U.S. Households' Homeowners Insurance and Financial Well-being

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Abstract

This study investigates the association between U.S. homeowners insurance decisions and financial well-being, specifically examining the moderating role of financial literacy. Utilizing weighted cross-sectional data (2019–2022) from the Understanding America Study (UAS), we employ Ordinary Least Squares (OLS) regression to analyze how voluntary insurance uptake among outright (mortgage-free) homeowners relates to subjective financial security. Our findings reveal that insured outright owners report significantly higher levels of financial well-being compared to both renters and uninsured owners. Furthermore, interaction models demonstrate that financial literacy acts as a critical cognitive moderator; the positive association between insurance and well-being is strongest for households with medium-to-high financial literacy, suggesting that literacy enables homeowners to better realize the utility of risk-transfer mechanisms. To ensure the integrity of our results, we addressed heteroskedasticity using bootstrapping and Robust Variance-Covariance Estimates and mitigated selection bias through Nearest-Neighbor Matching, which confirmed a robust Treatment Effect. These results suggest that while housing equity provides a baseline for security, formal insurance is essential to maximizing financial well-being. Implications for policymakers include the need to incentivize insurance among mortgage-free households and integrate financial literacy modules into housing programs. For financial planners, the study highlights the importance of addressing socio-economic and cognitive differences when advising clients on risk management and asset protection.

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I. INTRODUCTION

In light of recent economic fluctuations and the growing environmental hazards, the relationship between financial well-being and householders' insurance is a critical study area. A financial situation that is beneficial and enables individuals to meet their financial obligations while maintaining a sense of security and freedom from financial threats is broadly defined as financial well-being (Consumer Financial Protection Bureau, 2017b). A safety net against prospective losses is provided by homeowners insurance, which is essential for financial well-being. Natural disasters have an especially large effect on the

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financial stability of homeowners. Sass et al. (2015) have conducted research indicating that homeowners with pre-existing financial vulnerabilities are disproportionately affected by the financial effects of calamities like Hurricane Harvey. These adverse effects can be substantially mitigated, and financial stability can be maintained in crises by providing adequate insurance, such as flood insurance. Many U.S. households are underinsured or lack adequate coverage, even though homeowners insurance provides critical protection (Consumer Federation of America [CFA], 2024). CFA (2024) research shows that nearly 20% of U.S. household residents are underinsured. This implies that householders would be responsible for a significant portion of the repair or reconstruction expenses in the event of a disaster (Insurance Information Institute, 2021). The long-term financial health of households is affected by this coverage disparity.

Homeowners insurance has become more crucial than ever in an era where the frequency and intensity of natural disasters are rising. 20 distinct billion-dollar weather and climate calamity events occurred in the United States in 2021, resulting in substantial financial distress and property damage for the families affected (Smith, 2023). Yet, despite its importance, recent research indicates that many households remain underinsured, placing them at heightened risk of financial instability. After a natural disaster, households with sufficient homeowners insurance coverage reported a faster financial recovery and fewer financial strains than those without adequate coverage (Collier & Kousky, 2024). This emphasizes the significance of homeowners insurance in maintaining financial resilience and risk management, particularly during periods of economic instability. After considering these dynamics, it is imperative to investigate the relationship between financial well-being and homeowners insurance to comprehend the extent to which insurance coverage influences the financial resilience of households.

Using the Expected Utility theory, this paper examines how homeowners insurance decisions are associated with their financial well-being and whether financial literacy moderates this relationship. With rising insurance premiums and climate change-related hazards, this research addresses an important and relevant problem that impacts millions of American households. While the broad link between insurance and financial stability is well-established in the context of disaster recovery and macroeconomic resilience, the internal mechanisms that translate coverage into subjective well-being remain underexplored. This study provides a nuanced extension of existing literature by addressing three specific gaps: First, it isolates outright (mortgage-free) homeowners. Unlike previous studies that focus on the general population, this research looks at a group exempt from lender-mandated coverage to observe purely voluntary risk-mitigation behavior. Second, it utilizes the CFPB Financial Well-Being Scale. This shifts the focus from objective wealth metrics to a validated psychometric measure of financial security and 'peace of mind. Third, it examines the interaction effect of financial literacy. Rather than treating literacy as a standalone predictor, we test whether insurance is the 'mechanical tool' through which households apply their financial knowledge to achieve higher well-being.

II. LITERATURE REVIEW

While the connection between insurance and financial stability is established, existing research often conflates mortgage-mandated insurance with voluntary risk management. This study distinguishes itself by isolating outright homeowners, thereby removing the 'coercion' of mortgage requirements and allowing the pure relationship between voluntary insurance and subjective well-being to be observed.

A. *Home Insurance Predictors*

Home insurance is a highly essential financial protection product that evolved from fire insurance, which originated in London in the late 17th century. Later, this product became popular in the United States in the mid-19th century (Baker & McElrath, 1996). Home insurance, initially developed to protect homeowners from fire damage, has expanded its scope to provide comprehensive protection, including various property and liability coverages (Baker & McElrath, 1996; McAneney et al., 2016). Home insurance is interlinked with historical developments and societal needs and is influenced by various socio-economic, environmental, and psychological factors (Booth & Kendal, 2020). This type of financial protection provides homeowners with peace of mind by covering repair costs and liability claims (Shiller & Weiss, 1999). The decision to have a home insurance policy is influenced by various factors, including socio-economic and environmental factors (Ivčević et al., 2021). A growing body of research has

emphasized identifying its key predictors, which have been extensively studied across various dimensions. These include personal, economic, social, and environmental factors. Initial studies, such as Banker and McElrath's (1996) study, focused on personal factors. Their findings reveal that higher income, age, and education levels are positively associated with home insurance. Moreover, their findings also highlighted significant ethnic disparities, with Hispanics and Blacks having lower tendencies to avail themselves of insurance than non-Hispanics. In addition, Banker and McElrath (1996) found evidence of bias in the insurance claims process; they postulated that insurance adjusters' delays in payment lead to unconscious bias. Another study by Grace, Klein, and Philips (2001) examined economic conditions as essential predictors of home insurance in Texas urban markets. Their study calls for promoting safety and improving economic stability to increase demand for home insurance. For instance, they postulate that homeowners are more likely to invest in insurance when the economy strengthens, thereby incentivizing them to protect their assets. These findings reflect the interplay between economic security and insurance uptake. In addition to the above factors, Zolfagharian et al. (2020) emphasized consumer perceptions as an essential element in determining homeownership. For instance, in their findings, they have found that, despite equitable industry practices, Mexican Americans, relative to the majority of the White population, often considered home insurance as a financial burden rather than essential coverage. This perception is deeply rooted in many homeowners' structural and institutional circumstances. In this manner, Zolfagharian et al. (2020) postulate that cultural differences play a significant role in shaping perceptions of home insurance purchase.

Also, environmental factors have increasingly been used to explain home insurance uptake, particularly in light of climate change. Melser and Ruthbah (2024) also posited that climate change is rapidly changing the dynamics of insurance through physical risks, including fire, flood, and storms. In a study by Melser and Ruthbah (2024) comparing insurance uptake and exposure to climate-related risks, it was observed that climate change hurt insurance uptake. In addition, Ivčević et al. (2021) investigated residents' willingness to purchase home insurance in Italy's coastal wetlands. Their study concluded that people are now more conscious of climate change and are willing to adopt prevention measures. This indicates that increasing environmental threats increase the likelihood of needing to insure against them. Similarly, Lyubchich et al. (2019) found that climate change is an important predictor of home insurance; they postulate that local extreme weather events are causing greater losses than large natural disasters. For instance, they have found that the growing insurance risks associated with climate change are often underestimated. This has raised concerns among insurers about the adequacy of current pricing. The frequency of adverse weather events has increased significantly, ushering in a new era of risk that requires greater attention to environmental predictors of home insurance.

Another critical predictor of home insurance is the degree of homeowners' awareness of its benefits and disadvantages. For example, Mathur and Paul (2024) found that objective and subjective knowledge of home insurance significantly affects homeowners' perceived benefits and risks of disaster loss. Homeowners with considerable knowledge have a positive attitude towards home insurance. This positive attitude toward home insurance makes them feel more secure against catastrophic events and motivates them to buy it. In addition, Biswas and Vessal (2024) showed that product innovation and pricing are critical factors that affect homeowners' decisions to take home insurance. They examined the effects of the "smart" home insurance products that integrate conventional solutions with smart home technology to give customers better protection against risks. Their findings indicate that attractive pricing for these new products can lead to fewer losses for insurance companies while also offering greater value to customers. There is a similar study by Dominique-Ferreira et al. (2016), which focused on price as one of the most important factors influencing home insurance and found that price sensitivity depends on factors such as bundled discounts, brand loyalty, and the level of purchase involvement. Therefore, numerous variables influence home insurance, including those related to products, as well as personal, economic, social, and environmental factors. Various significant factors, including economic conditions, cultural attitudes, climate change, innovations, and personal attributes such as age, income, and education, influence household behavior. Individuals also become more informed and careful about insurance as the danger of climate change increases. In reaction to these many factors, the house insurance market will continue to change.

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B. *Home Insurance and Household Financial Behavior*

Home insurance is very important in determining financial behavior within the house since the choices made concerning the level of insurance taken reflect other aspects of financial management, risk-taking, and future planning. The connection between home insurance and household financial behavior has been of interest to scholars in recent years, as they seek to understand how economic conditions, financial literacy, and risk-taking propensity affect homeownership protection. Gropper and Kuhnen (2021) analyzed the relationship between household economic status and insurance penetration. The authors also found that higher-income households have better life and property insurance than lower-income households, contrary to the theoretical prediction that wealthy people should not insure their property. This difference shows how financial literacy, liquidity, and legal risks influence insurance and can increase existing inequalities between households.

Another important aspect of the literature on home insurance and household financial behavior is the impact of economic security and the decision to purchase insurance. Households with higher incomes and greater savings are likely to invest in homes (Brounen et al., 2016). A study by Gropper and Kuhnen (2021) found that financially secure households view insurance as an essential investment that safeguards their homes against risks such as natural disasters, theft, or accidents. This financial behavior postulates that the ability to absorb financial shocks without significant disruption is a key motivating factor in availing of home insurance. However, financial constraints can cause underinsurance or no insurance at all. The low-income earning strata may have to meet their basic needs, such as paying for their mortgages, electricity, food, and other basic needs, rather than insurance premiums. This dynamic is analyzed by Wakker, Thaler, and Tversky (1997), who observed that risk-averse and financially constrained consumers rarely purchase insurance, even though they recognize its need. They also found that financial considerations, and hence limited disposable income, influence the purchase of home insurance, resulting in gaps in protection, especially for low-income earners. This dynamic suggests that homeowners insurance is a primary pillar of household financial resilience, the capacity to endure and recover from economic shocks (Salignac et al., 2019). While typical resilience studies focus on liquid savings, the role of asset insurance is distinct because it prevents 'asset depletion.' For outright homeowners, who often have the majority of their net worth tied up in home equity, insurance acts as a formal risk-transfer mechanism that preserves the household's long-term financial trajectory, turning 'vulnerable equity' into protected wealth (Kousky, 2019).

Furthermore, financial literacy has been identified as an important factor in households' decision-making regarding home insurance. In the same way, households with higher levels of financial literacy will likely make better decisions about the type of insurance to buy and the level of coverage. According to the study by Lusardi and Mitchell (2014) on the effects of financial literacy on insurance decision-making, individuals with a good understanding of insurance products are more likely to seek a comprehensive home insurance policy. On the other hand, the less aware of the potential for financial risks, the more likely the person is to either underinsure the property or not insure it because of misconceptions about the cost of insurance or its value. This is a clear indication that there is a need for financial education programs that inform the public about the importance of home insurance in household financial planning. Risk perception is another important factor that shapes the financial behavior of homeowners seeking insurance. Homeowners who are highly exposed to disasters or accidents will likely purchase insurance. However, even in high-risk areas, some households underestimate the probability of catastrophic events and are less inclined to buy home insurance-related financial products (Kunreuther, 2015). This situation is called the "availability heuristic," leading homeowners to make insurance decisions based solely on their experiences rather than on statistical probabilities (Dumm et al., 2020). In this manner, we can infer that, even when households are financially capable of purchasing insurance, their risk perception significantly influences their insurance purchase behavior. This introduces a behavioral finance lens to the study of insurance uptake. For outright homeowners, the decision-making process is not governed by institutional mandates but by 'choice architecture. Under this framework, households may succumb to loss aversion, where the certain, immediate loss of a premium payment is perceived as more painful than the uncertain, future utility of protection (Kunreuther et al., 2013). This behavioral bias suggests that without the nudge of a mortgage requirement, cognitive factors and financial literacy become the primary determinants of

whether a household acts according to rational utility models.

In addition to risk perception, behavioral biases are also important elements in deterring the financial behaviors of homeowners. Research on behavioral economics, such as Kahneman and Tversky (2013), found that different households have varying degrees of "loss aversion," i.e., some are more sensitive to potential losses than equivalent gains. The individual with high loss aversion seeks to avoid potential losses. Thus, the phenomenon known as myopic behavior can be observed; households prefer to pay for insurance premiums in the short run rather than think about the future benefits of insurance (Illiashenko, 2017). Another important aspect of home insurance and household financial behavior is the effect of mortgage requirements. Most homeowners purchase such insurance to fulfill the requirement of obtaining a mortgage. Studies by Campbell (2012) have shown that households with mortgages are more likely to avail of home insurance because it is an obligatory product for a mortgage. In such a situation, a household's decision to purchase home insurance is not derived from their financial strategy but from meeting lender requirements.

Furthermore, a household's financial behavior around home insurance is often linked with the owner's resilience strategies. Research by Jappelli and Padula (2013) revealed that resilient households normally integrate home insurance into their portfolio of financial protections, including health insurance, life insurance, and savings. This diversification of the strategies used in financial risk management is indicative of the realization that insurance protects not only a home but also a person's financial well-being (Chu et al., 2017). Such households are, therefore, likely to have suitable home insurance cover as they consider it a long-term financial management strategy.

C. *Financial Well-being and Home Insurance*

Financial well-being is a multifaceted concept that includes meeting financial obligations, managing financial risks, and feeling secure about the future (Brüggen et al., 2017). Financial well-being is inherently linked to various types of insurance in an individual's financial life (Patel & Wolfe, 2019). While direct studies specifically linking homeowners insurance to financial well-being are sparse, insights can be drawn from a broad body of research on the impact of other forms of insurance, such as life, health, and property insurance, on financial stability. These studies demonstrate how insurance mitigates financial risks and provides a safety net, ultimately contributing to individuals' overall financial well-being.

Life and health insurance research clearly shows that insurance ownership is associated with improved financial outcomes. Life insurance, for example, has been consistently associated with financial security and peace of mind (Gustafson & O'Neill, 2022). Studies have shown that a person with life insurance is better positioned to deal with financial disruptions. In this context, insurance helps households maintain their standard of living, i.e., increase their long-term financial security. In addition, health insurance reduces the out-of-pocket costs associated with medical care (Nguyen, 2012). Furthermore, like health insurance, home insurance can reduce out-of-pocket home-related emergencies arising from climate or catastrophic events (Holzheu & Turner, 2018). In this manner, reducing catastrophic risks, medical emergencies, and health and property-related insurance can protect families from debt or financial losses due to unexpected illnesses or injuries (Cohen & Sebstad, 2005). We can apply the same logic to homeowners insurance, which protects against property loss due to fire, theft, or natural disasters (Kunreuther, 2018). Adequately insured homeowners are less likely to face severe financial setbacks from property damage or loss, which can otherwise deplete savings and lead to long-term financial distress.

Furthermore, property and casualty insurance studies emphasize the importance of insurance for preserving financial stability by safeguarding key assets. Homeowners insurance is intended to cover expenses for damage to the house or personal belongings resulting from various disasters, including fires, hurricanes, or theft (Grace et al., 2004). Without insurance coverage, many people could not afford the substantial costs of rebuilding or repairing a house or its contents (Comerio, 2023). Homeowners insurance reduces the financial effect of such events by shifting the financial risk to the insurance company. It protects homeowners' financial security by ensuring they do not have to shoulder the entire burden. Households with insurance are more resilient to financial shocks because they can rely on their coverage to recover from significant losses (Baker & McElrath, 1996). Research indicates that households with home insurance or other types of insurance report feeling less stressed and

more at ease in the broader context of financial well-being. This stems from their awareness that they are shielded from potential financial disasters, including losing a home or other priceless possessions.

Findings from research on other insurance types, such as income protection and disability insurance, further emphasize the significance of coverage in ensuring financial well-being. Disability insurance, for instance, replaces income for people who cannot work because of a sickness or injury. Similarly, homeowners insurance provides financial stability by avoiding income loss from paying cash for repairs or replacements of damaged property. Homeowners insurance shares several characteristics with other types of insurance known to enhance financial security, despite the absence of a specific study on this topic. Homeowners can preserve their financial well-being even in the face of unforeseen circumstances by having homeowners insurance, shielding them from the financial repercussions of property loss or damage. In addition to lowering the immediate financial stress, this protection promotes long-term financial stability and mental tranquility. Homeowners insurance can therefore be viewed as a crucial part of a broader plan to improve financial well-being by reducing risk and protecting assets.

In conclusion, while previous research has separately explored homeownership as a wealth-building tool and insurance as a disaster recovery tool, this study examines their intersection through the CFPB Financial Well-Being Scale. By distinguishing between mortgage-mandated and voluntary insurance, we move beyond objective wealth metrics to understand how protecting that wealth contributes to a household's subjective sense of security and freedom from financial threat. This provides a more precise articulation of the incremental role insurance plays in the broader framework of financial well-being.

III. THEORY AND HYPOTHESES

A. *Expected Utility Theory*

This study used the Expected Utility Theory (EUT), a foundational concept in economics and decision-making developed by John von Neumann and Oskar Morgenstern (2007). In situations of uncertainty, the theory explains how rational individuals make decisions. Especially when risk is present, individuals strive to optimize their expected utility rather than simply their predicted monetary outcomes, as per EUT. The main idea behind expected utility theory is that each person has a utility function that shows how they feel about different outcomes, how much risk they are willing to take, and what outcomes they prefer. The utility function converts objective payoffs, such as money values, into emotional pleasure, or utility. When people don't know what will happen, they figure out the expected utility by weighing each possible result's utility by its likelihood. EUT helps us understand decisions that involve risk, like buying insurance. According to EUT, people who don't like taking risks will choose options that make things less unclear or protect them from potential losses, even if those options cost money, such as paying insurance premiums. Risk-averse people value avoiding large losses more than other things, so they prefer insurance products that protect them financially from uncertain events.

Individuals draw utility from their wealth and the protection and peace of mind that insurance gives. This is what the expected utility theory says about home insurance. Homes are usually one of people's biggest expenses and a big part of their financial health. People without insurance risk losing substantial money if natural disasters, fires, or other unforeseen events damage their property. This could affect their total income and financial security. According to EUT, risk-averse households will buy insurance to reduce the risk of substantial financial losses. They narrow the range of possible outcomes (for example, total financial loss without insurance vs. moderate loss with insurance) by paying regular insurance premiums. For the covered renter, guaranteeing a modest cost (the insurance payment) is more important than the small chance of a catastrophic loss that would make their life much less useful.

While EUT provides a rational baseline for insurance decisions, a more nuanced positioning requires acknowledging the behavioral finance barriers that often lead to sub-optimal utility. In the absence of institutional nudges such as mortgage requirements, households may experience Loss Aversion, where the immediate, certain cost of insurance premiums is psychologically weighted more heavily than the abstract, future benefit of protection (Kahneman & Tversky, 2013). This is particularly relevant for the outright homeowners analyzed in this study, whose insurance decisions are entirely voluntary and driven by individual choice architecture rather than lender mandates. Furthermore,

this study integrates the concept of Financial Resilience. Insurance is not merely a mathematical hedge against loss; it is a structural defense that prevents 'asset depletion,' allowing households to maintain a stable standard of living despite environmental shocks (Salignac et al., 2019). Within this framework, Financial Literacy acts as the critical moderator. We posit that higher financial literacy provides the cognitive capacity to overcome behavioral biases like loss aversion, enabling the homeowner to act as the 'rational actor' described by EUT and successfully translate insurance coverage into higher subjective financial well-being.

The integration of EUT and Behavioral Finance in this study is not a contradiction, but a recognition of the Utility of Certainty. While EUT explains the rational protection of objective wealth, Prospect Theory explains the subjective peace of mind derived from the elimination of a catastrophic downside risk. We argue that for the average homeowner, the financial well-being score is a hybrid of these two: the objective security of the asset (EUT) and the psychological relief of risk-transfer (Behavioral). However, because humans naturally struggle with low-probability, high-impact events (probability weighting), the rational benefits of EUT are often obscured by the immediate pain of paying premiums (loss aversion). This is why the interaction with financial literacy is not circumstantial; literacy is the cognitive tool that allows a household to see through the behavioral bias and realize the full psychological utility of the insurance contract. From the above discussion, it is clear that homeowners insurance and financial well-being are theoretically linked through risk transfer and asset preservation. However, this study argues that Financial Literacy serves as the cognitive bridge required to realize these benefits. Financially educated individuals understand the role of insurance in maximizing expected utility and protecting their financial health, further strengthening the association. Conversely, people with low financial literacy might not place enough value on insurance benefits due to myopic behavior, making them more vulnerable to financial risks and decreasing their overall well-being score.

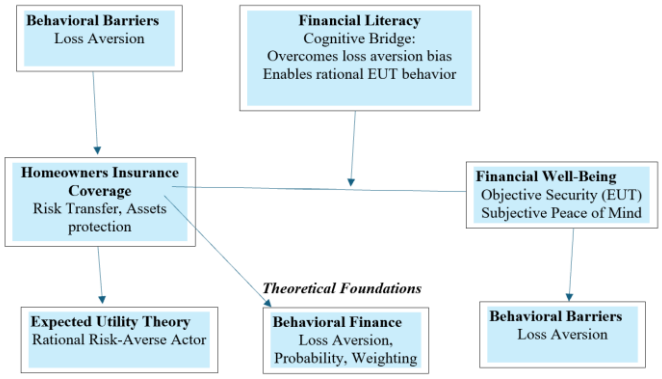

Fig. 1 Conceptual Framework: Homeowners Insurance coverage and financial well-being - Integrating expected utility theory, behavioral finance, and financial resilience

B. *Hypotheses*

H1. *Households with homeowners insurance are positively associated with higher levels of financial well-being.*

This hypothesis is supported by the Expected Utility Theory (EUT) and the financial resilience framework. For most U.S. households, home equity represents their largest financial asset; therefore, homeowners insurance serves as a formal risk-transfer mechanism that prevents asset depletion (Salignac et al.,2019). By paying premiums on time, covered homes reduce their risk of major financial problems, helping them stay stable. This protection provides a "safety net" that reduces financial anxiety and enhances the subjective sense of security measured by the CFPB scale. protections. In contrast, those without insurance or homeownership lack this formal resilience tool, making them more susceptible to sudden financial events and resulting in lower financial well-being scores.

H2*. Financial literacy moderates the association between homeowners insurance and financial well-being.*

The Expected Utility theory framework explains that households maximize their expected utility through insurance. However, this study shows that this relationship is not automatic but contingent on a household's cognitive capacity. Within a behavioral finance framework, financial literacy serves as a cognitive bridge that allows homeowners to overcome biases like loss aversion and accurately value the long-term utility of asset protection. Consequently, we argue that homeowners insurance contributes more effectively to the financial resilience and subjective well-being of households when paired with higher levels of financial

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literacy. This interaction suggests that literacy enables the rational application of EUT principles, leading to more stable financial outcomes and a greater sense of security. The reason financial literacy and insurance work so well together is based on how people perceive risk. Without a basic understanding of financial principles, a household might see insurance only as a cost rather than a benefit. However, households with higher financial literacy can accurately weigh the potential for loss against the protection a policy provides. For these informed owners, insurance acts as a stress-reducer that provides peace of mind. Our model shows that the sense of security measured by the financial well-being scale is strongest when households have both the protection of an insurance policy and the literacy to understand its value.

IV. METHOD

A. *Data and Sample*

This research analyzes U.S. homeowners insurance decisions and financial well-being using the Understanding America research (UAS) data. The University of Southern California's household panel (UAS) comprises 13,000 respondents from the United States. The UAS comprises about 550 surveys covering investments, financial literacy, financial behaviors, psychological perspectives, financial well-being, and many household topics. The uniqueness of the UAS-assigned sample enables the individual identification of survey participants across surveys and facilitates data integration. From July 2019 to August 2022, we gathered and integrated data from many surveys. We used the UAS-177 survey to assess individuals' financial well-being; the UAS-314 survey to investigate households' homeowners insurance decisions; and the UAS-189 survey to understand households' wealth-related behavior. The final sample comprised 4,068 home respondents. To ensure a robust estimation of the insurance effect and to account for structural differences in housing tenure, we conduct a primary analysis on the full sample, followed by a targeted sub-analysis restricted to 3,057 homeowners. By focusing on the homeowner population, we isolate the relationship between voluntary risk-transfer and financial well-being among those with significant housing equity.

B. *Dependent Variable*

The Financial Well-Being (FWB) Scale, our dependent variable, was recently developed by the Consumer Financial Protection Bureau (CFPB, 2017a). We implement a scale already developed by the CFPB for the UAS-177 survey to obtain a more precise metric. This scale also considers the mode of administration (self-administered or interviewer-administered), participants' age group, and any polarity effect. A CFPB IRT-based well-being score (*FWB_Score*) is used to designate this enhanced score in the UAS-177 survey. It is based on values ranging from 0 to 100. We employ this improved score in our primary analysis, and Appendix A provides comprehensive descriptions and condensed information for each item.

C. *Independent Variable*

Analyzing the impact of households' homeowner's insurance decisions, we have used two questions from the UAS 314 and categorized them into three categories to account for structural differences in housing tenure and insurance requirements: first, Renters and Others, serve as the baseline reference group and includes respondents who do not own their primary residency, allowing us to measure the incremental well-being associated with moving from a non-owning status to homeownership. Second, Insured owners include respondents who own their homes and maintain homeowners insurance; this group includes both mortgagors and outright owners and represents the population with formal risk-transfer mechanisms in place. The third category, Uninsured Owners, consists of respondents who own their home but do not carry insurance. Because mortgage lenders in the United States almost universally mandate insurance as a condition of a loan, this group serves as a robust proxy for outright owners who have voluntarily opted out of coverage. By utilizing this classification, we distinguish between the general equity effect of owning a home and the specific psychological and financial utility of insurance protection.

This was operationalized through the following questions from the UAS survey: (household currently owns or rents primary residence in section Insurance) Does your household own or rent your primary residence? The possible responses ranged from 1 (Own), 2 (Rent), and 3 (Other). (Households currently have homeowners insurance in the Insurance section) Does your household currently have homeowners insurance for the property

you own? Possible responses ranged from 1 (Yes) to 2 (No).

The research also notes financial literacy as a major deterrent to homeowners insurance (Lusardi and Mitchell, 2014). Financial literacy can be explained by two alternative variables: self-reported investment knowledge and objectively measured investment literacy (also known as objective investment literacy). The UAS-237 survey includes questions designed to measure financial knowledge covering various topics. Securities, bonds, insolvency, municipal bonds, stock margin, selling short, investment indicators, and index funds are among the topics covered by the UAS-1 financial literacy survey (see Appendix B for specific survey questions). We created an objective Financial Literacy Index based on the number of the fourteen questions each responder answered correctly. Thus, 1 represented extremely low financial knowledge, and 14 represented extremely high financial knowledge in our range. We have not used the subjective financial literacy measure in this study because we believe that households' self-confidence is always misleading towards rational decision-making.

D. *Control Variables*

Theory and literature on homeowners insurance decisions considering gender, marital status, age, employment status, race/ethnicity (White, non-White), education (less than college, some college/graduate), and household income.

To control for the role of accumulated capital in determining financial well-being, we constructed a Household Net Wealth measure. Following the Understanding America Study (UAS) methodology and UAS-189, Net Wealth is calculated as the sum of all household assets (including real estate equity, business equity, IRAs, stocks, and vehicles) minus all liabilities (including credit card debt and other personal loans) (see Appendix C, Panel A). To account for the highly skewed distribution of wealth and the presence of extreme values (Appendix C, Panel B), we utilize the Log of Wealth in our empirical models, which is normally distributed (Figure 4).

E. *Model*

To analyze the association between homeowners insurance decisions and their financial well-being and responsible financial behavior, we have used the OLS regression model as our dependent variable of interest: financial well-being, a continuous variable. Also, the model introduced a new explanatory variable, a product of "homeowners insurance and financial well-being," to estimate financial literacy's moderating role in the association between households' financial well-being and their homeowners insurance decisions.

$$YFWB\_Score = \beta_0 + \beta_1\ Homeowner\ Insurance_i + \beta_2\ Financial\ Literacy_i + \beta_n X_n + \in_i \quad (1)$$

In Equation 1, *FWB_Score* represents the financial well-being score of the *i*-th individual. Homeowner Insurance$_i$ represents whether the *i*-th individual is Non-Homeowners, Outright Owners-Insured, or Outright Owners-Uninsured.

$$YFWB\_Score = \alpha_0 + \alpha_1 Homeowner\ Insurance_i + \alpha_2\ Financial\ Literacy_i + \alpha_3\ \textbf{(Homeowners Insurance* Financial Literacy)} + \alpha_n X_n + \in_i \quad (2)$$

Equation 2 (Homeowners Insurance * Financial Literacy) represents the interaction of homeowners insurance and financial literacy. Financial Literacy$_i$ represents objective knowledge, and X_n represents the control variables relevant to the *i*-th individual's home insurance decisions, like age, gender, marital status, race/ethnicity (white, non-white), employment status (employed, unemployed), education (less than college, some college/graduate), and household income. All regression models (Tables 5, 6, 8, and 9) are estimated using probability weights provided by the UAS to ensure the results are representative of the U.S. population.

F. *Identification Strategy and Endogeneity*

We acknowledge that the relationship between homeowners insurance and financial well-being may be subject to endogeneity, specifically through reverse causality and selection bias. Households with higher baseline financial well-being may be more predisposed to purchase insurance as a proactive financial strategy. Furthermore, selection into outright ownership is inherently correlated with unobserved factors such as financial sophistication or accumulated life-cycle wealth. To mitigate these concerns, our models include a

comprehensive set of controls, including households' net wealth (*Log of Wealth*), age, income, and education, to isolate the insurance effect. We also conduct several robustness checks using sub-sample analysis to validate the stability of our coefficients at the end of Section V.

V. RESULTS

A. Descriptive Results

The descriptive statistics for the full research sample, including dependent and independent variables, are shown in Table 1. The average financial well-being score for individual households is 57 out of 95, indicating that, on average, respondents in our sample had slightly better financial well-being than the U.S. population. Only 28% of households are renters or others, 65% are insured owners, and 7% are uninsured owners. Descriptive statistics also show that 28% have low objective financial literacy, 52% have medium objective financial literacy, and 20% have high objective financial literacy. Nearly 50% of the respondents are males, the majority, 79% are white, and 58% are married. For age, 48% are 55+, although the average age is 42. Over 38% of respondents had a bachelor's degree or above, while 27% had a college degree. Employees made up 55% of respondents. At least 57% of respondents earn above $50,000 annually.

TABLE 1
DESCRIPTIVE STATISTICS FULL SAMPLE

Variable	Mean	SE
FWB	56.65	0.260
Homeowners Insurance Status		
Renters/Other	28%	0.0086
Insured Owners	65%	0.0091
Uninsured Owners	7%	0.0048
Financial Literacy		
Low	28%	0.0087
Medium	52%	0.0094
High	20%	0.0072
Gender		
Female	50%	0.0094
Male	50%	0.0094
Age		
18 to 35	18%	0.0075
35 to 55	34%	0.0089
55+	48%	0.0093
Education		
High School	35%	0.0096
College	27%	0.0078
Bachelor's degree or higher	38%	0.009
Race		
White	79%	0.0079
Non-White	21%	0.0079
Employment		
Employed	55%	0.0093
Unemployed	45%	0.0093
Household Income		
less than 50k	43%	0.0094
50k to 150K	46%	0.0094
150k +	11%	0.0057
Wealth		
Log of Wealth	7.50	0.0.99
Marital Status		
Married	58%	0.0094
Single	42%	0.0094

Note: Data are weighted from the Understanding America Study (UAS) surveys conducted from 2019 to 2022. Number observations = 4,068.

Table 2 shows the study's homeowners insurance decisions and gender differences in the sub-sample descriptive data. The results show distinct patterns in homeownership and insurance by gender. Among non-homeowners, females make up 16.67% and males 8.18%, suggesting that a higher proportion of females lack full homeownership. The largest group in outright owners who are insured includes 37.24% females and 32.18% males, totaling 69.42% of the sample. This indicates that most homeowners prioritize insurance, with females slightly more likely to secure coverage. Only 5.72% are outright owners uninsured, suggesting that few homeowners in the sample choose to forgo insurance, highlighting a general preference for financial protection in homeownership.

TABLE 2
CROSS-TAB -HOMEOWNERS INSURANCE STATUS BY GENDER

Homeowner Status	Female	Male	Total
Renters/Others	16.67%	8.18%	24.85%
Insured Owners	37.24%	32.18%	69.42%
Uninsured Owners	3.61%	2.12%	5.72%
Total	57.52%	42.48%	100.00%

Table 3 shows the study's homeowners insurance decisions and income differences in the sub-sample descriptive data. The data reveal that insured owners are most common among middle-income households, particularly those earning between $50,000 and $150,000, who make up the largest share of this group. Lower-income individuals, particularly those earning below $50,000, are more likely to be renters or uninsured homeowners, indicating financial barriers to accessing homeownership and insurance. Overall, most homeowners across income levels prefer to have insurance, highlighting a general inclination towards financial protection once homeownership is achieved.

TABLE 3
CROSS-TAB- HOMEOWNERS INSURANCE STATUS BY INCOME

Home-owner Status	Less than $50,000	$50,000 to $150,000	More than $150k	Total
Renters (Other)	15.61%	8.28%	0.96%	24.85%
Insured Owners	19.35%	39.97%	10.10%	69.42%
Uninsured Owners	4.35%	1.23%	0.15%	5.73%
Total	39.31%	49.48%	11.21%	100%

Table 4 shows the study's homeowners insurance decisions and age differences in the sub-sample descriptive data. The data shows that insured owners are most common among older individuals, especially those aged 55 and above, who make up 39.75% of this group. In contrast, younger individuals (18 to 34) are more likely to lack homeownership, accounting for 6.86% in the "renters" category. Overall, 69.42% of the sample is uninsured owners, indicating a strong preference for financial protection across age groups, particularly as age increases.

TABLE 4
CROSS TAB- HOMEOWNERS INSURANCE STATUS BY AGE

Home-owner Status	18 to 34	34 to 55	55+	Total
Renters /Other	6.86%	9.83%	8.16%	24.85%
Insured owners	6.54%	23.13%	39.75%	69.42%
Uninsured Owners	0.76%	2.02%	2.95%	5.73%
Total	14.16%	34.98%	50.86%	100%

B. Multivariate Results

Table 5 explains the OLS regression output and discusses the association between homeowners insurance and the financial well-being decisions of households. From the results, it is evident that households that are insured owners have a significant positive association with their financial well-being. By distinguishing between renters, insured owners, and uninsured owners, we isolate the specific utility of insurance. While the 'insured' category includes both mortgagors and outright owners, the 'uninsured' category represents a distinct group of outright owners who have voluntarily opted out of coverage.

TABLE 5
OLS MODEL RESULTS ON HOUSEHOLDS' FINANCIAL WELL-BEING AND HOMEOWNERS INSURANCE DECISIONS

Variable	Coefficient SE
Homeowners Insurance Status (Ref: Renters/Other)	
Insured Owners	4.47***
	0.60
Uninsured Owners	1.71
	1.15
Financial Literacy (Ref: low)	
Medium	0.382
	0.579
High	1.56*

	0.799
Gender (Ref: female)	
Male	1.408***
	0.463
Age (Ref: 18 to 34)	
35 to 55	-1.413***
	0.624
55+	2.811***
	0.649
Education (Ref: High School)	
College	0.144
	0.557
Bachelor's degree or higher	1.48**
	0.621
Race (White)	
Non-White	-1.601***
	0.581
Employment (Ref: Unemployed)	
Employed	-2.189***
	0.504
Household Income (Ref: less than 50k)	
50k to 150K	6.992***
	0.579
150k +	10.26***
	0.856
Wealth	
Log of Wealth	0.654***
	0.048
Marital Status (Ref: Married)	
Single	-0.424
	0.528
R-squared	0.344
F-Statistics	F (15,4053) = 97.68***

Note: Weighted Data is from the Understanding American Study (UAS) surveys 2019-2022. Number observations = 4,068. Significance levels: *p < 0.10, **p < 0.05, ***p < 0.01.

This allows us to compare the financial well-being of those with high home equity but no formal risk protection with that of those with both equity and protection. Also, uninsured owners are positively associated with financial well-being, but the association is not significant. Although the association for uninsured owners is not statistically significant, their raw well-being score remains higher than that of the renter reference group. This suggests that housing tenure (equity) provides a baseline level of financial security that persists even in the absence of insurance. The debt-free status of these outright owners likely dominates the immediate psychological disutility of being uninsured. However, as shown in the subsequent robustness check (Table 9), when the sample is restricted to homeowners only, the lack of insurance becomes a significant negative predictor, confirming that while equity provides a floor for well-being, insurance is required to reach the ceiling. Concerning financial literacy, households with high financial literacy are significantly and positively associated with financial well-being. Demographically, Fifty-five-year-old married white males with a bachelor's education are significantly and positively associated with financial well-being. Interestingly, employment is negatively associated with financial well-being. This seemingly counterintuitive result is likely explained by life-cycle dynamics and the Retiree Effect present in the sample. As shown in Table 5, individuals aged 55 and above, many of whom are retired and thus categorized as unemployed, report significantly higher financial well-being. These older households often benefit from accumulated home equity, stable pension or Social Security income, and reduced financial obligations (such as child-rearing or student debt) compared to younger, active employees who may be facing high cost-of-living pressures and job insecurity. Thus, the negative coefficient for employment likely reflects the superior financial stability of the retired population rather than a penalty for working. Additionally, adults aged 35 to 55 report significantly lower financial well-being than younger adults, while those aged 55 and above report significantly higher financial well-being. Race differences are also evident, as non-white households show significantly lower financial well-being relative to white households. Households with income above $50,000 and wealthier households were positively associated with financial well-being, with income and wealth among the strongest predictors in the model. Overall, the model explains about 34.4% of the variation in financial well-being, indicating a reasonably strong model fit.

Table 6 explores the interaction between financial literacy and homeowners insurance status to assess their combined impact on household financial well-being. The results reveal that homeowners with insurance and medium or high financial literacy experience a significantly positive association with financial well-being, suggesting that financial literacy moderates the benefits of homeownership and insurance. Specifically, the interaction between insured ownership and medium financial literacy is statistically significant, indicating that moderate literacy strengthens the positive effect of being an insured outright owner. Although the interaction with high literacy is positive, it is not statistically significant, suggesting that the moderating effect is strongest at medium literacy levels (Figure 2).

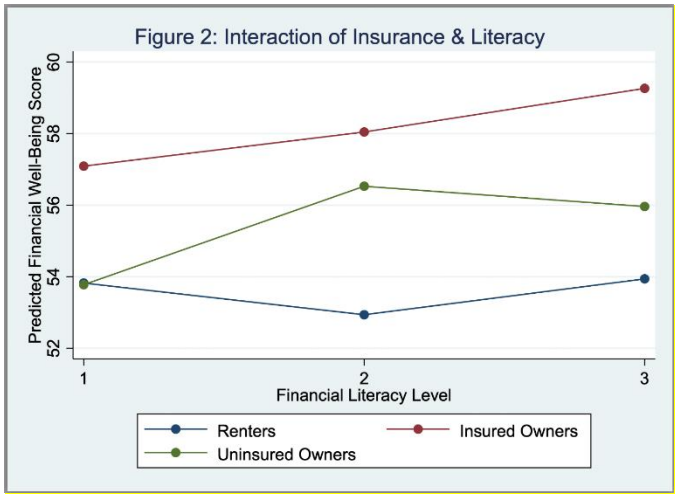

Fig. 2 Predicted Financial Well-Being by Insurance Status and Financial Literacy Level.

Note: Figure 2 visualizes the interaction effect from Table 6 using predicted marginal values. The plot reveals a clear divergence in trends: for insured homeowners (red line), financial well-being increases linearly as financial literacy improves. In contrast, for uninsured homeowners (green line), the trend is non-linear. While there is a temporary increase in well-being at the medium literacy level, likely reflecting a self-insurance bias where households feel a sense of security from the liquidity of unpaid premiums, this benefit disappears at the highest literacy level. This suggests that highly literate individuals recognize that skipping insurance is an insufficient long-term strategy, causing subjective well-being to stall or decline without formal protection.

In contrast, uninsured owners, even those with medium or high financial literacy, do not show consistent or statistically significant improvements in financial well-being, indicating that insurance coverage may be a necessary condition for literacy to translate into financial outcomes. Interestingly, financial literacy alone (without interaction) does not significantly predict financial well-

being in this model. The shift in the significance of financial literacy from a main effect in Table 5 to an insignificant one in Table 6 is a key finding of this interaction model. It suggests that financial literacy does not enhance well-being in a vacuum; rather, its utility is conditional upon having formal risk protection. To make this interaction more transparent, we examine the marginal effects: for insured homeowners, moving from low to medium literacy results in a significant 1.84-point increase in well-being. In contrast, for uninsured homeowners, literacy gains do not translate into statistically significant improvements in well-being. This confirms that knowing how to manage money (literacy) only translates into feeling financially secure (well-being) when the household's largest asset is structurally protected by an insurance policy. Demographic controls such as gender, age, education, income, and wealth maintain their significance and direction from the previous model, reinforcing their stable influence. For example, males, older adults (55+), higher-income households, and wealthier households continue to show significantly higher financial well-being, while non-white households and employed individuals report significantly lower well-being. The negative effect for adults aged 35–55 also persists. The model's R-squared value of 0.345 suggests a modest improvement in explanatory power with the inclusion of interaction terms.

TABLE 6
OLS MODEL RESULTS ON HOUSEHOLDS' FINANCIAL WELL-BEING AND HOMEOWNERS INSURANCE DECISIONS WITH INTERACTION

Variable	Coefficient SE
Homeowners Insurance Status (Ref: Renters/Other)	
Insured Owners	3.26***
	0.93
Uninsured Owners	-0.047
	1.562
Financial Literacy (Ref: low)	
Medium	-0.886
	0.886
High	0.117
	1.68
Homeowner's Insurance * Financial literacy	
Outright Owners (Insured) * Medium Financial Literacy	1.84*
	1.124
Outright Owners (Insured) * High Financial Literacy	2.055
	1.807
Outright Owners (Uninsured) * Medium Financial Literacy	3.638
	2.331
Outright Owners (Uninsured) * High Financial Literacy	2.068
	5.058
Gender (Ref: female)	
Male	1.418***
	0.463
Age (Ref: 18 to 34)	
35 to 55	-1.455**
	0.620
55+	2.82***
	0.647
Education (Ref: High School)	
College	0.146
	0.555
Bachelor's degree or higher	1.515**
	0.620

Race (White)	
Non-White	-1.608***
	0.579
Employment (Ref: Unemployed)	
Employed	-2.151***
	0.504
Household Income (Ref: less than 50k)	
50k to 150K	7.04***
	0.578
150k +	10.24***
	0.855
Wealth	
Log of Wealth	0.650***
	0.048
Marital Status (Ref: Married)	
Single	-0.415
	0.529
R-squared	0.345
F-Statistics	F (19, 4049) = 78.17***

Note: Weighted Data is from the Understanding American Study (UAS) surveys 2019-2022. Number observations = 4,068. Significance levels: *p < 0.10, **p < 0.05, ***p < 0.01.

C. Heteroskedastic Results

Post-estimation diagnostics indicated heteroskedasticity, as shown by the residual trends in Figure 3.

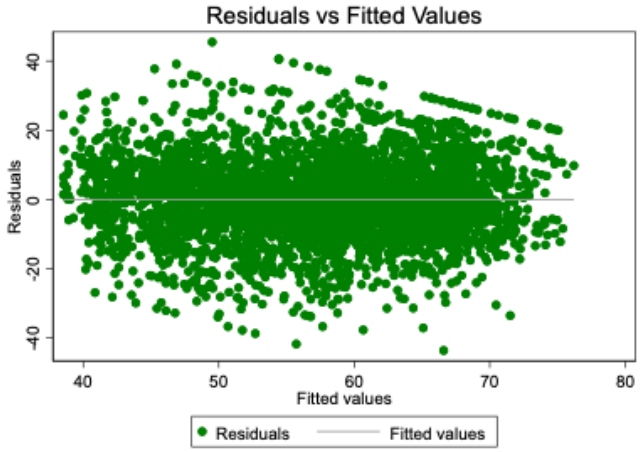

Fig. 3 Heteroskedasticity pattern

This was formally confirmed by both White's and Breusch-Pagan tests (Table 7).

TABLE 7
WHITE AND BREUSCH-PAGAN TESTS FOR HETEROSKEDASTICITY

White Test	Breusch-Pagan Test
H0: Homoskedasticity Ha: Unrestricted heteroskedasticity	H0: Constant variance
chi2(116) = 174.14	F (15, 4052) = 4.42
Prob > chi2 = 0.0004	Prob > F = 0.0000

To ensure the validity of the statistical inference, we addressed this issue by employing a Heteroskedasticity-Consistent Covariance Matrix (HCCM) and bootstrapping with 1,000 replications. The corrected results in Table 8 confirm that the primary associations remain robust. Insured outright owners and households with high financial literacy maintain a significant positive association with financial well-being. Demographic predictors also remain stable: being male, white, aged 55+, and possessing a bachelor's degree are positive predictors, while employment remains negatively associated with well-being. Furthermore, income above $50,000 and greater household wealth continue to emerge as the strongest positive predictors in the model.

TABLE 8
HETEROSKEDASTIC MODELS

Variables	Boot-strapping Coefficient/SE	HCCM Coefficient/SE
Homeowners Insurance Status (Ref: Renters/Other)		
Insured Owners	4.24***	4.24***
	0.502	0.496
Uninsured Owners	0.487	0.487
	0.915	0.921
Financial Literacy (Ref: low)		
Medium	0.259	0.259
	0.488	0.502
High	1.11*	1.11*
	0.645	0.647
Gender (Ref: female)		
Male	1.335***	1.335***
	0.383	0.383
Age (Ref: 18 to 34)		
35 to 55	-1.879***	-1.879***
	0.523	0.523
55+	2.408***	2.408***
	0.550	0.559
Education (Ref: High School)		
College	-0.049	-0.049
	0.482	0.510
Bachelor's degree or higher	1.539***	1.539***
	0.531	0.550
Race (White)		
Non-White	-1.304***	-1.304***
	0.501	0.503
Employment (Ref: Unemployed)		
Employed	-2.446***	-2.446***
	0.401	0.409
Household Income (Ref: less than 50k)		
50k to 150K	6.494***	6.494***
	0.481	0.477
150k +	10.38***	10.38***
	0.696	0.720
Wealth		
Log of Wealth	0.726***	0.726***
	0.0413	0.0407
Marital Status (Ref: Married)		
Single	0.343	0.343
	0.442	0.424
R-squared	0.345	0.348

Bootstrapping with 1000 reps. HCCM (Heteroskedastic consistent covariance matrices. Weighted Data is from the Understanding American Study (UAS) surveys 2019-2022. Number observations = 4,068. Significance levels: *p < 0.10, **p < 0.05, ***p < 0.01.

D. Robustness Check

To address concerns regarding potential endogeneity and selection bias, specifically the concern that insurance coverage may simply serve as a proxy for the inherent financial stability or wealth of homeowners, we conducted a series of robustness tests. We restricted the analysis to homeowners only, excluding renters from the sample (N = 3,057), and introduced a rigorous control for the Log of Net Wealth. As shown in Table 9, the lack of homeowners insurance remains a significant negative predictor of financial well-being. Specifically, households owning a home without insurance coverage report a well-being score 2.52 points lower (p = 0.029) than their insured counterparts, even after adjusting for total wealth, income, and financial literacy. Viewed conversely, these results indicate that possessing insurance is associated with a 2.52-point increase in the CFPB Financial Well-Being score among homeowners, holding all other factors constant. This finding confirms that the risk-management utility of insurance makes a unique contribution to subjective well-being, independent of objective asset accumulation.

Second, to isolate the specific impact of coverage, we conducted a sub-analysis comparing insured and uninsured homeowners (Table 9, Column 3). Within this subsample (N=3,057), possessing insurance is associated with a statistically significant 2.52-point increase in financial well-being (p = 0.029). Because this model explicitly controls for Log of Net Wealth (beta = 0.69, p < 0.001), the results confirm that the benefit of insurance is independent of a household's total assets. This targeted comparison among owners for whom insurance is often a voluntary choice mitigates 'mandate bias' and suggests that the risk-transfer utility of insurance makes a unique contribution to subjective well-being, rather than merely serving as a proxy for financial stability.

TABLE 9
ROBUSTNESS OF HOMEOWNERS INSURANCE ON FINANCIAL WELL-BEING

Variable	Coefficient/SE Full Sample	Coefficient/SE Homeowners Only	Coefficient/SE Insurance Effect (Owners)
Homeowners Insurance Status (Ref: Renters/Other)			
Insured Owners	4.47***		2.51**
	0.6		1.15
Uninsured Owners	1.71	-2.51**	
	1.15	1.15	
Financial Literacy (Ref: low)			
Medium	0.382	1.012	1.012
	0.579	0.742	0.742
High	1.56*	1.94**	1.94**
	0.799	0.928	0.928
Gender (Ref: female)			
Male	1.408***	1.799***	1.799***
	0.463	0.539	0.539
Age (Ref: 18 to 34)			
35 TO 55	-1.413***	-1.136	-1.136
	0.624	0.808	0.808
55+	2.811***	3.121***	3.121***
	0.649	0.816	0.816
Education (Ref: High School)			
College	0.144	0.080	0.080
	0.557	0.674	0.674
Bachelor's degree or higher	1.48**	1.639**	1.639**
	0.621	0.725	0.725
Race (White)			
Non-White	-1.601***	-1.115	-1.115
	0.581	0.770	0.770
Employment (Ref: Unemployed)			
Employed	-2.189***	-2.90***	-2.90***

	0.504	0.598	0.598
Household Income (Ref: less than 50k)			
50k to 150K	6.992***	6.78***	6.78***
	0.579	0.669	0.669
150k +	10.26***	10.19***	10.19***
	0.856	0.934	0.934
Wealth			
Log of Wealth	0.654***	0.692***	0.692***
	0.048	0.057	0.057
Marital Status (Ref: Married)			
Single	-0.424	-0.357	-0.357
	0.528	0.615	0.615
R-squared	0.344	0.293	0.293

Note: Weighted Data is from the Understanding American Study (UAS) surveys 2019-2022. Number observations = 4,068. However, the analytical sample in Column 1 (N=4,068) and Columns 2–3 (N=3,057) reflects that the reduction in the homeowner subsample is due to the exclusion of renters. Significance levels: *p < 0.10, **p < 0.05, ***p < 0.01

Finally, to further address potential selection bias, we employed a Nearest-Neighbor Matching (Propensity Score) approach. Households were matched based on a comprehensive set of observable characteristics, including financial literacy, income, education, and employment status. The Average Treatment Effect (ATE) results from the matching analysis in Table 10 indicate that, even among households with nearly identical demographic and socioeconomic profiles, homeowner's insurance is associated with a 5.69-point increase in financial well-being ($p < 0.001$). This substantial and highly significant effect suggests that the observed benefits of insurance are not merely driven by observable differences between insured and uninsured populations but represent a robust and independent association with subjective financial security.

TABLE 10
TREATMENT EFFECTS ESTIMATION
(NEAREST-NEIGHBOR MATCHING)

Estimator	Coefficient (ATE)	SE	*Z*-Stat	*P* > | *z* |
ATE				
Insurance (1 vs 0)	5.694	1.603	3.55	0.000

Note: Households matched on literacy, gender, age, marriage, education, race, employment, and income. Mahalanobis distance metric used with exact matching on gender and race.

VI. DISCUSSION AND IMPLICATIONS

Using expected utility theory under uncertainty (EUT), this research demonstrates the importance of homeowner insurance to U.S. households' financial well-being. This study's first hypothesis is supported by the significant association between homeowner insurance and financial well-being, as insurance provides financial protection against unexpected disasters, aligning with the idea of mitigating risk and reducing uncertainty in future financial outcomes. The utility derived from knowing they are protected from such events likely contributes to higher financial well-being, as it reduces anxiety and financial instability. This association also explains that outright owners with insurance may experience lower financial uncertainty due to the absence of mortgage payments and the added security insurance provides. The literature also shows that individuals enhance their expected utility by transferring risk to an insurance provider through premiums; homeowner insurance helps individuals maintain financial stability by covering significant repair or replacement costs that might otherwise result in financial distress (Grace et al., 2004). Also, homeowner insurance provides peace of mind by protecting homeowners from unexpected events, thereby contributing directly to improved financial well-being (Shiller and Weiss, 1999). Furthermore, the finding that uninsured outright owners still exhibit slightly higher well-being than renters (though not statistically significant in all models) suggests that housing tenure itself provides a baseline level of psychological and financial security. The equity in an owned home acts as a

wealth cushion that dominates the immediate absence of insurance. However, the significantly higher scores for insured owners show that while equity provides a floor for well-being, formal risk mitigation is required to maximize it.

Our findings support Hypothesis 2: financial literacy moderates the relationship between insurance and financial well-being. While literacy alone is not a significant predictor, it acts as a cognitive bridge that allows households to realize the utility of insurance. For insured owners, higher literacy reduces stress by helping them understand their protection. Interestingly, the small well-being boost seen in medium-literacy uninsured households suggests a self-insurance bias, where families feel temporarily secure by saving on premium costs. However, this effect disappears at high levels of literacy, as more educated individuals recognize that skipping insurance is a dangerous long-term risk (Lusardi & Mitchell, 2014). This confirms that the highest financial well-being is achieved only when high literacy is paired with active insurance coverage.

This study also found insights into demographics and socioeconomic factors. Households with incomes above $50,000 are more likely to absorb the risk because it is positively associated with financial well-being. Expected utility theory explains that higher-income households can derive greater utility from paying premiums because they can afford to insure against various risks associated with their lifestyles. Households with disposable income are more likely to buy homeowners insurance to protect their financial security during natural disasters (Brounen et al., 2016; Madrian et al., 2017).

Households with limited financial resources are more risk-averse due to their limited financial flexibility, leading them to remain underinsured (Wakker, Thaler, and Tversky, 1997). This phenomenon reflects the trade-off between risk and reward in expected utility theory, in which individuals may allocate limited financial resources to more immediate needs rather than purchase insurance. Interestingly, employment is negatively associated with households' financial well-being. While this may appear counterintuitive, it is likely explained by the Retiree Effect within the life-cycle hypothesis. As our results for age suggest, adults aged 55 and above, many of whom have transitioned out of the active workforce, report significantly higher financial well-being. This demographic typically has greater accumulated home equity, stable retirement income (Social Security/pensions), and fewer financial obligations than younger, employed households, which may be navigating job insecurity, child-rearing costs, and active debt management. Thus, the negative coefficient for employment likely captures the relative financial strain of active workers compared to the established financial stability of retirees.

Also, we found that fifty-five-year-old white males with a college education are positively associated with financial well-being. The literature shows that households near retirement or 55 years old are more conservative in their financial behavior (Gustafson and O'Neil, 2022). As they age, they maximize their utility by reducing their financial risk. They are more likely to secure insurance to protect their financial asset and minimize their uncertainty about future losses, which can significantly impact their financial well-being. Also, financial literacy increases with age, and informed financial decisions to protect against future losses make sense to older people (Lusardi and Mitchell, 2014). It is clear from the financial literacy discussion that higher education leads to higher financial literacy and more informed decisions, thereby increasing the utility of purchasing insurance. Regarding racial disparities in homeowners insurance and well-being, our results align with Zolfagharian et al. (2020), who noted that structural and cultural factors significantly influence household insurance decisions. Rather than a lack of value for protection, the lower well-being scores and insurance rates among minority groups may reflect historically rooted disparities in wealth accumulation and homeownership access. From an Expected Utility Theory perspective, this can manifest as Loss Aversion or Probability Weighting. If a household has historically faced systemic financial barriers, the immediate cost of a premium may be perceived as an unnecessary burden compared to more pressing immediate needs. This suggests that the well-being gap is not merely a matter of personal choice but reflects broader socio-economic vulnerabilities.

Based on the results and discussion, this study also discusses the main implications for policymakers, academicians, and financial planners. Policymakers can use this study to focus on financial literacy programs specifically for homeowners or prospective homeowners, as financial literacy positively affects homeowners financial well-being. These programs offered by policymakers should focus mainly on insurance options and long-term financial planning. This study found that

outright owners with insurance are positively associated with financial well-being; policymakers can encourage such households across the United States by offering tax deductions or premium discounts that could make insurance more appealing to minority groups. Policymakers can also introduce housing or loan programs that include financial literacy modules to explain to households the importance of insurance as a more powerful financial protection tool. The academician can expand their understanding and discuss financial literacy and financial well-being more when discussing home insurance in classes or conferences. Academicians can also consider cultural differences and their impact. Academicians can also further investigate the psychological factors that influence under-insurance or over-insurance if they can manage the data, and how these biases differ across different demographic groups. This will help researchers in the community open up new research on behavioral economics in homeownership insurance. Based on these results, financial planners can tailor their homeownership and insurance advice to different demographic groups and can adjust their strategy for higher-educated and financially literate clients. Financial planners can use these results to advise clients near retirement and discuss the importance of homeowners insurance for financial resilience. Also, financial planners should understand their clients' cultural differences, so it is the financial planner's responsibility to provide culturally sensitive advice. Lastly, a financial planner should always assess clients' financial capacity and advise them on insurance solutions, as evidenced by different income groups.

VII. LIMITATIONS AND FUTURE RESEARCH

This study explores the association between U.S. household homeowners insurance decisions, financial well-being, and the moderating role of financial literacy. Like every other scholarly research, this study also has some limitations. This study used an Understanding American Study Survey (UAS) with different waves from 2019 to 2022. UAS is a comprehensive survey, but it has limited data available only on outright owners with insurance from the overall sample; it does not have data on households that own homes with mortgages and have homeowners insurance. Future research may use different household surveys with all categories of homeownership data on homeowners insurance decisions to see if the results of this study are consistent with them. Further, this study only explores the association and has not explained the causal relationship between homeowners insurance decisions and financial well-being, but explores the moderating or interaction effects of financial literacy. Future research can use another approach, experimental or longitudinal, if data is available to understand the causality. Also, future research can use Lusardi and Mitchell's top 3 financial literacy questions to see if the association remains the same. Lastly, future research can also include any other variables, like a household's financial wealth, to see the impact on the financial well-being if households own a home with homeowner's insurance.

REFERENCES

Baker, T., & McElrath, K. (1996). Whose safety net? Home insurance and inequality. *Law & Social Inquiry*, *21*(2), 229-264.

Biswas, D., & Vessal, S. R. (2024). Smart home insurance: Collaboration and pricing. *European Journal of Operational Research*, *314*(1), 176-205.

Booth, K., & Kendal, D. (2020). Underinsurance as adaptation: Household agency in places of marketisation and financialisation. *Environment and Planning A: Economy and Space*, *52*(4), 728-746.

Brounen, D., Koedijk, K. G., & Pownall, R. A. (2016). Household financial planning and savings behavior. *Journal of International Money and Finance*, *69*, 95-107.

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, *79*, 228-237. https://doi.org/10.1016/j.jbusres.2017.03.013

Campbell, A. L. (2012). Policy makes mass politics. *Annual Review of Political Science*, *15*(1), 333-351.

Consumer Financial Protection Bureau. (2017a). *CFPB financial well-being scale: Scale development technical report*. https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-technical-report/

Consumer Financial Protection Bureau. (2017b). *Financial well-being in America*. https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-america/

Chu, Z., Wang, Z., Xiao, J. J., & Zhang, W. (2017). Financial literacy, portfolio choice, and financial well-being. *Social Indicators Research*, *132*, 799-820.

Cohen, M., & Sebstad, J. (2005). Reducing vulnerability: The demand for microinsurance. *Journal of International Development: The Journal of the Development Studies Association*, *17*(3), 397-474.

Collier, B., & Kousky, C. (2024). Household financial resilience after severe climate events: The role of insurance. *Available at SSRN 4857411*. https://doi.org/10.2139/ssrn.4857411

Comerio, M. C. (2023). *Disaster hits home: New policy for urban housing recovery*. University of California Press.

Consumer Federation of America. (2024, March). *Exposed: How America's Homeowners Are Vulnerable Without Insurance*. Consumer Federation of America. https://consumerfed.org/wp-content/uploads/2024/03/Exposed-UninsuredHomes-1.pdf

Dominique-Ferreira, S., Vasconcelos, H., & Proença, J. F. (2016). Determinants of customer price sensitivity: an empirical analysis. *Journal of Services Marketing*, *30*(3), 327-340.

Dumm, R. E., Eckles, D. L., Nyce, C., & Volkman-Wise, J. (2020). The representative heuristic and catastrophe-related risk behaviors. *Journal of Risk and Uncertainty*, *60*, 157-185.

Grace, M. F., Klein, R. W., & Kleindorfer, P. R. (2004). Homeowners insurance with bundled catastrophe coverage. *Journal of Risk and Insurance*, *71*(3), 351-379.

Grace, M. F., Klein, R. W., & Philips, R. W. (2001). Auto insurance reform: The South Carolina story. *Centre for Risk Management and Insurance Research, Georgia State University*.

Gropper, M. J., & Kuhnen, C. M. (2021). *Wealth and insurance choices: Evidence from US households* (No. w29069). National Bureau of Economic Research.

Gustafson, K., & O'Neill, C. (2022). GRI Product Allocations in a QDIA Framework—The Margin of Safety Retirement Savers Need for Peace of Mind. *Journal of Insurance and Financial Management*, *5*(2), 85-113.

Holzheu, T., & Turner, G. (2018). The natural catastrophe protection gap: Measurement, root causes and ways of addressing underinsurance for extreme events. *The Geneva Papers on Risk and Insurance-Issues and Practice*, *43*, 37-71.

Illiashenko, P. (2017). Behavioral Finance: Household Investment and Borrowing Decisions. *Visnyk of the National Bank of Ukraine*, (242), 28-48.

Insurance Information Institute. (2021). *Insurance for your house and personal possessions*. Insurance Information Institute. https://www.iii.org/article/insurance-for-your-house-and-personal-possessions.

Ivčević, A., Statzu, V., Satta, A., & Bertoldo, R. (2021). The future protection from the climate change-related hazards and the willingness to pay for home insurance in the coastal wetlands of West Sardinia, Italy. *International Journal of Disaster Risk Reduction*, *52*, 101956.

Jappelli, T., & Padula, M. (2013). Investment in financial literacy and saving decisions. *Journal of Banking & Finance*, *37*(8), 2779-2792.

Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 99-127).

Kousky, C. (2019). The role of natural disaster insurance in recovery and risk reduction. *Annual Review of Resource Economics*, *11*(1), 399-418.

Kunreuther, H., Meyer, R., & Michel-Kerjan, E. (2013). Overcoming decision biases to reduce losses from natural catastrophes. *Behavioral foundations of policy*, 398-413.

Kunreuther, H. (2015). The role of insurance in reducing losses from extreme events: The need for public–private partnerships. *The Geneva Papers on Risk and Insurance-Issues and Practice*, *40*, 741-762.

Kunreuther, H. (2018). All-hazards homeowners insurance: Challenges and opportunities. *Risk Management and Insurance Review*, *21*(1), 141-155.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5-44. https://doi.org/10.1257/jel.52.1.5

Lyubchich, V., Newlands, N. K., Ghahari, A., Mahdi, T., & Gel, Y. R. (2019). Insurance risk assessment in the face of climate change: Integrating data science and statistics. *Wiley Interdisciplinary Reviews: Computational Statistics*, *11*(4), e1462.

Madrian, B. C., Hershfield, H. E., Sussman, A. B., Bhargava, S., Burke, J., Huettel, S. A., ... & Shu, S. B. (2017). Behaviorally informed policies for household financial decision making. *Behavioral Science & Policy*, *3*(1), 27-40.

Mathur, T., & Paul, U. K. (2024). Predictors of home insurance purchase: the homeowners' knowledge, perceived benefits and perceived vulnerability towards disaster losses. *International Journal of Housing Markets and Analysis*, *17*(3), 683-701.

McAneney, J., McAneney, D., Musulin, R., Walker, G., & Crompton, R. (2016). Government-sponsored natural disaster insurance pools: A view from down-under. *International Journal of Disaster Risk Reduction*, *15*, 1-9.

Melser, D., Le, T., & Ruthbah, U. (2024). Climate change and its impact on home insurance uptake in Australia. *Ecological Economics*, *222*, 108195.

Nguyen, C. V. (2012). The impact of voluntary health insurance on health care utilization and out-of-pocket payments: New evidence for Vietnam. *Health economics*, *21*(8), 946-966.

Patel, P. C., & Wolfe, M. T. (2019). Money might not make you happy, but can happiness make you money? The value of leveraging subjective well-being to enhance financial well-being in self-employment. *Journal of Business Venturing Insights*, *12*, e00134.

Sass, S. A., Belbase, A., Cooperrider, T., & Ramos-Mercado, J. D. (2015). What do subjective assessments of financial well-being reflect?. *CRR WP*, *3*.

Salignac, F., Marjolin, A., Reeve, R., & Muir, K. (2019). Conceptualizing and measuring financial resilience. *Social Indicators Research*, *145*(1), 17-38.

Shiller, R. J., & Weiss, A. N. (1999). Home equity insurance. *The Journal of Real Estate Finance and Economics*, *19*, 21-47.

Smith, A. B. (2023, January 10). *2022 U.S. billion-dollar weather and climate disasters, in historical context*. Climate.gov. National Oceanic and Atmospheric Administration. https://www.climate.gov/news-features/blogs/beyond-data/2022-us-billion-dollar-weather-and-climate-disasters-historical.

Von Neumann, J., & Morgenstern, O. (2007). Theory of games and economic behavior: 60th-anniversary commemorative edition. In *Theory of games and economic behavior*. Princeton University Press.

Wakker, P., Thaler, R., & Tversky, A. (1997). Probabilistic insurance. *Journal of Risk and Uncertainty*, *15*, 7-28.

Zolfagharian, M., Hasan, F., Motie, G. B., & Squires, G. D. (2020). Perceptions of Home Insurance and Policy Directions: Comparing Mexican Americans and Non-Hispanic White Americans. *Journal of Consumer Affairs*, *54*(2), 417-455.

APPENDIX A
CFPB FINANCIAL WELL-BEING QUESTION USED

FWB-Questions
Panel A: This statement describes me
1. I could handle a major financial transaction.
2. I am securing my financial future.
3. Because of my money situation, I feel like I will never have the things in want in lIfe
4. I can enjoy life because of the way I'm managing my money
5. am just getting by financially.
6. I am concerned that the money I have or will won't last.
Panel B: This statement applies to me
1. Giving a gift for a wedding, birthday or other occasion would put a strain on my finances for the month.
2. I have money left over at the end of the month.
3. I am behind with my finances.
4. My finances control my life.

Note: **Consumer Financial Protection Bureau. (2017a).** *CFPB financial well-being scale: Scale development technical report.* https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-technical-report/

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APPENDIX B
FINANCIAL LITERACY QUESTIONS

"1. Suppose you had $100 in a savings account, and the interest rate was 2% yearly. After 5 years, how much do you think you would have in the account if you left the money to grow: More than $102, exactly $102, less than $102?

- More than $102
- Exactly $102
- Less than $102
- I don't know."

"2. Suppose you had $100 in a savings account, and the interest rate was 20% per year, and you never withdraw money or interest payments. After 5 years, how much would you have in this account?

- More than $200
- Exactly $200
- Less than $200
- I don't know."

"3. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

- More than today
- Exactly the same as today
- Less than today
- I don't know."

"4. Assume a friend inherits $10,000 today, and his sibling inherits $10,000 but 3 years from now. Who is richer today because of the inheritance?

- My friend
- His sibling
- They are equally rich.
- I don't know."
-

"5. Suppose that in the year 2020, your income has doubled, and the prices of all goods have doubled, too. In 2020, will you be able to buy more, the same, or less than today, with your income?

- Buy more than today.
- Buy the same as today.
- Buy less than today.
- I don't know."

"6. Which of the following statements describes the main function of the stock market?

- The stock market helps to predict stock earnings.
- The stock market results in an increase in the price of stocks.
- The stock market brings people who want to buy stocks together with those who want to
- sell stocks.
- None of the above
- I don't know."

"7. Which of the following statements is correct?

- Once one invests in a mutual fund, one cannot withdraw money in the first year.
- Mutual funds can invest in several assets; for example, invest in both stocks and bonds.

- Mutual funds pay a guaranteed rate of return, which depends on their past performance.
- None of the above.
- I don't know."

"8. If the interest rates (rise/fall), what should happen to bond prices?
- They should rise.
- They should fall.
- They should stay the same.
- I don't know."

"9. Do you think the following statement is true? Buying a (single company/stock mutual fund) usually provides a safer return than a (single company/stock mutual fund).
- True
- False
- Don't know."

"10. Do you think that the following statement is true or false?
(Stocks/Bonds) are normally riskier than (stocks/bonds).
- True
- False
- Don't know."

"11. Considering a long period (for example, 10 or 20 years), what normally gives the highest return?
- Savings accounts
- Bonds
- Stocks
- I don't know."

"12. Normally, which asset described below displays the highest fluctuations over time: savings accounts, bonds, or stocks?
- Savings accounts
- Bonds
- Stocks
- I don't know."

"13. When an investor spreads his or her money among different assets, does the risk of losing a lot of money increase, decrease, or stay the same?
- Increase
- Decrease
- Stay the same.
- I don't know."

"14. Is the following statement true? Housing prices in the US can never go down.
- True
- False
- I don't know

Note: **The questions were taken from the Understanding American Study UAS-1.** Similar questions were used by Brenner et al. (2020) and Merkoulova et al. (2022). Brenner, L., Meyll, T., Stolper, O., & Walter, A. (2020). Consumer fraud victimization and financial well-being. *Journal of Economic Psychology*, *76*, 102243. https://doi.org/10.1016/j.joep.2019.102243

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APPENDIX C

PANEL-A: HOUSEHOLD WEALTH MEASURE

Assets	
Real Assets	**"**If you sold all that and then paid off any debts on it, about how much would you get?"
Business or Farm Equity	**"**If you sold all that and then paid off any debts on it, about how much would you get?"
IRA Accounts	**"**About how much (in total is in these other IRA or KEOGH accounts/in total is in these IRA or KEOGH accounts/is in this account) at the present time?"
Stocks	"If you (or your husband/or your wife/or your partner/or your spouse) sold all those and paid off anything you owed on them, about how much would you have?"
CDS Govt Savings T-bills	" If you added up all such accounts, about how much would they amount to right now?"
Vehicles	"What are they worth altogether, minus anything you still owe on them?"
Jewelry / Collectibles	"If you (or your husband/or your wife/or your partner/or your spouse) sold all those and paid off anything you owed on them, about how much would you have?"
Liabilities	
Other Debt	"Do you (or your husband/or your wife/or your partner/or your spouse) have any debts that we haven't asked about, such as credit card balances, medical debts, life insurance policy loans, loans from relatives, and so forth? Altogether, about how much would that amount to?"
Credit Card Debt	"How much credit card debt did you (and your husband/and your wife/and your partner/and your spouse) carry over from last month to this one?"

Note: *Survey questions from the Understanding America Study (UAS) are reproduced with permission from the USC Dornsife Center for Economic and Social Research. Licensing details are available at* https://uasdata.usc.edu.

PANEL-B: HOUSEHOLD NET WEALTH & LOG WEALTH (UN-WEIGHTED)

Variables	Obs.	Mean	SD	Min	Max
Net Wealth	4,068	511,744.9	15,900,000	-996,995	1,000,000,000
Log Wealth	4,068	7.97	5.19	0	20.72

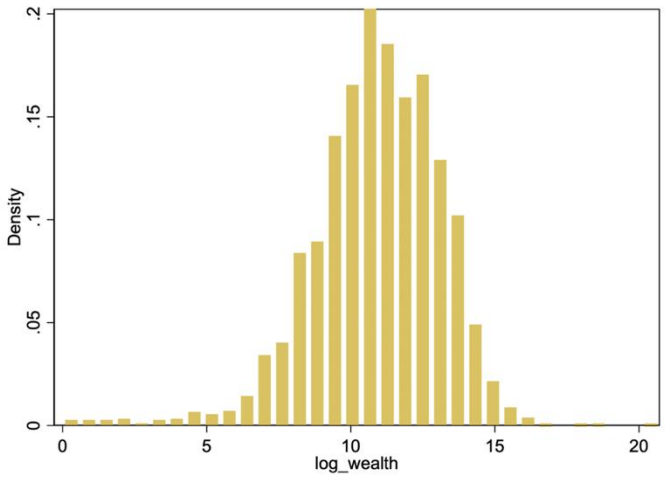

Fig. 4 Household Log Wealth