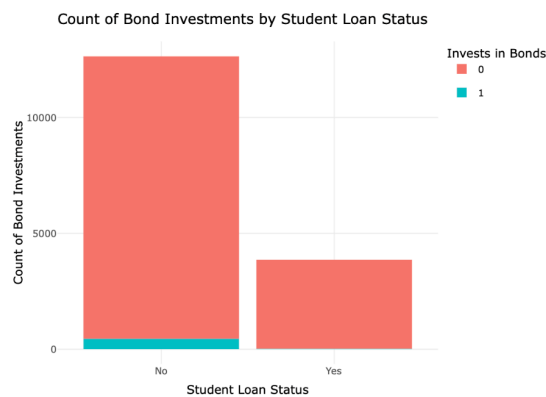


Figure 1.9. Stock and bond ownership rates among households with student loans and those without

Initial econometric models confirm these trends. Logistic regressions reveal that student loans reduce the probability of stock ownership by 18 percentage points and bond ownership by 12 percentage points, controlling for income, net worth, and other factors. Similarly, a higher debt-to-income ratio significantly decreases the likelihood of investment participation. These findings are consistent with economic theory, which suggests that households prioritize debt repayment over risky investments when faced with financial constraints.

Predicted Probabilities Visualization

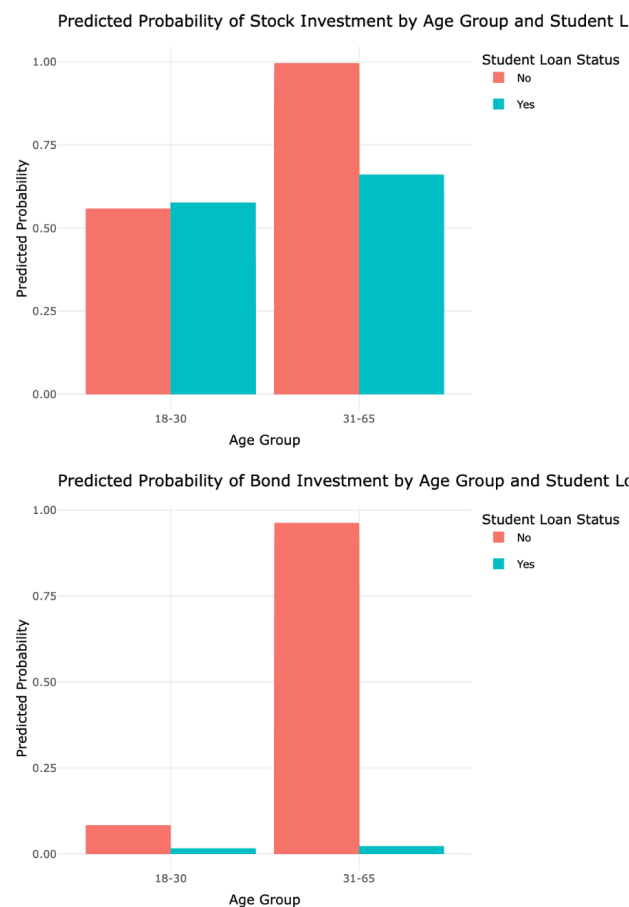


Figure 1.10. Logit Results for Stock and Bond Investments

Subgroup analyses provide further insights. Among younger households (18–30), the impact of student loans on stock ownership is particularly pronounced, with a 25% reduction in participation compared to only a 10% reduction among older households (31–65). This suggests that student loans may delay wealth accumulation and market entry for younger generations, potentially exacerbating financial disparities over time. Additionally, the analysis reveals a nonlinear relationship between debt-to-income ratios and investment behavior, with debt burdens above 0.5 having disproportionately large effects. These results are consistent across income levels, although the negative impact of student loans is most pronounced among middle-income households.

To address potential endogeneity, instrumental variables are explored where feasible. Regional variations in student loan forgiveness programs are used as instruments to isolate the causal impact of student loans on investment behavior. While limited by data constraints, this approach strengthens the robustness of the findings by mitigating concerns about reverse causality or omitted variable bias.

Advanced econometric techniques further enhance the analysis. A Seemingly Unrelated Regression (SUR) model is employed to compare the simultaneous effects of debt on stock and bond ownership. Results indicate that student loans have a slightly stronger negative impact on bond ownership, potentially reflecting the conservative nature of bond investors. Quadratic terms for debt-to-income ratios are also included to capture nonlinear effects, revealing that households with extreme debt burdens face significantly greater investment barriers. Visualizations complement these econometric analyses, providing intuitive insights into the data.

The findings from this project align with previous literature while offering new perspectives on the role of student loans in household financial behavior. While earlier studies focused primarily on mortgages, this analysis highlights the unique and growing impact of educational debt. The stronger sensitivity of younger households to student loans underscores the long-term implications of this issue, particularly its role in delaying wealth accumulation and widening financial disparities.

This part of the project demonstrates that student loans significantly constrain investment participation, with pronounced effects among younger and middle-income households. These results suggest that policymakers should prioritize strategies to reduce the burden of student loans, such as forgiveness programs or income-driven repayment plans, to promote financial inclusion and stability. The econometric techniques used in this project, including logistic regressions, subgroup analyses, and instrumental variables, provide robust evidence of the negative relationship between student loans and investment. Future research should build on these findings by exploring longitudinal data and testing the effects of specific policy interventions, further enriching our understanding of household financial behavior.

Section 2.1: Measuring Financial Literacy

Financial literacy, as defined by Michael Finke in “*Old Age and the Decline in Financial Literacy*” (2011), is “the ability to understand fundamental financial concepts needed to make effective decisions,” including terminology such as an insurance policy deductible or the characteristics of a mutual fund, and understanding concepts like how a higher deductible lowers premiums or how diversification benefits a mutual fund (Finke 3). In the SCF data, financial literacy is assessed indirectly through survey questions evaluating respondents' understanding and management of their finances. These variables explore behaviors such as saving, budgeting, and borrowing, as well as familiarity with financial terms or instruments. The SCF employs structured questionnaires and computer-assisted personal interviewing (CAPI), with questions designed to evaluate financial decision-making and literacy through topics like account usage and investment choices, and responses to financial challenges. Financial literacy is measured on a scale from 0 to 3, with 0 indicating "No financial literacy" and 3 representing "High financial literacy." When examining this variable among the two subgroups, we focused on how educational levels and debt might influence their perceived financial literacy.

Finke makes a key assumption in his paper that:

"higher education may proxy a lower cost of information acquisition, a lower rate of time preference, or may involve direct exposure to financial information through business or economics coursework—all of which will increase expected financial literacy. Because rates of educational attainment have risen in the United States during the 20th century (Day, 2010), younger cohorts may be more likely to have taken an economics or finance course in college. To mitigate the potential bias caused by lower educational attainment

in older cohorts, we estimate our model only on older respondents with a college or graduate school education" (Finke 8-9).

Section 2.2: OLS Results

To test this assumption, we conducted OLS regressions on both subgroups, measuring financial literacy using variables such as education, age, race, and debt. As shown in Figures 2.1 and 2.2, higher education is strongly associated with better financial literacy in both age groups. For young adults, the strongest positive impact on financial literacy is linked to having a Bachelor's, Master's, or Professional degree, all showing high significance. For middle-aged and elderly adults, education remains significant, with particularly strong effects for those holding Bachelor's, Master's, or Professional degrees. We also found that age does not significantly affect financial literacy in young adults, as the p-value is greater than 0.05. However, for middle-aged and elderly adults, age shows a significant positive relationship with financial literacy. This supports Finke's claims, which highlight a decline after age 60 when cognitive decline becomes more apparent. The middle-aged and elderly group (ages 31–65) encompasses a wide age range, including individuals who may still benefit from accumulated knowledge and experience (crystallized intelligence). These factors could mask the decline Finke refers to, which becomes more visible in older individuals who are no longer in the workforce.

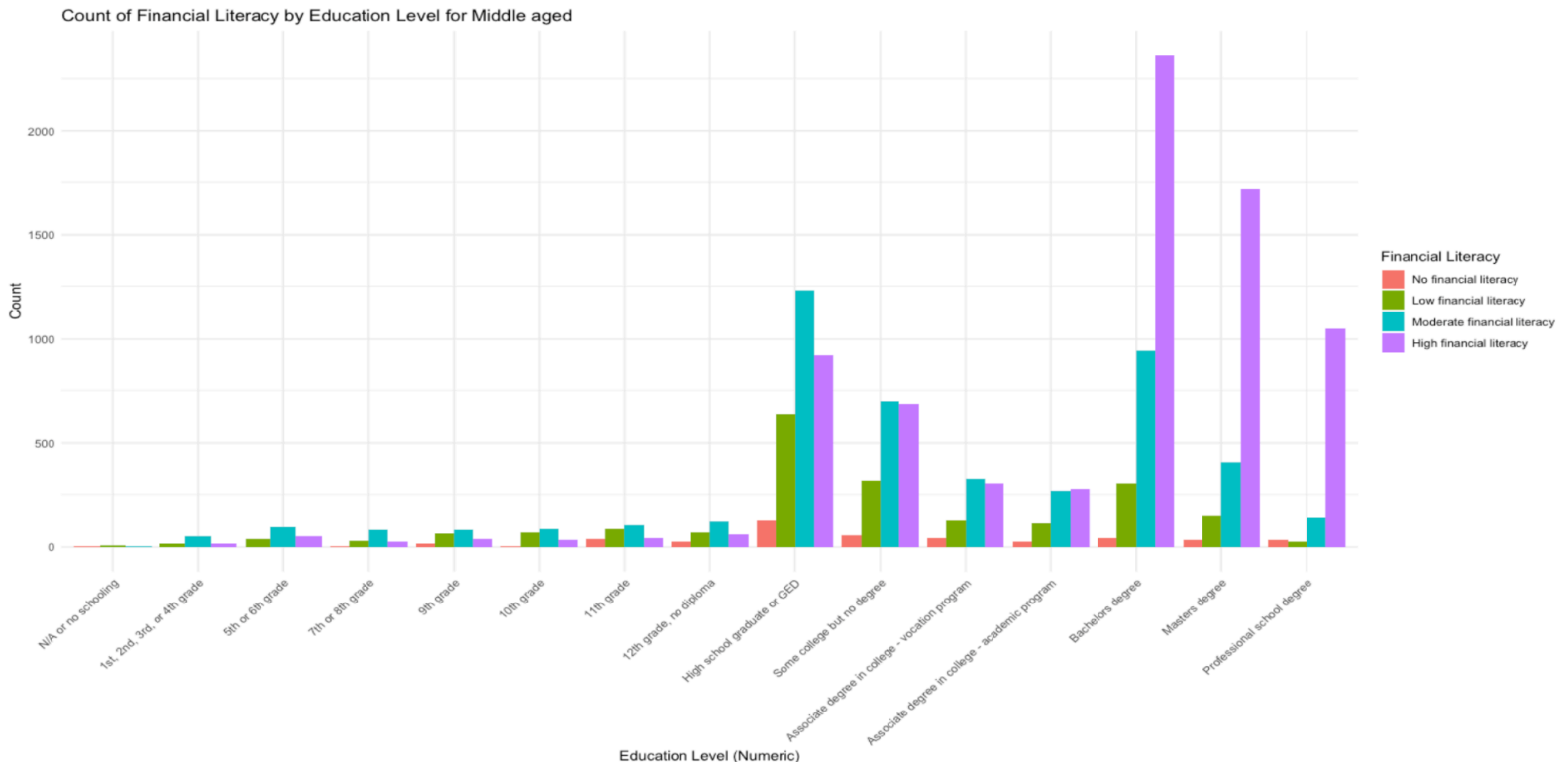
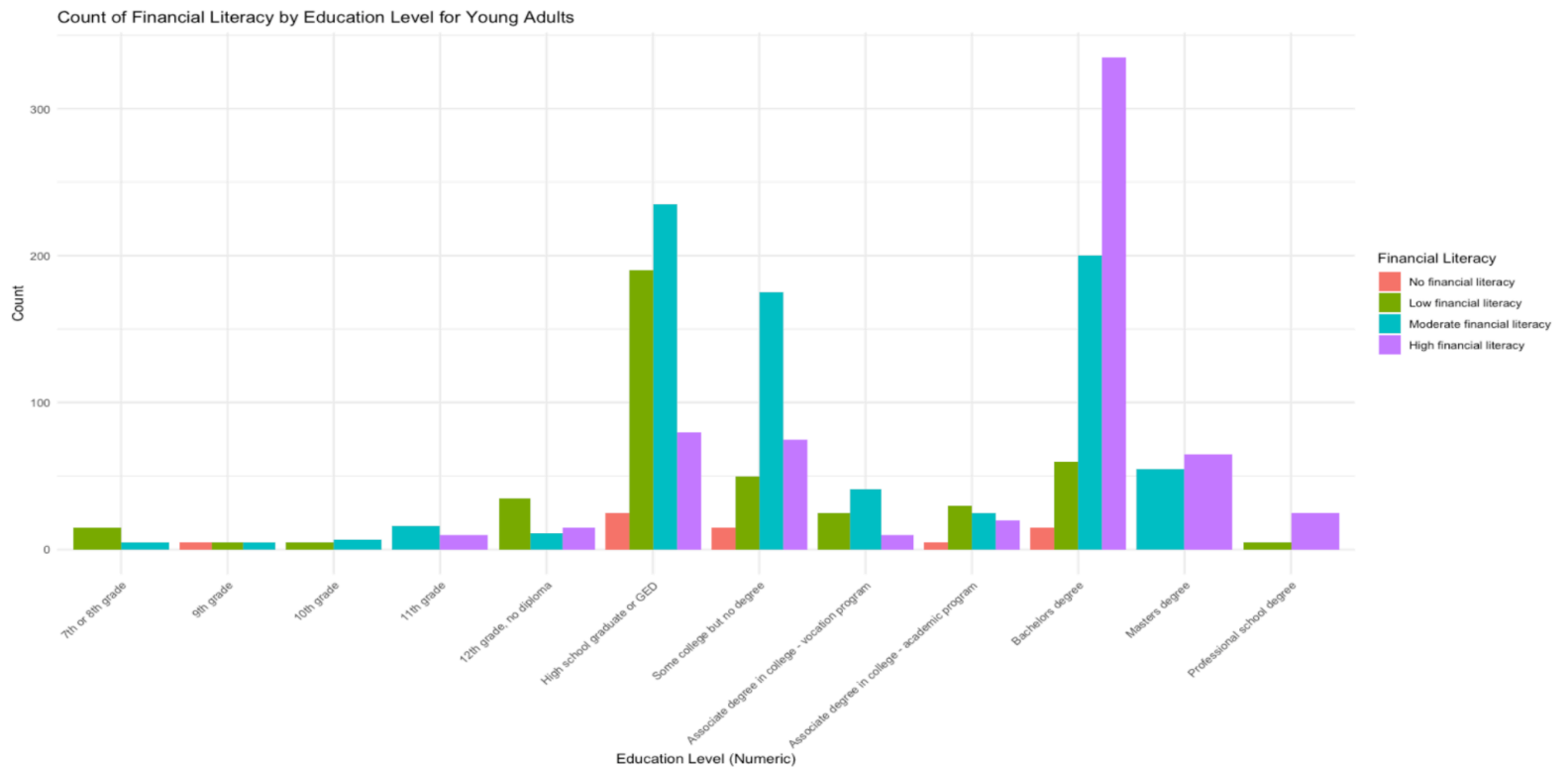


Figure 2.1. Count of Financial Literacy by Education Level for Middle Aged



The OLS regression analysis examines the relationship between debt and financial literacy, revealing significant differences between age groups. For young adults, moderate debt (ranging from \$50k to \$99.9k) shows a positive correlation with financial literacy, as shown in figure 2.3. This level of debt often includes student loans, car loans, or early mortgage commitments, requiring individuals to actively manage payments, understand interest rates, and navigate credit systems. Many young adults in this category are either completing or have recently completed higher education, which is also associated with improved financial literacy. In contrast, higher debt categories, such as \$200k–\$499.9k and \$500k+, show only borderline significance in their relationship with financial literacy, indicating a weaker or less consistent correlation. Among middle-aged and elderly individuals, as shown in figure 2.4, the correlation between debt and financial literacy is weaker. This may be due to factors such as financial stability, as many in these groups have reached a more stable financial position, reducing their debt or focusing more on retirement savings than acquiring additional financial knowledge. Additionally, their financial focus may shift from accumulating wealth to managing assets making the link between debt and financial literacy less direct. Older individuals may also have gained financial experience over time, which enables them to manage finances effectively even with debt, suggesting that financial literacy may be more related to experience than to debt levels. Interestingly, while moderate debt is beneficial for both young adults and older individuals, debt greater than \$200k begins to negatively affect financial literacy in middle-aged adults, highlighting a difference in how debt influences financial decision-making across different age groups.

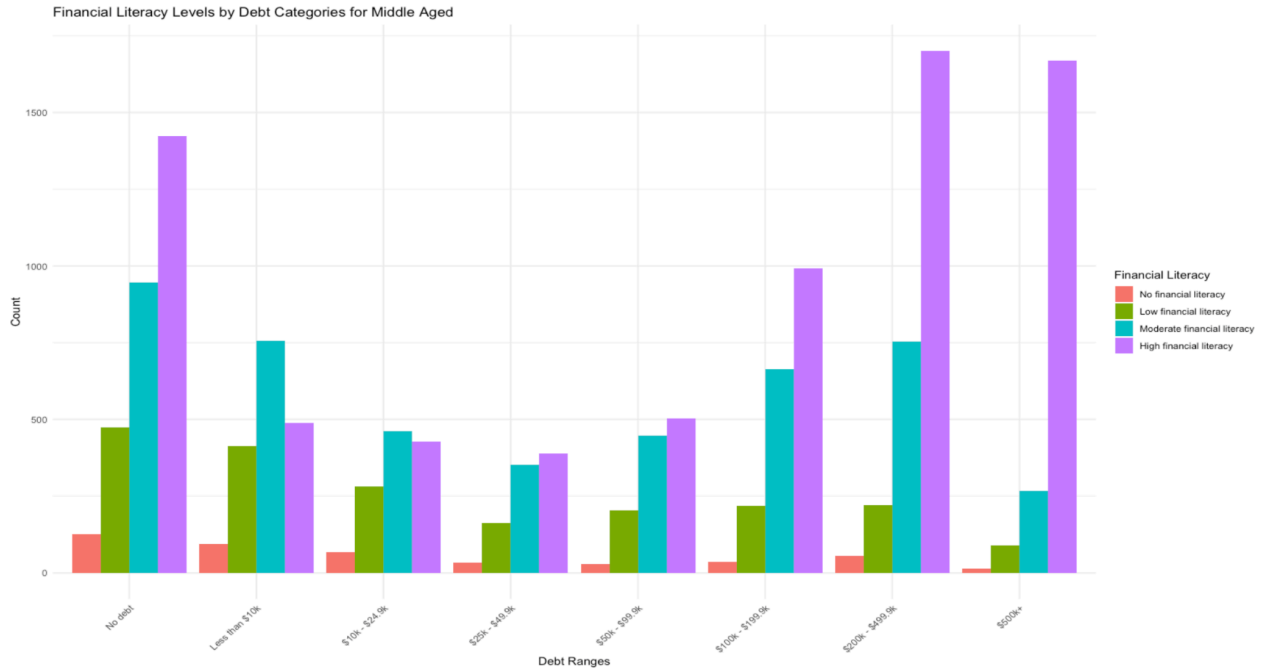


Figure 2.3. Count of Financial Literacy by Debt for Middle Aged

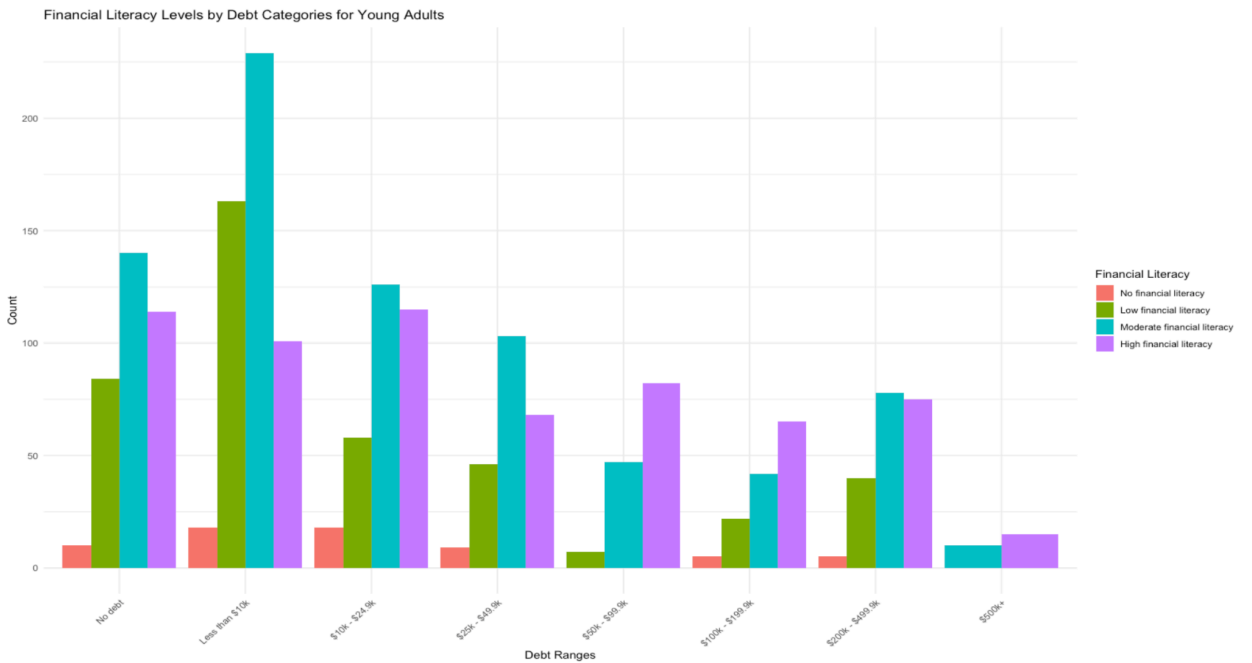


Figure 2.4. Count of Financial Literacy by Debt for Young Adults

Section 2.3: Logit and Errors

To better understand the relationship between financial literacy and key demographic factors, we will use financial literacy as a binary variable, focusing on individuals with a financial literacy score above level 1. This approach allows for a clearer analysis of how various factors, such as education, age, and debt levels, influence financial literacy. In both the young adult and middle-aged/elderly models, education level shows a strong influence on the likelihood of achieving financial literacy. For the young adult group, having a “Bachelor's degree” (coefficient = 3.52, p-value = $3.60\text{e-}10$) and a “Professional school degree” (coefficient = 3.08, p-value = $4.42\text{e-}05$) are strongly associated with a higher probability of financial literacy. Other levels of education, “High school graduate or having a GED” (coefficient = 1.83, p-value = 0.0008), also show positive effects on financial literacy, though to a lesser extent. In the middle-aged and elderly model, the relationship between education and financial literacy is similarly strong, with significant positive coefficients for education levels such as “Professional school degree” (coefficient = 3.41, p-value = $2.66\text{e-}10$), “Masters degree” (coefficient = 3.02, p-value = $1.08\text{e-}08$), and “Bachelors degree” (coefficient = 2.89, p-value = $3.90\text{e-}08$). Unlike the young adult model, almost all education levels in the middle-aged and elderly group show significant positive effects on financial literacy, indicating that higher education is consistently linked to better financial literacy in this older age group.

In the young adults model, certain debt levels are positively associated with financial literacy. Specifically, young adults with debts ranging from \$50k to \$99.9k have a coefficient of 2.21 ($p = 2.97\text{e-}06$), and those with no debt have a coefficient of 0.68 ($p = 0.0189$), both indicating a higher likelihood of financial literacy. However, the debt category of \$500k and

above has a very large coefficient of 17.30 but is not statistically significant ($p = 0.988$), suggesting no clear relationship with financial literacy. For the middle-aged and elderly group, the relationship between debt levels and financial literacy is more negative. Debts ranging from \$10k to \$24.9k (coefficient = -0.72, $p = 3.63e-14$) and debts less than \$10k (coefficient = -0.66, $p = 1.06e-13$) are significantly associated with lower financial literacy, indicating that higher levels of debt in these categories are linked to reduced financial literacy in this age group. In contrast, the \$500k and above debt category has a coefficient of 0.45 ($p = 0.000384$), showing a positive association with financial literacy, although the effect is weaker than that seen in the young adult group.

The confusion matrix analysis for both of the logit models reveals how well each model predicts financial literacy above level 1. In the young adults model, the model correctly identifies 373 true negatives (low financial literacy) and 964 true positives (higher financial literacy). However, it misclassified 112 individuals as having higher financial literacy (false positives) and 446 as having low financial literacy (false negatives). For the middle-aged and elderly group, the model accurately classifies 1,795 individuals as having low financial literacy (true negatives) and 7,957 as having higher financial literacy (true positives). Nonetheless, it misclassified 725 individuals as having higher financial literacy (false positives) and 4,283 as having low financial literacy (false negatives). Both models perform relatively well overall, but they show tendencies toward misclassifying certain individuals, particularly in the false positive and false negative categories. The young adults model tends to misclassify some individuals with high financial literacy as low, while the middle-aged and elderly model is more prone to misclassifying individuals as having low financial literacy. These misclassifications suggest that while financial literacy is a significant factor in both groups, other variables such as age, education, and debt

may also play a role in the models' predictions. Figures 2.5 and 2.6 illustrate how financial literacy is predicted based on the model.

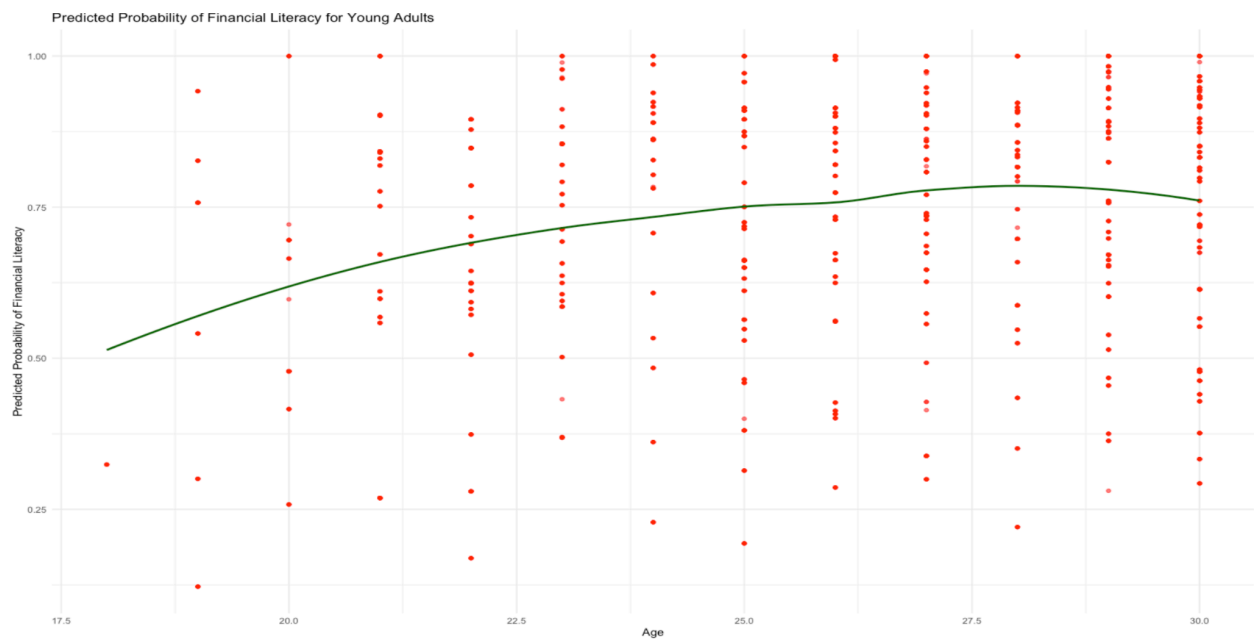


Figure 2.5. Predicted Probability of Financial Literacy for Young Adults

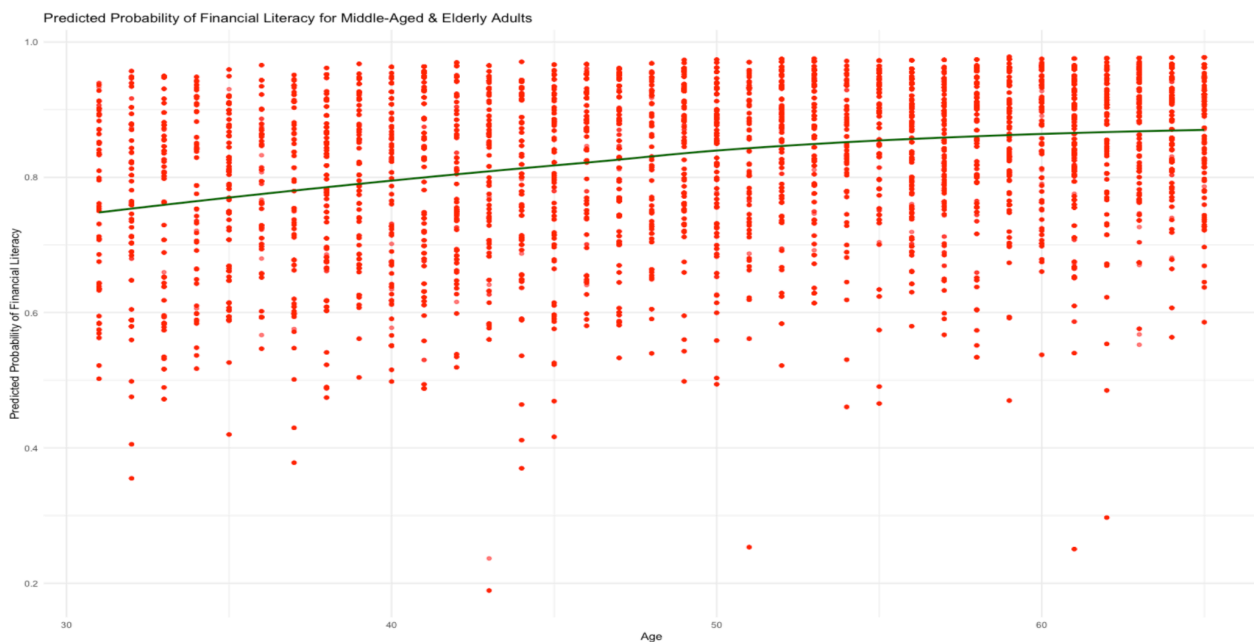


Figure 2.6. Predicted Probability of Financial Literacy for Middle Aged

Section 3.1: Family Compositions and Financial Behaviors

The paper "Desirable Family Financial Behaviors: An Examination of the Role of Family Structure in the United States" by Yu Zhang, Swarn Chatterjee, and Diann C. Moorman is one of the many studies performed that examine how family structures influence financial decision-making. Researchers have extensively explored the impact of family composition, such as marital status and the presence of children, on financial behaviors like saving, planning, and credit management. This paper highlights that married families, particularly those without children, exhibit stronger financial behaviors due to their ability to pool resources and make collaborative financial decisions. In contrast, single-parent families and cohabiting households often face greater financial burden, leading to lower rates of saving and financial planning. These results align with studies like Lusardi and Mitchell (2011), which emphasize the challenges faced by single-parent families in achieving financial stability.

However, there are notable differences across studies in terms of the specific financial behaviors examined and the conclusions drawn. For instance, while some research finds that cohabiting families undergo similar financial stress as single-parent households, others suggest that cohabiting families may attain financial advantages depending on the duration and stability of the relationship. These variations often stem from the datasets and methodologies used. The "Desirable Family Financial Behaviors" study utilizes the 2016 National Financial Well-Being Survey, which focuses on financial knowledge, behavior, and well-being. Other studies that rely on the "Survey of Consumer Finances" (SCF) may place emphasis on wealth and asset management rather than daily financial decisions. This leads to varying results.

Despite our success in understanding these household dynamics, many challenges still arise. One main issue the paper points to is endogeneity, as family structure and financial behaviors are often intertwined. For instance, financial stress can lead to changes in family composition, such as divorce or separation. Most existing studies rely on cross-sectional data, which makes it difficult to establish causal relationships. Furthermore, external factors such as access to financial markets and regional economic conditions can interfere with the results which leads to faulty conclusions.

Although the paper is leaning towards the idea that married families have better financial health, different authors have pointed out the varying driving factors of drivers of financial behaviors. Some studies stress the importance of financial literacy and education as one of the primary factors. They emphasize that increasing financial knowledge for individuals can improve their financial state in the long run. Others focus on structural factors like income inequality or systemic barriers to financial services, which would need new policies as solutions. These differences unveil an interesting perspective which is that on the individual level, we can resolve some issues with temporary solutions; however, if we want to directly tackle broader systemic challenges, we would need broader policy changes to battle financial disparities across family structures.

This "Desirable Family Financial Behaviors" paper also relies on regression analysis to identify relationships between family structure and financial outcomes. Although regression models are ideal for navigating correlations between variables, they often fail to address reverse causality and external factors. Techniques like instrumental variable (IV) regression have been used in some studies to resolve any upcoming endogeneity issues such as local financial literacy programs. Other econometric techniques that can further improve the research are

difference-in-differences (DiD) analysis, which can be used to evaluate the effects of changes in family structure over time.

The main datasets used in this research, like the National Financial Well-Being Survey and the Survey of Consumer Finances (SCF), are free and commonly used by researchers. They include a lot of valuable information about financial behaviors, demographics, and family structures, which helps answer important questions in this area. However, since these datasets are cross-sectional, they can't track changes in family structures or financial behaviors over time. In conclusion, while existing studies show how family structure affects financial behaviors, challenges like causality, hidden factors, and data limitations still need to be addressed. Future research should use advanced techniques like Difference-in-Differences (DiD) and focus on data collected over time to better understand these relationships. This will help create effective strategies and policies to improve financial well-being for all families.

Section 3.2 Results Overview

For middle-aged/elderly individuals, figure 3.1 demonstrated that "Other Family Type" households dominate food expense levels in the \$25,000–\$50,000 range. Single individuals and single parents generally fall into lower food expense categories, such as "Less than \$10K" or "\$10K–\$25K," suggesting limited financial flexibility for these family types. Married households seem to be evenly distributed across these lower food expense ranges, indicating moderate spending patterns. On the other hand, figure 3.2 shows that young adults have a clear constant reappearance of food expenses in the "Less than \$10K" category for married households, demonstrating their limited financial capacity for higher expenses. Single individuals and other

family types exhibit lower counts across all expense levels, emphasizing the restricted food budgets typical of this age group.

Figure 3.1. Food Expenses by Family Structure for Young Adults

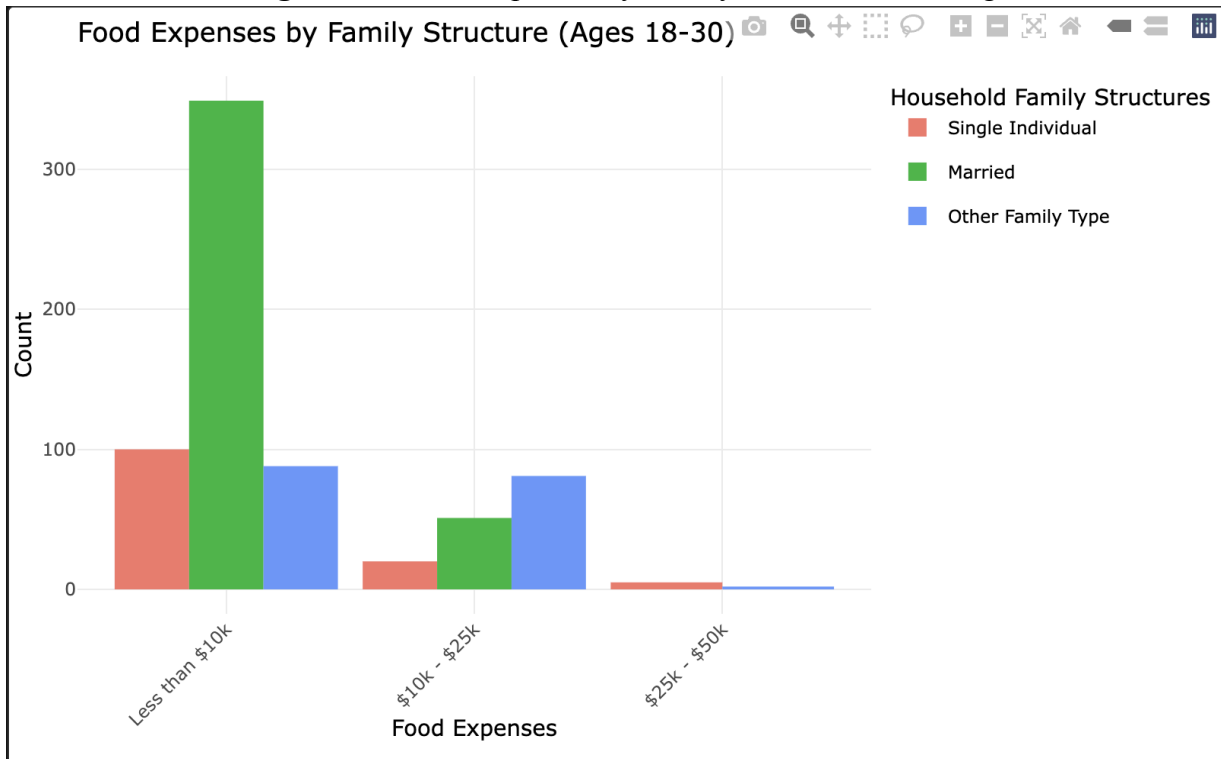
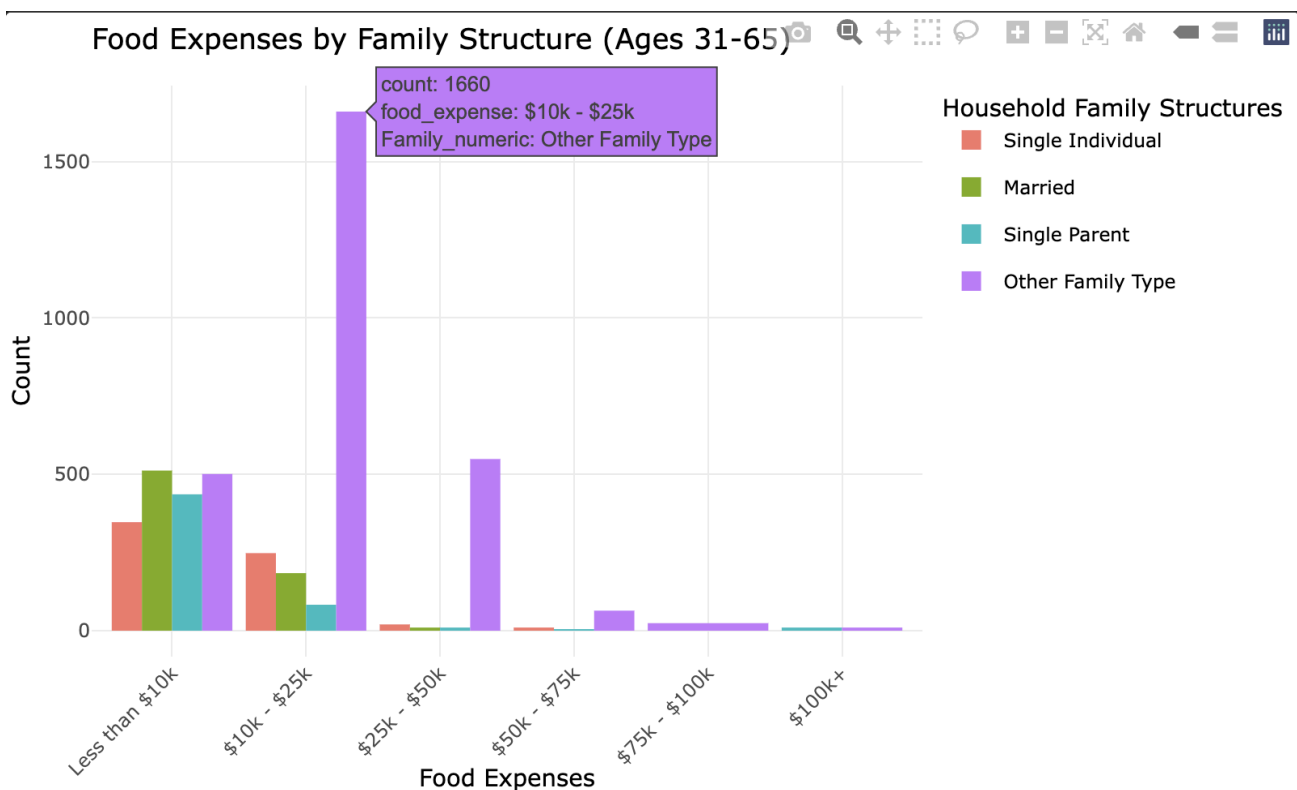
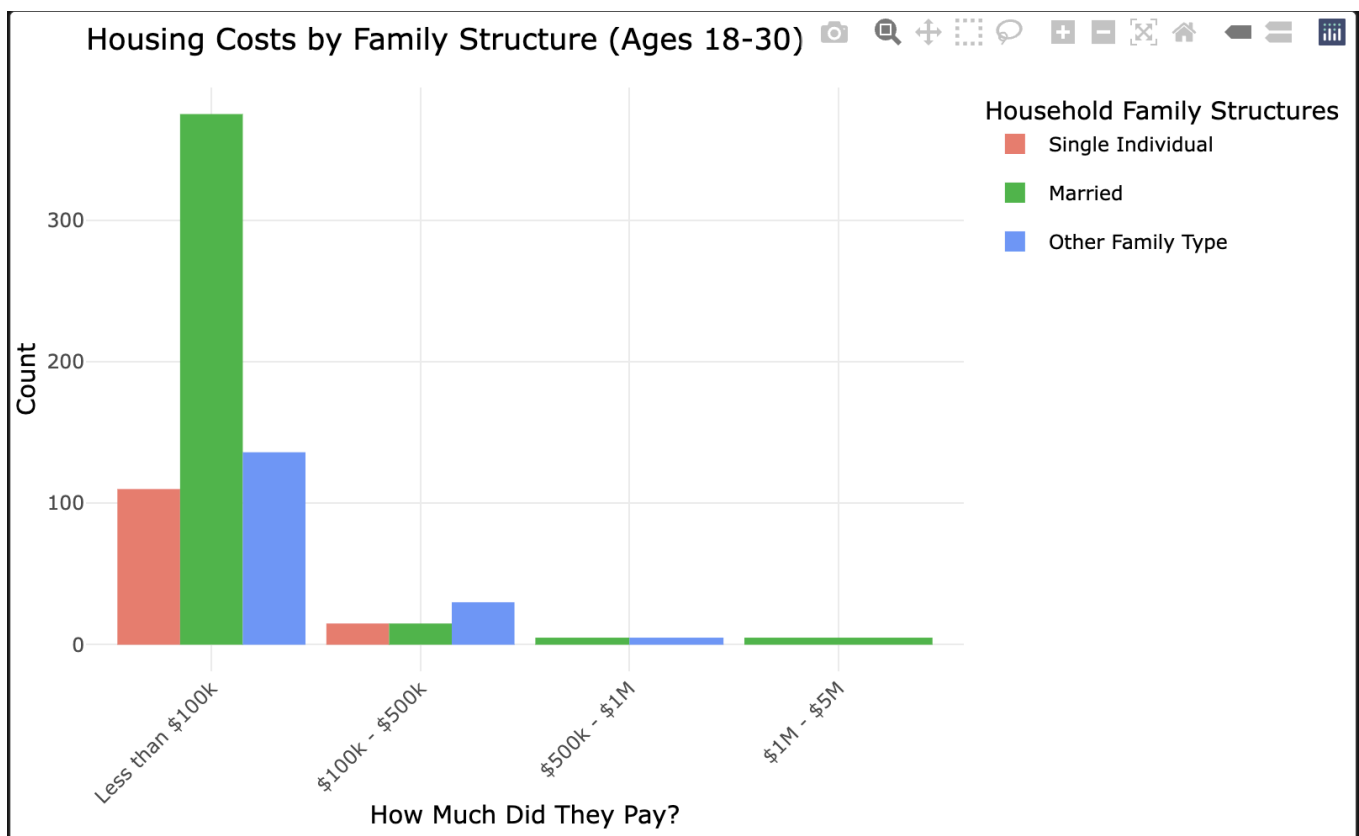


Figure 3.2. Food Expenses by Family Structure for Middle Age/Elderly



For middle-aged/elderly individuals in figure 3.3, "Other Family Type" households are most prominent in the "\$100K–\$500K" and "\$500K–\$1M" housing cost ranges, indicating significant financial resources or larger household sizes requiring higher costs. Single individuals and single parents are concentrated in the "Less than \$100K" range, reflecting financial constraints in housing expenses. Married households, while better represented in the "\$100K–\$500K" category, are also clustered in lower-cost ranges, showing financial moderation compared to "Other Family Types." For young adults, as shown in figure, married households overwhelmingly dominate the "Less than \$100K" range, suggesting affordability and perhaps smaller housing needs. Other family types and single individuals are also largely clustered in this category, consistent with the financial limitations of this subgroup.

Figure 3.2. Housing Costs by Family Structure for Young Adults



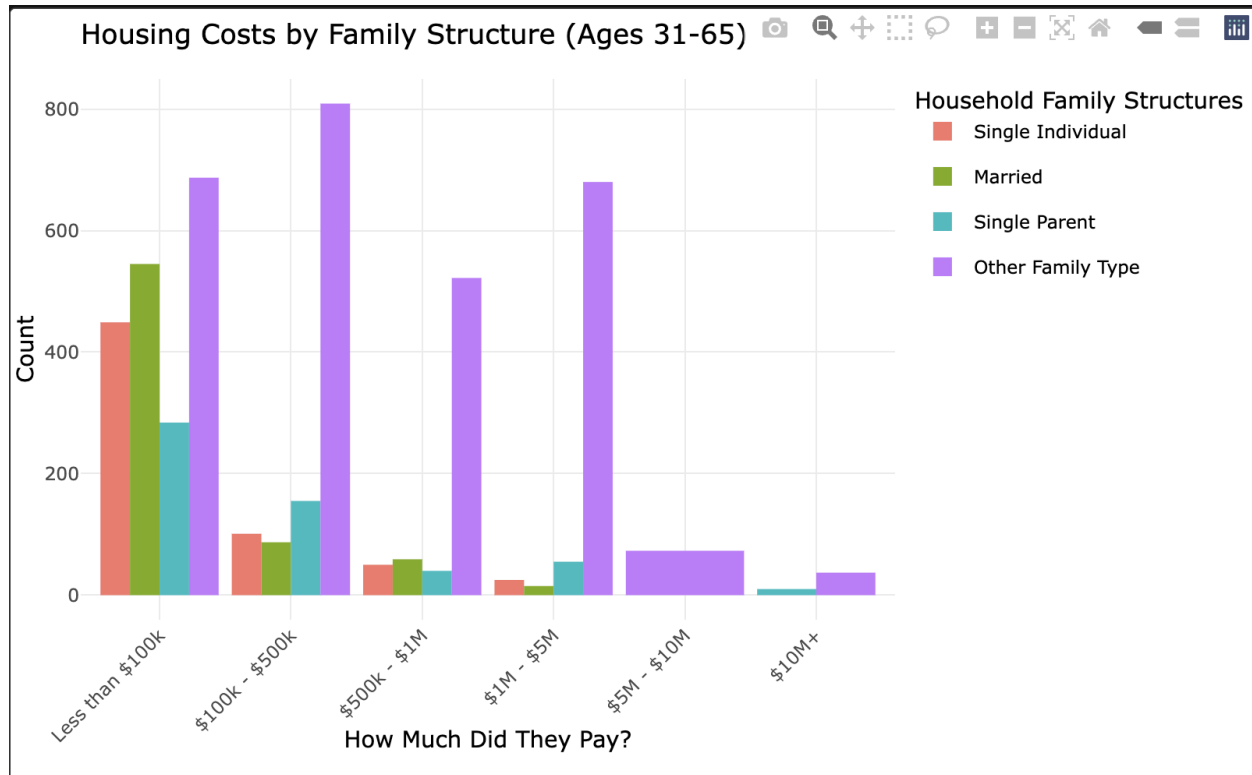


Figure 3.4. Housing Costs by Family Structure for Middle Age/Elderly

When comparing spending habits across asset levels, figures 3.5 and 3.6, middle-aged/elderly individuals show a higher count of people in the "\$25K–\$50K" and "\$100K–\$499.9K" asset ranges who equate spending to income. However, spending exceeding income is relatively lower across all asset levels, possibly reflecting better financial planning in this subgroup. For young adults, spending habits are more balanced across asset levels with a noticeable trend of spending equaling income at various levels. However, the counts are significantly lower compared to middle-aged/elderly individuals, reflecting limited asset accumulation at this stage of life.

Figure 3.5 Assets and Spending Habits for Young Adults

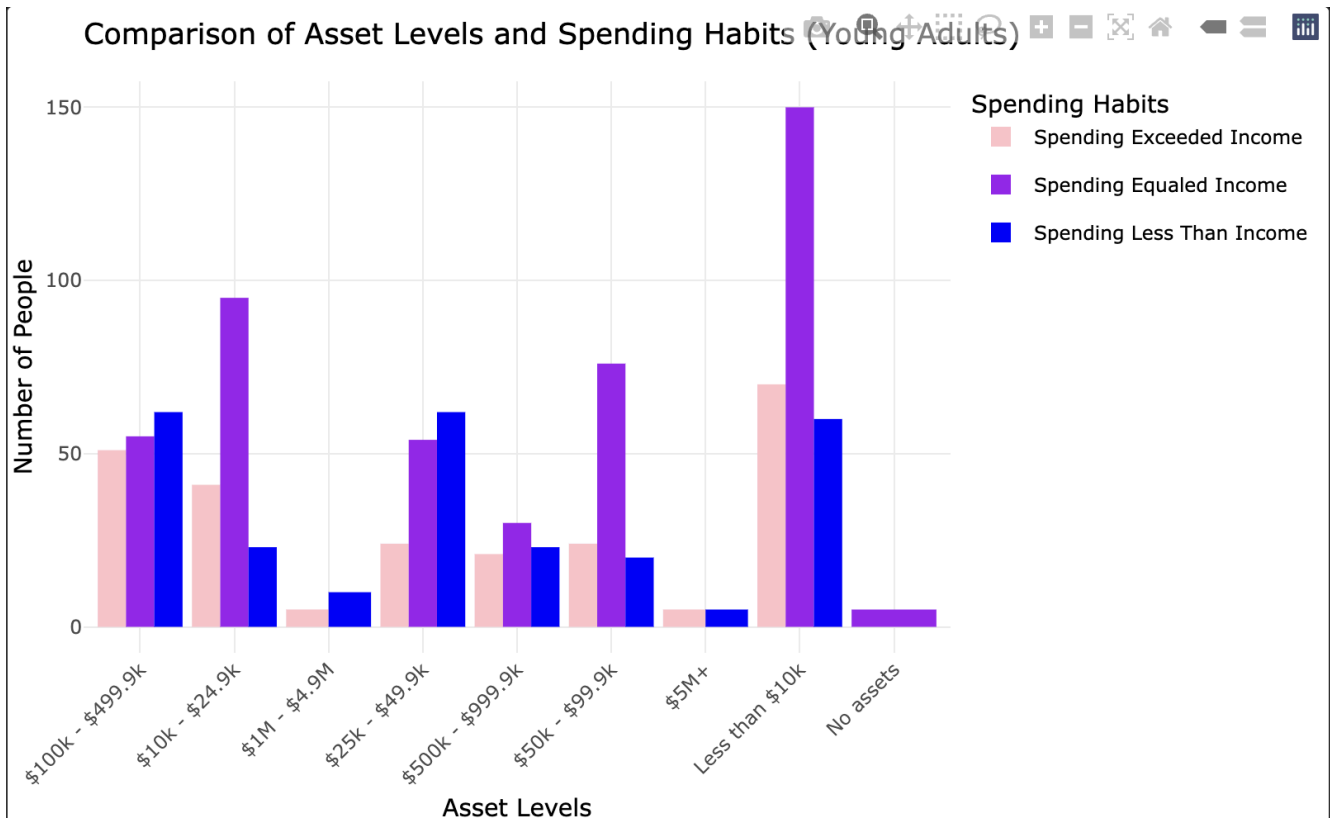
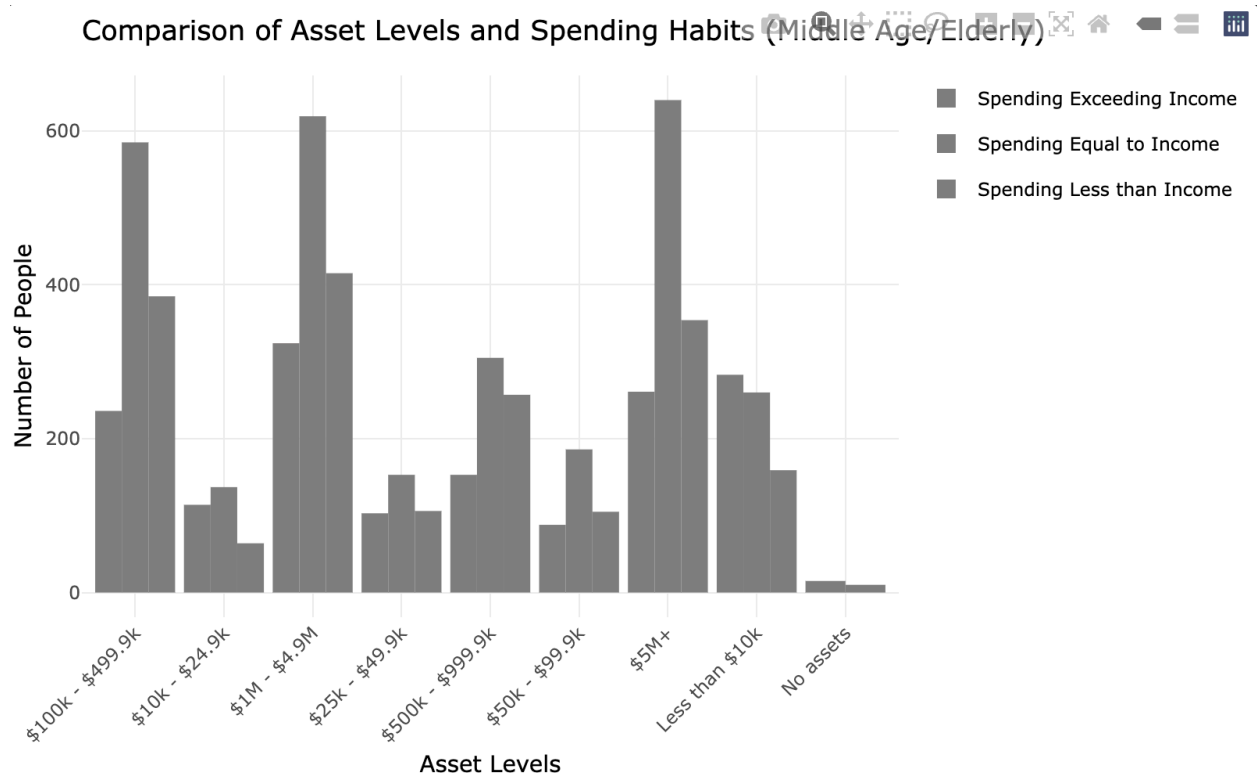


Figure 3.6 Assets and Spending Habits for Middle Age/Elderly



The logistic regression models for young adults (ages 18–30) and middle-aged/elderly individuals (ages 31–65) aimed to examine how asset levels, housing costs, and food expenses influence family structure. However, both models faced significant issues. In the young adult model, most predictors had coefficients close to zero with undefined standard errors, suggesting lack of variability in the data. Key variables, such as certain asset and housing categories, were omitted due to singularities, indicating overlapping information among predictors. Similarly, the middle-aged/elderly model exhibited undefined values for multiple predictors. Both models had near-zero deviance values and very low AIC scores, reflecting poor fit and limited explanatory power.

In the young adult subgroup, the scatter plot (Figure 3.7) shows a weak positive relationship between income and yearly food expenses. Most data points are clustered in the lower ranges of both income (below \$50,000) and food expenses (below \$10,000), suggesting limited financial capacity in this age group. The trend line indicates a slight increase in food expenses as income rises, but the relationship appears minimal, as there is significant variability in spending across income levels. For middle-aged and elderly individuals, the scatter plot (Figure 3.8) similarly reveals a weak positive relationship between income and food expenses. However, this subgroup displays a wider range of income and food expenses, with some outliers showing expenses as high as \$40,000 annually. The trend line again shows a slight upward slope, indicating that food expenses tend to increase with income, but the relationship remains weak and scattered.

Figure 3.7 Food Expenses and Income for Young Adults

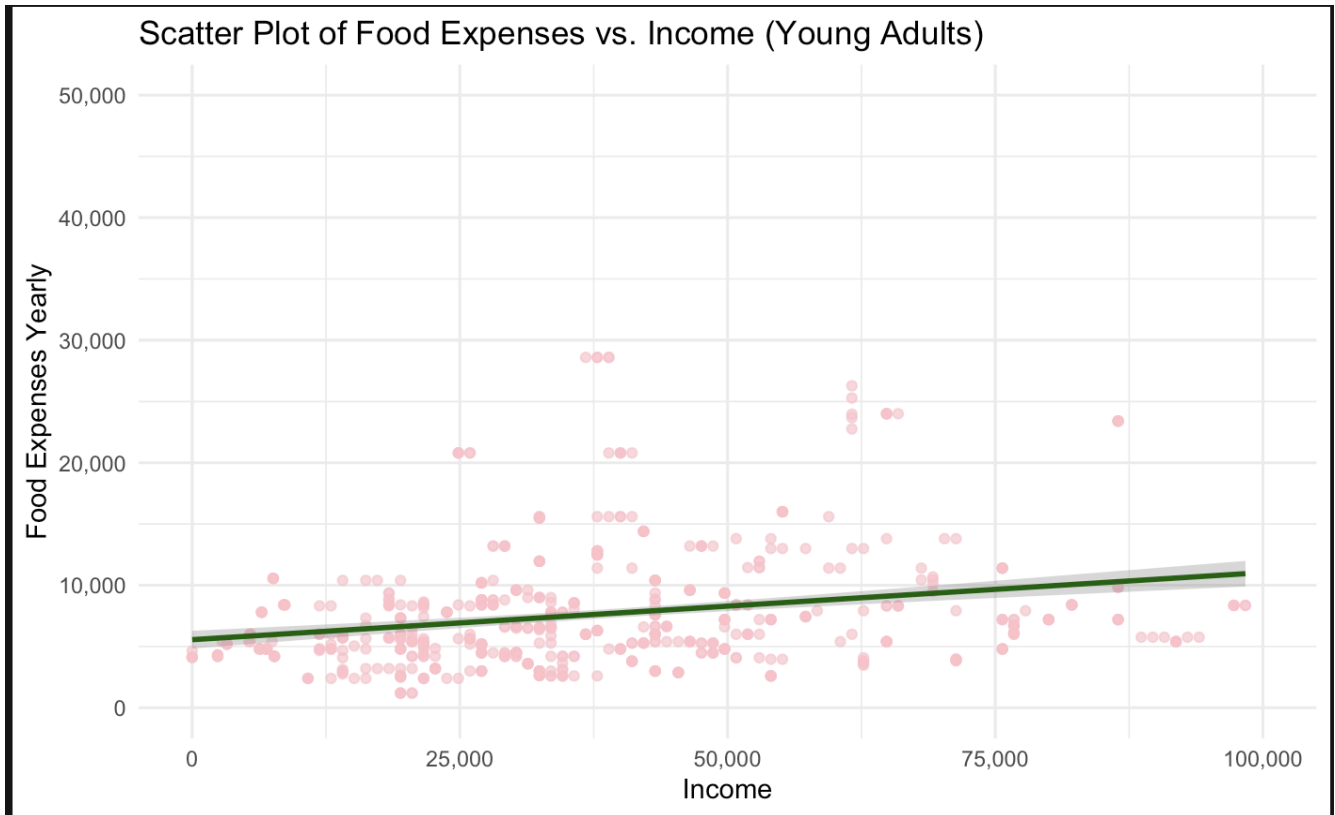
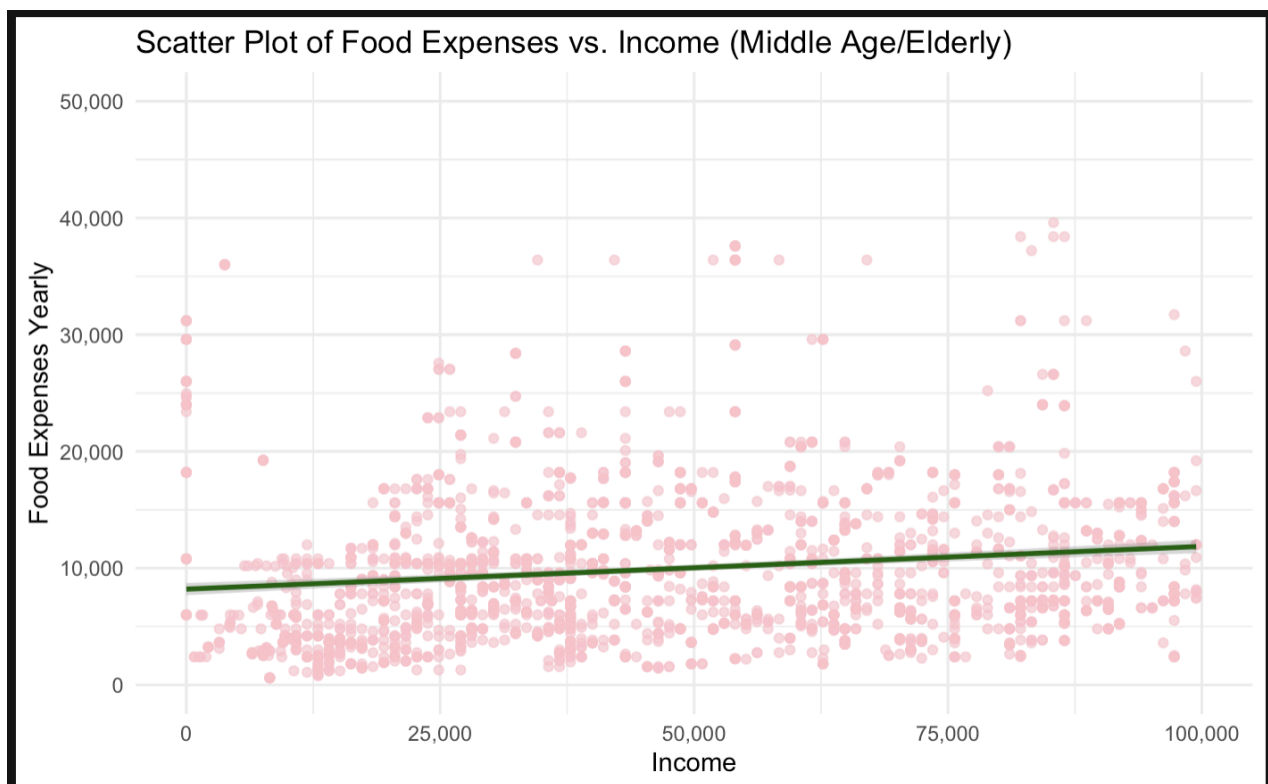


Figure 3.8 Food Expenses and Income for Middle Age/Elderly



The scatter plot for young adults (Figure 3.9) shows a weak positive trend between income and monthly rent payments. Most data points are clustered below \$1,500 in rent, even for individuals with incomes up to \$50,000. This indicates that young adults, regardless of income, generally occupy more affordable housing. The trend line reflects a minimal increase in rent as income rises, but the variability within rent values is substantial. In the middle-aged/elderly subgroup (Figure 3.10), the scatter plot shows a slightly stronger relationship between income and rent compared to young adults. While most rent payments are clustered below \$1,500, some individuals with higher incomes pay upwards of \$3,000 or more. The trend line exhibits a small positive slope, suggesting that rent tends to increase with income, but the overall relationship remains modest.

Figure 3.9 Rent and Income for Young Adults

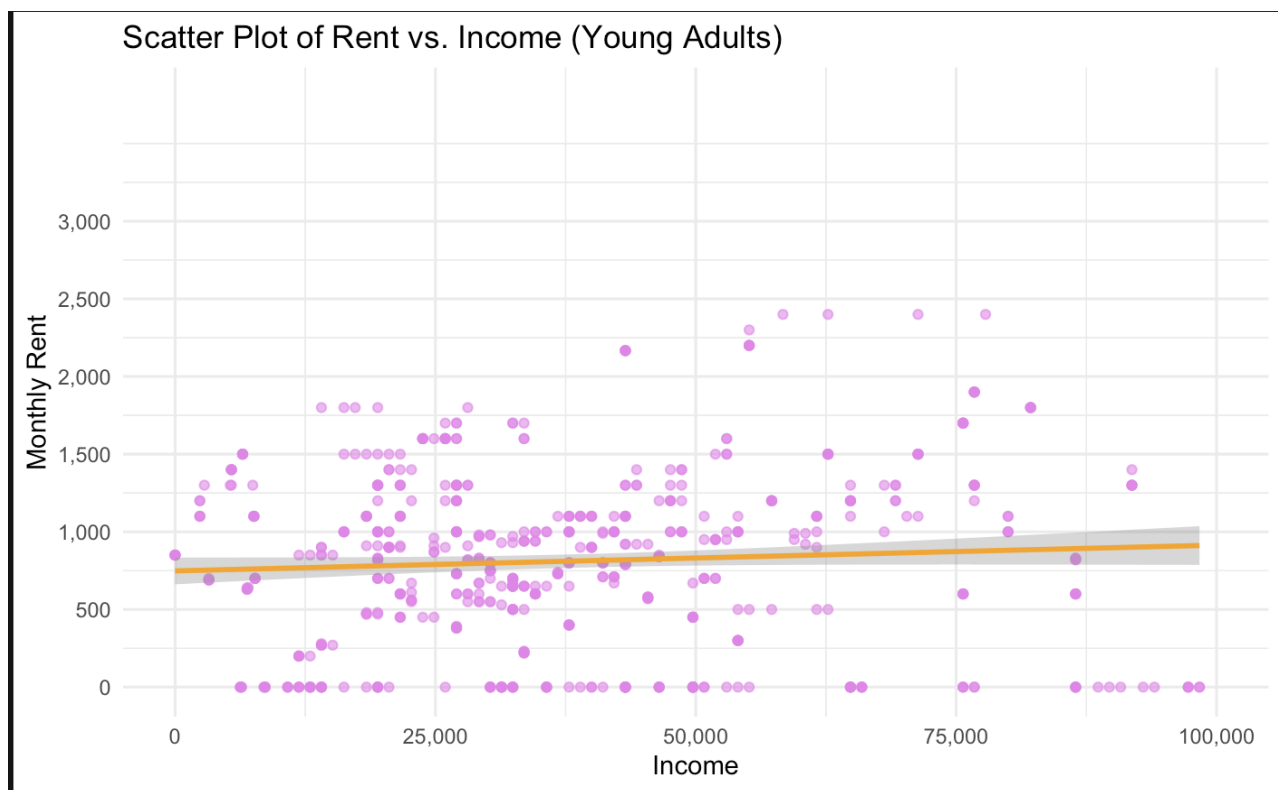
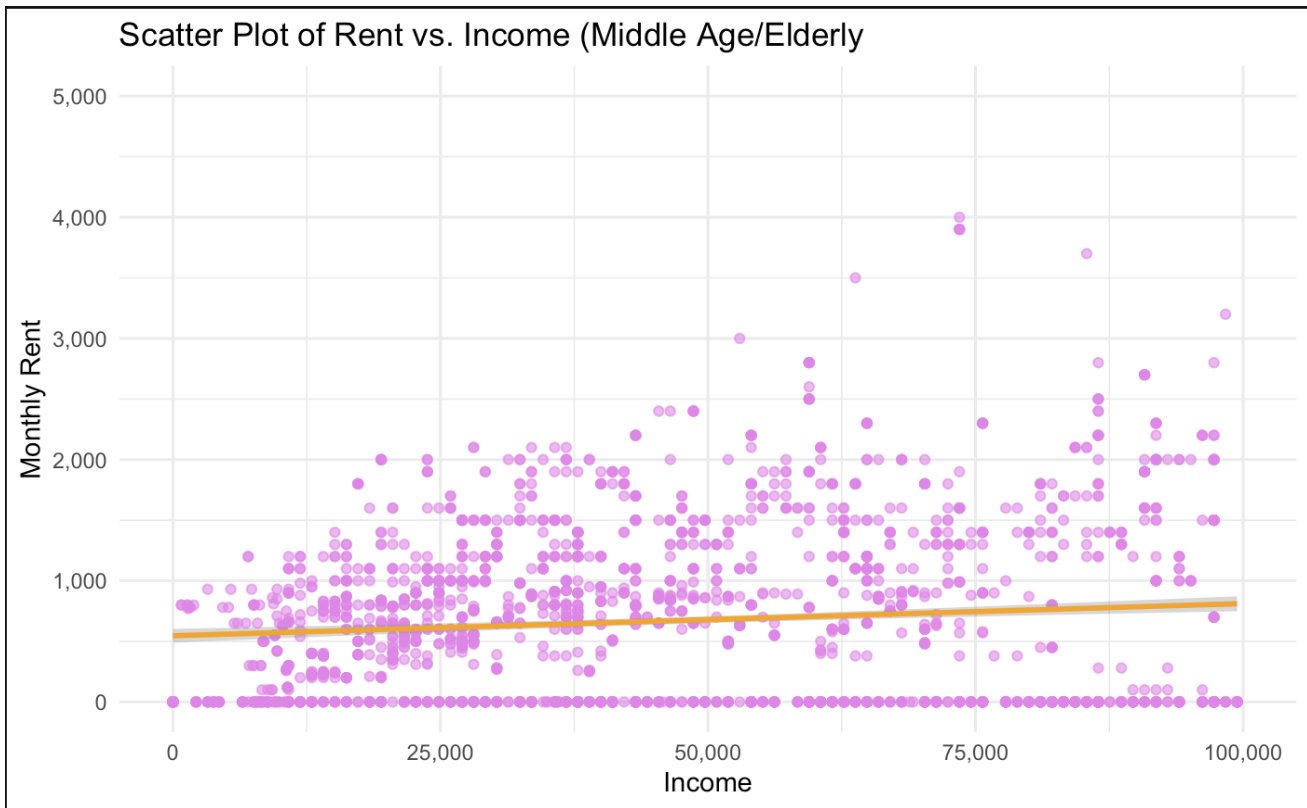


Figure 3.10 Rent and Income for Middle Age/Elderly



Conclusion

This project offers a comprehensive analysis of financial health by comparing young adults (18–30) to middle-aged and elderly individuals (31–65) across key financial dimensions. The findings consistently show that financial responsibility and stability improve with age, primarily due to differences in spending habits, debt burdens, investment behavior, and financial literacy. Section 1 highlights the significant burden of student loans on young adults, which leads to higher debt-to-income ratios (mean 0.45 vs. 0.25) and lower net worth. This financial strain restricts investment behavior, with young adults' participation in stocks and bonds being 25%

lower compared to older households, who face only a 10% reduction. These results underscore the challenges young adults face in building wealth early in life.

A complementary analysis of spending habits, asset accumulation, and housing costs reveals that young adults tend to overspend, hold fewer assets, and face higher relative housing costs. In contrast, middle-aged and elderly individuals exhibit greater financial discipline, evidenced by higher asset ownership, lower housing burdens, and a better alignment of income and expenses. These trends support the hypothesis that older individuals are better equipped to manage financial responsibilities. Section 2 explores the influence of education, debt, race, and age on financial literacy. Education emerges as a key driver of financial knowledge in both age groups, with advanced degrees having a more significant impact on middle-aged and elderly individuals. Debt plays a dual role: moderate levels of debt enhance financial literacy for young adults, while high debt levels negatively affect financial literacy among older individuals. Racial disparities also persist, influencing both access to financial education and literacy outcomes across the groups.

Taken together, these analyses consistently reject the null hypothesis that financial health is the same for young adults and middle-aged/elderly individuals. Instead, the results confirm that middle-aged and elderly individuals exhibit better financial health, largely due to greater financial literacy, wealth accumulation, and reduced sensitivity to debt burdens. The evidence underscores the evolution of financial outcomes over time, shaped by life stages, education, and systemic factors.

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