

Trust, Consumer Debt, and Household Finance*

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Abstract

We provide evidence that trust is an important determinant of an array of household financial decisions and outcomes including debt management. Individuals more trusting of others are less likely to be in debt, miss payments, or file bankruptcy. Their households enjoy better financial outcomes as measured by lower financial leverage and higher retirement savings, assets, and net worth. Cultural background, life experience, and community attributes are all significant determinants of an individual's trust level. When we instrument trust using these determinants, the effect of trust on household finance remains significant. Further, the effect of trust is more pronounced among female and those who have lower education or income. Our further evidence suggests that enhancing individuals' trust, and to the right amount, can foster household financial prosperity.

1. Introduction

Classic economic and finance theories predict that rational households make optimal financial decisions regarding savings, investing, and managing debt. Yet, one-third of American adults in their 50s have no retirement savings plan and more than half of households do not directly or indirectly own any stock.¹ During the past two decades prior to 2006, the personal saving rate dropped steadily from over 10% to 1-2%, and the average US household reached a debt-to-income ratio of about 125%.² Over the period 2000–2010, 1.3 million households filed bankruptcy annually, which account for 97% of the total bankruptcy filings.³

These statistics suggest that many households do not make optimal decisions. Poor household finances, overindebtedness in particular, are widely believed to have played a prominent role leading up to the current financial crisis and economic downturn (e.g., Cynamon and Fazzari (2008), Mian and Sufi (2010a, 2010b)). Thus, it is crucial to understand the determinants of suboptimal behaviors in household finances, particularly the poor management of household debt.

In this paper, we show that trust is an important factor that underlies major household financial decisions and outcomes. Prior literature has found that psychological factors (Benartzi and Thaler 2004), cognitive abilities (Korniotis and Kumar 2010, Agarwal and Mazumder 2011), financial literacy (Lusardi and Mitchell 2007, Lusardi, Mitchell, and Curto 2009), and individual social capital (Agarwal, Chomsisengphet, and Liu 2011) play important roles in household financial decision making. We add to this literature by showing that trust is another factor of such importance.

Existing research on trust has studied the effect of individuals' trust on stock market participation and income of European households (Guiso, Sapienza, and Zingales 2008, Butler, Giuliano, and Guiso 2009), the 401(k) participation of a small sample of US individuals (Agnew, Szykman,

¹See Lusardi (2003) and Lusardi, Mitchell, and Curto (2009) on the inadequacy of retirement savings among US households. See Mankiw and Zeldes (1991) and Campbell, Jiang, and Korniotis (2011) for earlier and more recent evidence on limited stock market participation among US households.

²See Dynan and Kohn (2007), Dickerson (2008), and Cynamon and Fazzari (2008) for the leverage in recent years among US households. See the personal saving rate from U.S. Department of Commerce: Bureau of Economic Analysis. <http://research.stlouisfed.org/fred2/series/PSAVERT>

³See national statistics from American Bankruptcy Institute. <http://www.abiworld.org>.

Utkus, and Young 2007), and loan repayment of borrowers in a Peruvian microcredit program (Karlan 2005). We advance this literature on individual trust by greatly expanding the scope of the household finance measures on both debt and asset management, and also by using a large sample of representative individuals from the US. We show that trusting individuals make wiser household financial decisions in managing debt, assets, retirement savings, and achieve significantly better financial outcomes.

Following Guiso, Sapienza, and Zingales (2008), we define trust as the fundamental confidence an individual has toward others to return what is promised—simply, the confidence to have a fair return in any contract. The extent to which an individual trusts others embodies the core values that she inherits from her family, religion, ethnic and cultural background (Guiso, Sapienza, and Zingales 2006), is influenced by her life experience and the characteristics of the community where she used to reside and currently resides (Alesina and La Ferrara 2002, Barr 2003), and is closely related to the level of her own trustworthiness (Glaeser, Laibson, Scheinkman, and Soutter 2000). In short, we view trust as a subjective belief that is formed by a collection of cultural influences, life experiences, and the level of own trustworthiness.

All else equal, we posit that a trusting individual is more likely to invest in financial markets, as the belief that he will get a fair return in an investment contract encourages her to enter into such a contract (e.g., Guiso, Sapienza, and Zingales (2008)). Thus, trust should promote investments. We also hypothesize that trust promotes responsible borrowing since being trusting is highly correlated with being trustworthy (e.g., Glaeser, Laibson, Scheinkman, and Soutter (2000), Butler, Giuliano, and Guiso (2009)) and being influenced by the social norms that discourage default (e.g., Agarwal and Mazumder (2011)). In sum, we expect trusting individuals to make more financial and real investments, comply with financial contracts they enter into, and ex ante, avoid taking on excessive debt. As a result, they will save more, manage debt better, and enjoy greater financial success.

We make use of individual-level measures of trust and a rich set of household finance variables obtained from the 1979 National Longitudinal Survey of Youth (NLSY79). In this dataset, a cohort of nationally representative American individuals who were born between 1957 and 1964

were interviewed annually between 1979 and 1994, and biennially afterwards. In 2008, they were asked to rate how much they trust others using the following question: “Generally speaking, how often can you trust other people?” Respondents chose one of five answers (always, most of the time, about half the time, once in a while, never), which we translate into a rating of 1 to 5, with 1 indicating the lowest level (never) and 5 the highest level of trust (always).⁴ We link this measure of trust to a broad set of measures of household financial outcomes.

Consistent with the idea that trusting individuals take advantage of the financial system, we find that individuals with above-average trust levels have almost 3 times more retirement savings and 85% higher asset values compared to those with below-average trust levels. These high-trust individuals are also more likely to comply with the terms of financial contracts as they have a 30% lower probability of missing a payment or being late in paying bills. More broadly, they manage their debt better—they are 45% less likely to be in debt (have negative net worth), 21% less likely to declare bankruptcy, and have 35% lower financial leverage compared to low-trust individuals. A combination of superior asset and debt management leads to a 121% higher value of household net worth for these high-trust individuals compared to the low-trust ones. The effect of trust on household finances remains statistically significant with controls for various economic, psychological, cognitive factors, and state fixed effects.⁵

The marginal effect of trust is also significant. Our regression estimates with a comprehensive set of controls indicate that a one standard deviation increase in trust on average leads to a 35% reduction in the probability of being in debt, a 19% reduction in the probability of missing or being late for a payment, and a 13% reduction in the probability of filing bankruptcy, relative the unconditional mean probability of each type of events. Moreover, a one standard deviation increase in trust leads to a marginal increase of \$7K in retirement savings, \$89K in total assets, and \$32K in net worth, again controlling for a host of other factors. Overall, our evidence across the board

⁴The wording of this question is similar to that in the widely used World Values Survey and the General Social Survey: “Generally speaking would you say that most people can be trusted or that you can’t be too careful in dealing with people?” (Possible answers: Most people can be trusted, can’t be too careful, don’t know). Thus, our measure of trust is similar to the one used in the previous studies, but it has an advantage that it allows us to measure the effect of different levels of trust.

⁵The controls we consider include income, age, gender, marital status, family size, the number of children, education, having a finance-related job, cognitive ability, risk aversion, saving preference, impatience, and state dummies.

suggests that trusting individuals on average benefit significantly from healthier financial decisions.

A general concern with any study that examines the effect of trust is the direction of causality. For example, one may argue that individuals who are financially successful should become more trusting, therefore an empirical correlation between trust and financial outcomes may not indicate causal effects of trust. We address this concern by using the instrumental variable approach with several alternative sets of instrumental variables. Our choices of instruments are variables that shape trust but are unlikely to be influenced by the current financial status of an individual. We use religious and ethnic backgrounds, which have been used as instruments in the literature (e.g., Guiso, Sapienza, and Zingales (2006)). In addition, we use three sets of new instruments: life experience (experienced life trauma), and the characteristics (racial, education, and family structure) of the community where the individual currently resides and used to reside during adolescence. Our tests show that all of the above variables predict the level of an individual's trust, and the predicted trust continues to explain a majority of household financial decisions and outcomes.

We also examine cross-sectional variations in the effect of trust on household finance. We find that the effect of trust is most visible among individuals who are less educated, with low income, or female. These results are consistent with the argument that trust helps individuals overcome the concern of not fully understanding complex financial contracts (e.g. Guiso, Sapienza, and Zingales (2004)).

Finally, we show that there is a hump-shaped effect of trust on household finance. Specifically, the effect of trust on all financial outcome measures peaks at the trust rating of 4, and then declines substantially for the highest level of trust rating of 5. In fact, there is no statistical difference between individuals with the highest and the lowest level of trust. Our findings are consistent with the non-linear effect of trust on household income documented by Butler, Giuliano, and Guiso (2009), who argue that extremely low levels of trust lead to overly conservative priors and missing valuable investment opportunities while extremely high levels of trust lead to overly optimistic priors and a higher probability of being cheated. Thus, it is important to have the right amount of trust.

Our findings contribute to a fast growing body of research that considers the role of trust, or more generally, that of culture in economics and finance. Recent empirical studies argue that culture is an important determinant of creditor rights (Stulz and Williamson 2003), several economic outcomes such as national savings and preferences for redistribution (Guiso, Sapienza, and Zingales 2006), trades between countries (Guiso, Sapienza, and Zingales 2009), the returns of momentum strategies (Chui, Titman, and Wei 2010), the volume, gains, and terms of cross-border mergers (Ahern, Daminelli, and Fracassi 2012), capital structure (Li, Griffin, Yue, and Zhao 2011), venture capital investments (Bottazzi, Da Rin, and Hellmann 2010), and the terms of syndicated bank loans (Giannetti and Yafeh 2011). Trust has been considered an important dimension of culture (e.g., Guiso, Sapienza, and Zingales (2006), Guiso, Sapienza, and Zingales (2009), Ahern, Daminelli, and Fracassi (2012)), thus our results can also be viewed as evidence showing the effect of culture on household finance.

2. Motivation and Hypotheses

2.1 Trust and Economic and Financial Decisions: Individual Level Evidence

A voluminous literature shows that trust has a positive effect on aggregate economic and political phenomena. By an incomplete count, the World Values Survey question on trust has been used by over 500 papers to study the economic effect of trust (Sapienza, Toldra, and Zingales 2010). Most of these papers have focused on the positive effect of trust at the aggregate level, showing that a higher level of average trust in a nation or region is correlated with greater aggregate economic growth and investments (Knack and Keefer 1999), greater judicial efficiency, less corruption, greater bureaucratic quality, higher tax compliance (La Porta, Lopez-de-Silanes, Vishny, and Shleifer 1997), and better financial development (Guiso, Sapienza, and Zingales 2004).

In contrast, only a few have studied the effect of trust on the economic outcomes at the individual level. Karlan (2005) finds that borrowers in a Peruvian microcredit program who answer positively to the General Social Survey trust question have a lower probability of default, but do not have significantly higher savings. Guiso, Sapienza, and Zingales (2006) show that trust is positively

associated with the probability of becoming an entrepreneur using the General Social Survey of the US. Using a small sample of US employees participating in three 401(k) plans, Agnew, Szykman, Utkus, and Young (2007) show that less trusting individuals are more likely to opt out from automatic enrollment plans. Guiso, Sapienza, and Zingales (2008) find that trusting individuals in the Netherlands are more likely to participate in stock markets and invest more conditional on participation. Using the European Social Survey, Butler, Giuliano, and Guiso (2009) uncovers a non-linear effect of trust on individuals' income.⁶

Although these existing studies suggest that trust has a positive effect on the economic and financial wellbeing of an individual, they do not offer a comprehensive picture of the effect of trust on household finances. Furthermore, with an exception of Karlan (2005), none of these studies examine how trust affects debt management. Our goal is to study the effect of trust on individual household finances using several measures of both asset and debt management and using a representative sample of US households that have not been examined by prior research.

2.2 Hypothesis Development

Trust is likely to play an important role in economic activities where the transaction takes place over a period of time and individuals need to rely on the future and/or unobservable actions of others, such as investments and savings decisions (e.g., Guiso, Sapienza, and Zingales (2006)). Trusting individuals are more likely to invest because they believe they are going to get a fair return in the investment contract (Guiso, Sapienza, and Zingales 2008). Prior evidence shows that trusting individuals are more likely to participate in the stock market, invest more in risky assets, and less likely to opt out of defaulted 401(k) plans (Agnew, Szykman, Utkus, and Young 2007, Guiso, Sapienza, and Zingales 2008). Thus, we conjecture that these trusting individuals will have higher levels of savings and asset holdings, as a result of taking advantage of valuable investments and savings opportunities.

⁶These studies all use survey responses to the question about how much one trusts others. On the other hand, the study of El-Attar and Poschke (2012) imputes the trust level of Spanish household based on personal and demographic information, and shows that individuals with lower levels of imputed trust invest more in housing and less in financial assets.

We also conjecture that trusting individuals manage household debt better for several reasons. First, a trusting individual is usually trustworthy. Glaeser, Laibson, Scheinkman, and Soutter (2000) show that survey questions that solicit the degree of trust toward others also capture the degree of one’s trustworthiness. Butler, Giuliano, and Guiso (2009) argue that people tend to extrapolate their own trustworthiness to form the expected trustworthiness of others. A trustworthy individual is more likely to comply with the debt contract he enters into and strive to keep his promises by making payments on time. Further, since a trustworthy individual is committed to pay back debt and interest, *ex ante*, they would avoid excessive borrowing.⁷

Second, a trusting individual likely has built her trust toward others based on the social capital she possesses, where social capital encompasses social networks, norms, and cooperation in a community (Putnam 1995). High-social-capital communities encourage members to keep their promises and attach social stigma to deviants through imprinting moral attitudes in the community (e.g., Guiso, Sapienza, and Zingales (2004)). Such social norms are likely to reduce the rates of bankruptcy filings and consumer defaults (Buckley and Brinig 1998, Agarwal, Chomsisengphetb, and Liu 2011). Thus, due to the ethical or social norms reflected in personal trust, we expect trusting individuals to have a lower probability of missing payments or declaring bankruptcy, and make conservative borrowing choices like having lower leverage and a lower probability of being indebt (having negative equity) to avoid such negative outcomes.⁸

Taken together, we hypothesize that

H1: Trusting individuals manage both assets and debt better, and have higher net worth.

a: Trusting individuals have higher values of savings, assets, and net worth.

⁷This prediction is opposite to a prediction based on borrowing constraints. Duarte, Siegel, and Young (2009) show that borrowers with higher perceived trustworthiness have a higher probability of obtaining a loan and lower cost of a loan in a peer-to-peer lending site. Thus, trusting individuals should have less borrow constraints.

⁸While trust promotes the use of investment contracts, we expect trust to have very different effects on individuals’ use of debt contracts. A fundamental difference between investment and debt contracts is who is entrusting money to whom. When an individual makes financial investments, she is entrusting her money to financial institutions. On the other hand, when she borrows money, she is being entrusted with money from a financial institution. Thus, the effect of trust as a subjective probability of fair returns on the use of debt contracts is not as clear as that on the use of investment contracts, and we expect that trust affects debt management mainly through its association with trustworthiness and social capital.

b: Trusting individuals are less likely to miss payments, be in debt, or declare bankruptcy, and have lower leverage.

If trust leads to better financial decisions and outcomes, a natural question to ask is what factors determine an individual's trust toward others. Prior literature suggests that trust can be built through at least three different channels. First, trust can be transmitted from parents to children in their prior beliefs and values, and such a cultural component of trust is often correlated with ethnic and religious traits (Guiso, Sapienza, and Zingales 2004). La Porta, Lopez-de-Silanes, Vishny, and Shleifer (1997) find that trust is lower in countries with higher percentages of population belonging to a hierarchical religion such as Catholic, Eastern Orthodox, or Muslim. Their finding is consistent with the argument by Putnam (1993) that hierarchical religions discourage the formation of trust since trust is likely to be formed through horizontal networks of cooperation among people.⁹

Second, trust can be shaped by personal life experience. Alesina and La Ferrara (2002) show that individuals with a recent history of traumatic experiences such as divorce and belonging to groups that traditionally claim to have been discriminated against have low levels of trust. Butler, Giuliano, and Guiso (2009) point out that those who have been cheated are more likely to revise their trust beliefs downward.

Third, trust can be fostered by community attributes to which one used to belong and currently belongs. Communities with high levels of social capital characterized by close relationship and cooperation among individuals can promote general trust toward others. Also, to the extent that an individual's trust is motivated by his expectation of trustworthiness of the people he deals with (Barr 2003), characteristics of people in the community that may be correlated with their trustworthiness can shape one's trust level. Knack and Keefer (1999) and Alesina and La Ferrara (2002) find trust is stronger in nations or communities with a lower level of income inequality and with better-educated and ethnically homogeneous populations. Since an individual's trust is shaped by life experience, we expect not only the community attributes where she currently resides, but also those where she used to reside, matter for her trust. Joining the above arguments, we

⁹However, recent studies (including ours) do not find lower trust among Catholics. Guiso, Sapienza, and Zingales (2006) conjecture that it is due to the change in Catholic doctrine and teaching around 1960.

hypothesize that

H2: Cultural background, personal life experience, and community attributes where an individual resides and used to reside affect the level of an individual's trust.

Further, the effect of trust may differ across groups. Guiso, Sapienza, and Zingales (2008) find that trust has a stronger effect on stock market participation among less educated individuals. Since financial contracts are complex and difficult to comprehend for less-educated individuals, being trusting can help them overcome the concern of being cheated in a complex financial contract, encouraging them to invest through financial vehicles. Therefore, we conjecture that trust is likely to have a bigger impact on those who are more prone to poor financial decisions.

H3: The effect of trust should be most pronounced among individuals who are prone to poor financial decisions.

Finally, the effect of trust may not be linear. Butler, Giuliano, and Guiso (2009) show that the relation between one's level of trust and his/her income is hump-shaped. They argue that highly trusting individuals underperform those with intermediate levels of trust because they tend to form beliefs that are too optimistic, and as a result they take too much social risk and get cheated more often. Similar arguments can be made regarding the effect of extreme levels of trust on the measures of financial decision quality and financial outcomes. We state our conjecture in the following hypothesis.

H4: Trust has a non-linear effect on the quality and outcomes of household financial decisions; those with extremely high levels of trust perform worse than those with moderate levels of trust.

In the sections that follow, we introduce our data sources, describe the measures of household financial decisions and outcomes, and test each of the hypotheses.

3. Data

The primary data source of our analysis is the 1979 National Longitudinal Survey of Youth (NLSY79). The NLSY79 is a nationally representative sample of 12,686 young men and women who were 14 to 22 years of age when first surveyed in 1979. The respondents were interviewed annually through 1994, after which they were interviewed every other year. The NLSY79 is known for its exceptional retention rate among all longitudinal studies. For example, in 2008, 82% of eligible respondents who were not known to be deceased participated in the survey, which mitigates the self-selection issue faced by many other studies.

Our key variable on trust is based on the following question in the 2008 survey, which is the most recent round of survey with available data: “Generally speaking, how often can you trust other people?” (Always, Most of the time, About half the time, Once in a while, Never). We assign 1 to ‘Never’ and 5 to ‘Always’, so that a higher number corresponds to a higher level of trust.

We relate the trust measure to measures of household finance in 2008. The values of the following asset items were collected for the 2008 survey: CDs, bonds, business assets, vehicles, saving/checking/money market accounts, mutual funds, employer-sponsored retirement accounts, saving bonds, stock, IRA/Keogh/other tax-advantaged accounts, residential properties, collections, cash-value insurance, items each worth \$1,000 or more, and personal or mortgage loans made to others. For liabilities, the values of credit card debt, car loans, business debt, student loans, mortgages and back taxes, other debt on residential properties, debt to other businesses, and personal loans were collected. Although NLSY79 collected information on assets and liabilities in earlier rounds of survey starting from 1985, they did not ask about some of asset items, especially important debt items such as credit card debt and student loans, and used coarser categories until 2000.

NLSY79 has also gathered information on demographic characteristics, income, risk aversion, cognitive ability, and impatience. Some of the variables are collected in every round, while others are collected in certain years. For example, the Armed Forces Qualifying Test (AFQT) scores, which we use as measures of cognitive ability, are taken from the 1981 survey. The AFQT scores

are based on four areas (Arithmetic Reasoning, Mathematical Knowledge, Word Knowledge, and Paragraph Comprehension) of the Armed Services Vocational Aptitude Battery (ASVAB), and are widely used in the literature (e.g. Agarwal and Mazumder (2011)) as measures of cognitive ability.

In addition, we use American Community Survey 2008 and US census 1980 to construct measures of community characteristics such as the racial fragmentation index, the percentage of residents who have completed high school, and the percentage of households that are married-couple households with own children under 18. We provide the definition of each variable used in our paper in the Appendix and descriptive statistics in Table 1.

[—————INSERT TABLE 1 HERE—————]

Panel A of Table 1 shows that the mean trust level is 2.95, with a standard deviation of 1.02. About 9% individuals have the lowest trust level of 1, and 2% have the highest level of 5, and with the other three (2, 3, 4) levels each accounting for 25%-35% of the sample.

4. Empirical Results

4.1 Trust and Financial Decision/Outcomes

We first test Hypothesis H1, which predicts that trusting individuals manage debt better, have higher values of assets and net worth. We measure the quality of debt management by the following four variables: (1) Indebt (whether the respondent has a negative net worth); (2) Miss Pmt (whether the respondent has completely missed a payment or been at least 2 months late in paying any of the bills in the last 5 years); (3) Bankruptcy (whether the respondent has ever declared bankruptcy); and (4) leverage (the ratio of debt over assets).¹⁰

We measure the quality of asset management by two variables: (1) Log Retire (the logarithm of retirement savings); (2) Log Asset (the logarithm of total asset).¹¹ To capture the net effect

¹⁰The leverage ratio used includes all debt over all assets. In unreported robustness checks, we define leverage by excluding mortgage debt/assets, student loan, or business debt/asset, and continue to find qualitatively similar and statistically significant results.

¹¹NLSY79 only reports the total balance of various tax-advantaged retirement accounts and education savings accounts. However, only 3% of households in our sample have any education savings accounts. Thus, we use the total balance as a proxy for the retirement savings. We find that excluding the 3% households that have education savings does not materially change our results on retirement savings, suggesting that education savings does not drive our result.

of trust on both debt and asset, we use Log Net Worth (the logarithm of net worth), which is defined as $\log(1+\text{Net Worth})$ for net worth greater than or equal to zero, and $-\log(1-\text{Net Worth})$ for negative net worth. Hypothesis H1 predicts that trust should have a negative relation with all four debt-related variables, but have a positive relation with assets and net worth.

[—————INSERT FIGURE 1 and TABLE 2 HERE—————]

To gain a first glance at the effect of trust on personal finance, we first sort individuals into a high and a low trust group, where high trust refers to the above-mean level of trust (rating of 3 or above) and low trust refers to below-mean level of trust (rating of 1 or 2). We report the means of the debt and asset variables of the two groups in Figure 1.

Figure 1A plots the variables on debt management. The high trust group has a probability of 9.1% of being in debt, 18.9% of missing payments, 14.8% of declaring bankruptcy, and a leverage ratio of 0.383. These numbers are uniformly and significantly lower than those of the low trust group: 16.7%, 26.9%, 18.7%, and 0.592. In other words, low-trusting individuals are about 30%-80% more likely to run into a problem associated with debt and are 50% more leveraged. When it comes to asset management, again the high trust group performs significantly better. Figure 1B shows that the high trust group on average has \$92K retirement savings, \$1,044K total assets, and \$319K net worth, in contrast to a much lower \$32K, \$564K, and \$144K of the three variables for the low trust groups. In other words, individuals in the high trust group cumulates 2-3 times of the assets of various sorts cumulated by individuals among the low trust group. Therefore, Figure 1 clearly shows that high-trust individuals enjoy significantly better financial outcomes than low-trust individuals.

Next, we confirm the relationship between trust and various financial outcome variables using regressions. We report the univariate regression results in Table 2, Panel A. When the dependent variable is a dummy variable, we use probit regressions. Otherwise, we use OLS regressions. We adjust standard errors for clustering at the county level since the NLSY79 survey uses county as the primary geographic cluster for selecting respondents.

The results in Panel A of Table 2 are consistent with Hypothesis H1: the debt-related variables

and the use of informal finance are negatively related to trust. In contrast, the asset-related variables and net worth are positively related to trust. In all regressions, the coefficient estimates on trust are statistically significant at the 1% level. These regression estimates suggest that a one-standard-deviation change (1.02) in trust leads to a reduction of 4% in the probability of being in debt, 4.1% in the probability of missing a payment, 2.1% in the probability of filing bankruptcy, and 11.4% in leverage. Placing these numbers relative the unconditional mean of each variable, the one-standard-deviation change in trust corresponds to 13%-35% reductions in the four debt measures. For the asset-related variables and net worth, our coefficient estimates imply that a change of trust level by one standard deviation leads to an increase of about \$59K in retirement savings, \$943K in total assets, and nearly \$283K in net worth, where the marginal changes are computed at the mean of each variable.

In Panel B, we include a set of controls that are likely to affect household financial decisions: income, age, gender, marital status, family size, number of children, education, whether the respondent works in the finance industry, measures of risk aversion, saving preference, and the level of impatience. In addition, we include two measures of cognitive ability: the math and verbal scores of the AFQT tests taken from the 1981 survey. Prior literature has emphasized the importance of cognitive ability in the understanding of financial literacy (Lusardi and Mitchell 2006, Lusardi and Mitchell 2007) and the quality of financial decisions (Korniotis and Kumar 2010, Korniotis and Kumar 2011, Agarwal and Mazumder 2011). These control variables are likely to capture the heterogeneity in financial and cognitive abilities and preferences for risk and saving, which are important determinants of financial decisions based on prior research. We also control for state fixed effects to account for unobserved differences in financial constraints, legal enforcement, or social capital across states.¹²

After adding all of the above-mentioned control variables, however, trust remains statistically significant at the 1% level in all regressions. These regression estimates suggest that a one-standard-deviation change (about 1) in trust leads to a reduction of 9.5% in the likelihood of being in debt,

¹²The state fixed-effects also absorb the differences in trust across states. Not surprisingly, our results are stronger without controls for the state dummies.

10.3% in the likelihood of missing a payment, 13.6% in the likelihood of filing bankruptcy, and 13.9% in leverage, relative to the mean likelihood. For the asset-related variables and net worth, our regression estimates imply a change of trust by one standard deviation leads to a marginal increase of \$7K in retirement savings, \$89K in total assets, and nearly \$32K in net worth, incremental to the effect of a host of economic, preference, and cognitive factors and state fixed effects.¹³

The regression estimates of control variables in Panel B are also generally consistent with prior findings. For example, individuals that are married, male, with higher income and higher education, and work in the finance industry tend to exhibit better financial outcomes (e.g. Lusardi and Mitchell (2007), Grinblatt, Keloharju, and Linnainmaa (2010)). However, unlike prior studies, age is insignificant in our regressions. This is probably attributed to the fact that our respondents come from a cohort with similar ages (born between 1957 and 1964), therefore leaving little dispersion in age for our sample of individuals. The preference for savings consistently has a positive effect on various financial measures. But measures of risk aversion and impatience have only some or little influences. Overall, our regression results in Table 2 provide strong support that trust is strongly correlated with the quality and outcomes of household financial decisions.

4.2 Determinants of Trust

Next, we turn to Hypothesis H2 to explore the determinants of trust. Hypothesis H2 attributes the level of an individual’s trust to the cultural background, personal life experience, as well as to the attributes of the community where the individual used to and currently reside.

Following Guiso, Sapienza, and Zingales (2006), we use ethnicity and religion in which one is raised to proxy for cultural background. Motivated by Alesina and La Ferrara (2002), we use `trauma_past` – whether one has experienced divorce, separation, or loss of spouse in the past – to proxy for life experience. We also use several measures of community attributes that are likely to be related to the level of one’s trust level, motivated by Knack and Keefer (1999) and Alesina and La Ferrara (2002): the racial fragmentation index, the percentage of population that are married

¹³It is possible that one misses a payment or file for bankruptcy due to overindebtedness. However, our further robustness check shows that including a debt-to-income ratio has little impact on the relation between trust and the probability of missing payments or filing bankruptcy.

with own children under age 18, and the percentage of population above age 25 that have high school diploma. All of the community attribute variables are measured at the county level and taken from the American Community Survey 2008 for 2008 community attributes, and from the US census for 1980 attributes. Some of the variables such as `trauma_past` and community attributes that are not endowed at birth, and may shape individual's trust subsequently. Based on prior studies, we expect trust to have a negative relation with `trauma_past` and the racial fragmentation index, and a positive relation with the percentage of people married with own children, and the percentage of high-school graduates. We use OLS regressions test these predictions and report the coefficients and the t -statistics based on robust standard errors adjusted for clustering at the county level.

[—————INSERT TABLE 3 HERE—————]

We present the regression results using five specifications in Table 3. In the first four, we regress trust on each of the four sets of determinants, from cultural background (religion-raised and ethnicity) to life experience and community attributes. In the last one, we regress trust on all of the factors to study the incremental effect of these determinants. In regression (1), trust is regressed on both religion and ethnicity dummies with the 'others' category for both variables set as the benchmark. We find a significant positive coefficient for five out of nine religions including two strongest: Episcopalian (0.352, $t = 4.28$) and Jewish (0.322, $t = 2.61$), and one marginally significant, negative coefficient on Baptist. Among the ethnicity dummies, we find significant negative coefficients on Black, Puerto Rican, and Mexican and Hispanic, consistent with the findings by Alesina and La Ferrara (2002) who suggest that belonging to racial groups that are perceived to have been discriminated against tend to lower the levels of trust.

In regression (2), we use personal life experience to predict trust. We again find strong support to our Hypothesis H2: trauma has a significant negative coefficient (-0.191 , $t = -7.53$), suggesting traumatic life experiences reduce trust. Furthermore, it also matters where the individual lived in adolescence and currently lives. Our regressions (3) and (4) estimates show that those living (or have lived) in communities with good social capital, characterized by a lower level of racial fragmentation, more stable family structure, and higher education, have high levels of trust.

Finally, when all of the determinants are used together in regression (5), we continue to see similar statistical significance in most of the variables with a slight reduction in the size of many coefficients. Overall, the regression estimates suggest that the four sets of determinants appear to capture distinct aspects of influence on trust. That is, trust can be inherited through culture, shaped by life experience, and fostered by community social capital.

4.3 Instrumental Variable Approach

Our goal is to show that trust leads to better financial decisions and outcomes. So far we have demonstrated that trust has a significant relation with an array of household financial outcome measures. We have also shown that while trust contains components that remain relatively stable over one's life time, such as religion and ethnicity, it also contains components that can be shaped by life experiences and community characteristics. In this subsection we use the instrumental variable approach to address a concern about causality and also to examine how each component of trust affects household finances.

A primary alternative explanation for our main results is based on reverse causality. Since both trust and the financial decision/outcome measures are observed roughly at the same time, it is possible that higher trust levels are caused by better financial status; success breeds trust. Thus, the correlation we document may simply indicate that financial outcomes influence the level of trust. This is a valid and important concern. To establish causality, we explore the instrumental variable approach. Our goal is to identify instruments that are correlated with the level of trust but are not likely to be influenced by one's financial status. The determinants (components) of trust we study in Table 3 are potentially good candidates for this purpose.

Specifically, the religion in which one is raised and the individual's ethnicity affect trust, but one's financial status does not determine her family religion or ethnicity. Next, traumatic life experiences such as divorce, separation, or loss of spouse can shape trust, but the current financial status cannot cause prior life experience when we control for the current marital status. Finally, community attributes can influence one's trust, but an individual's financial status is unlikely to cause a change in the community characteristics. Of course, it is possible that a better financial status prompts

reallocation to a community with higher levels of social capital. However, reallocation to a different community occurs relatively infrequently in our sample.¹⁴ To address the concern of self-selected communities, we also use the community attributes from the residing county in 1980, when most individuals were in their adolescence and first interviewed by NLSY. Most of the respondents had not cumulated significant financial assets or debts in 1980. Thus, the community attributes in 1980 should be free from the influence of the current financial status. Therefore, they are relatively ideal instruments for studying the causal impact of trust on financial decisions and outcomes.

[—————INSERT TABLE 4 HERE—————]

To show the separate effect of the four sets of instrumental variables, we use each of them in separate regressions. In the unreported first stage regressions, we regress trust on one of the four sets of instrumental variables together with all the control variables. We find that the coefficient estimates on the instrumental variables are mostly qualitatively similar to those in Table 3. In the second stage regressions, we regress each of the seven financial outcome measures on the predicted value of trust from the first stage regression together with all other controls. We report the regression estimates in the four panels of Table 4 that differ only in the set of instrumental variables used. We focus on the economic and statistical significance of the predicted trust measure.

When we use culture-based instrumental variables (religion-raised and ethnicity) in Panel A, we find the predicted trust remains statistical significant and in the expected sign for all but the bankruptcy and leverage measures. Compared to the results in Panel B of Table 2, the size of the coefficients on the instrumented trust, however, is usually 5-10 times larger than that of the original trust variable. The greater coefficients are partly caused by smaller standard deviations of the predicted trust measure. For example, in the OLS regressions, the standard deviations of the predicted trust range from 0.411 to 0.418, smaller than 1.02 of the original trust variable. However, even after we account for the differences in the standard deviations, the results indicate that the economic impacts are larger using the instrumental variable approach. This phenomenon

¹⁴During the period 1998–2008, about 12% of the respondents moved across states, and 16% of the respondents moved across counties within the same state. These numbers suggest that a majority (more than 71%) of the respondents in our sample have been living in the same county of the same state during the most recent decade up to 2008.

is also observed by Guiso, Sapienza, and Zingales (2006) when they use ethnicity and religion as instruments.

In Panel B, we use `trauma_past` as the instrumental variable and `trauma_current` as an additional control. We obtain statistically significant coefficients for all but the leverage and the log asset measure regressions, whose coefficients are marginally significant. Again, the size of the coefficients on the predicted trust tends to be larger than those in Panel B of Table 2 when trust is used.

Finally in Panels C and D, we use the three county-level community attributes in 2008 and 1980 as instruments, respectively. For the 2008 instruments, we obtain four significant and two marginally significant coefficients on the predicted trust among the seven dependent variables considered. The coefficients for bankruptcy remains in the expected direction but is statistically insignificant. For the 1980 instruments, we obtain four significant and one marginally significant coefficients. Although not all financial outcome variables show a statistically significant relationship with predicted trust, overall, the results suggest that trust that stems from the broad community social capital improves the quality of household financial decisions in most of the dimensions we consider.

To summarize, the results in Table 4 show that trust formed by culture, personal experience, and community attributes encourages investments and more responsible debt management. In particular, the cultural variables we consider (religion and ethnicity) are determined at birth therefore are not driven financial outcomes, and the community attributes variables in 1980 influence the respondents in their adolescence but cannot be influenced by an individual's financial status 28 years later. Thus, our findings suggest that the effect of trust on household finance is unlikely be driven by reverse causality.

4.4 Subsample Analyses Based on Proneness to Poor Financial Decisions

In this subsection we turn to Hypothesis H3, which predicts that trust should have a more pronounced effect on those who are more susceptible to poor financial decisions. To identify such vulnerable individuals in household finance, we use three sorting variables: education, income, and gender. Education is used by Guiso, Sapienza, and Zingales (2008), who show that the effect of

trust on stock market participation is stronger among less educated individuals. The next two variables, income and gender, are motivated by prior studies that show that those with low income and female are more likely to display low levels of financial knowledge (e.g., Lusardi and Mitchell (2006)).

[—————INSERT TABLE 5 HERE—————]

We report the results on the subsample analyses in Table 5. In Panels A, B, and C, the sample is split into two groups based on education, income, and gender, respectively. The results overall suggest that trust has bigger effects on those who are more susceptible to poor financial decisions. For example, among individuals with below college education, trust has a statistically significant effect in all debt and asset variables but leverage, while among individuals with college education or above, trust impacts none of the debt variables but leverage and two of the three asset variables, in which cases the coefficient of trust is only marginally significant. Thus, the effect of trust appears to be strong among the low-education group but weak among the high-education group.

Using the other two sorting variables, we continue to observe statistically significant effects of trust on all dependent variables for the financially vulnerable groups; those who have low income or are female enjoy a significant beneficial effect of trust. In contrast, trust has a statistically significant effect only for three dependent variables among high-income individuals and for one dependent variable among males—the group who are presumably more competent and financially sophisticated. Overall, we echo prior research by showing that the effect of trust is more pronounced among more vulnerable individuals in household finance.

4.5 The Non-Linear Effect of Trust

Finally, we test Hypothesis H4, which pertains to the non-linear effect of trust. We expect that individuals with extremely high levels of trust perform worse than those with moderately high levels of trust, as they may take others at their word and do not perform due diligence before entering into a contract. Since the level of trust ranges from 1 to 5, with 1 indicating the lowest level and 5 the highest level, we run all regressions in Table 2 with four trust dummies that indicate the trust level of 2, 3, 4, and 5. Thus, the coefficient of each dummy captures the incremental effect of that

trust level relative the lowest trust level.

[—————INSERT TABLE 6 HERE—————]

The results, shown in Table 6, provide strong support for our hypothesis H4. In Panel A, when each of the financial decision/outcome measures is regressed on the four trust dummies without control variables, we find that the coefficients of various trust level variables are mostly in the expected direction within each regression. However, the size of the coefficient on trust all increases from the level of 2 to 3, peaks at 4, followed by a sharp decline at the level of 5. The statistical significance also follows this pattern. Using the regression of indebtedness as an example, having a trust level of 2 to 5 reduces the likelihood of being in debt by 7.6% ($z = -6.35$), 10.3% ($z = -8.93$), 15.0% ($z = -12.98$), and 6.4% ($z = -2.43$), respectively, as compared to the lowest level of trust. With the set of controls added in Panel B, the marginal effect of trust in reducing the probability of being in debt is 3.3% ($z = -2.25$), 3.5% ($z = -2.54$), 4.8% ($z = -3.27$), and 3.0% ($z = -1.06$) for trust levels 2 through 5. In other words, having an extremely level of trust makes one no better off than having an extremely low level of trust.

This pattern applies to all other dependent variables. We observe a gradual increase in the effect of trust up the level 4 followed by a sharp decrease at the highest level of trust. Although the size and statistical significance of the coefficients on trust dummies are generally reduced, the coefficients for the trust level of 4 remain statistically significant in all regressions. In other words, the non-linear effect of trust is generally robust to the controls of the host of economic and psychological factors we consider. To summarize, our regression results in Table 6 show that it is the right level of trust, not an extremely high level of trust, that leads to better household finances.

5. Conclusion

Using a representative sample of American individuals and a set of broad measures of household financial decisions and outcomes, we show that on average trusting individuals fare better in household finances. Trusting individuals have larger assets, greater retirement savings, lower probabilities of missing payments or filing bankruptcy, lower levels of debt, and higher net worth.

Trust is influenced by culture, life experience, and community social capital. These components have a strong impact on household finances by shaping an individual's trust. Trust is more crucial for vulnerable groups of individuals that are more prone to poor financial decisions. Consistent with Butler, Giuliano, and Guiso (2009), we find that moderately high levels of trust are most beneficial, but extremely high levels are not.

To address a concern of reverse causality, we show that the instrumented trust using cultural variables and other determinants of trust has a significant influence on financial decisions and outcomes. Some of these instruments are endowed at birth or influence individuals in their adolescence and are unlikely to be caused by financial status in their adulthood. Thus, our evidence suggests the causal impact of trust on household finance.

There has been a growing interest in household finance, especially after the most recent financial crisis and economic recession where excessive borrowing by households is blamed to have played a major role. If trust is an important factor underlying household financial decisions, debt management in particular, improving trust can bring substantial benefits to individual household finances and the aggregate economy. Although the cultural component of trust has a strong effect, we find that personal experiences and community environment also shape one's trust level and affect household financial decisions. Thus, fostering the right amount of trust by building good community cultures can benefit individuals in improving their household finances.

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Appendix: Variable Definition

All variables are from NLSY79 unless noted otherwise.

Variable name / Description	
AFQT_math	Sum of standard scores on ASVAB section 2 (arithmetic reasoning) and section 8 (mathematics knowledge), from 1981 survey.
AFQT_verbal	Sum of standard scores on ASVAB section 3 (word knowledge) and section 4 (paragraph comprehension), from 1981 survey.
Age	Age at the interview date, from 2008 survey.
Asset	Sum of the values of CDs, bonds, business asset, vehicles, saving/checking/money market accounts, mutual funds, employer-sponsored retirement accounts, saving bond, stock, IRA/Keogh/other tax advantaged accounts, residential properties, collections, cash-value insurance, items, and personal loans made to others. Scaled by 1,000, from 2008 survey.
Bankruptcy	Equal to 1 if the respondent has ever declared bankruptcy, from 2008 survey.
Education	Name of the highest degree ever received. It is in 9 categories: (1) None, (2) High school diploma (or equivalent), (3) Associate/Junior College (AA), (4) Bachelor of Arts Degree (BA), (5) Bachelor of Science (BS), (6) Master's Degree (MA, MBA, MS, MSW),(7) Doctoral Degree (PhD),(8) Professional Degree (MD, LLD, DDS),(9) Other, from 2008 survey.
Edu_high	Equal to 1 if the respondent's highest degree received is High school diploma or equivalent (category 2), from 2008 survey.
Edu_college	Equal to 1 if the respondent's highest degree received is College (AA, BA, BS) (categories 3, 4, or 5), from 2008 survey.
Edu_gradprof	Equal to 1 if the respondent's highest degree received is Graduate/Professional (MA, MBA, MS, MSW, PhD, MD, LLD, DDS) (categories 6, 7, or 8), from 2008 survey.
Edu_other	Equal to 1 if the respondent's highest degree received is Others (category 9), from 2008 survey.
Ethnicity	The origin/descent of the respondent (For multiple origins: one the respondent feels closest to). It is in 29 categories, which are collapsed into 8 categories: (1) Black, (2) Puerto Rican, (3) Mexican, Hispanic, and Cuban, (4) Hawaiian, Indian American, (5) Asian (including Asian Indian, Korean, Chinese, Filipino, Japanese, and Vietnamese), (6) European (including Portuguese, Greek, Russian, English, Italian, Scottish, Welsh, Polish, French, German, and Irish), (7) American; (8) Others, from 1979 survey.
Famsize	The number of family members, from 2008 survey.
Fin_riskaver	The lowest price at which the respondent is willing to sell an item that is worth nothing or \$10,000 with equal probabilities. Scaled by 1,000, from 2006 survey.
Finance industry	Equal to 1 if the respondent's primary employer is in finance or insurance industry, from 2008 survey.

Appendix: Variable Definition (Continued)

Variable name / Description	
High-School Population	The county-level percentage of people (25 years and over) who have completed high school (includes equivalency). The 2008 variable is based American Community Survey 2008 data. The 1980 variable is based on the US census 1980 data.
Impatience	The smallest amount of additional money that the respondent would have to receive one month from now to convince him/her to wait one month rather than claim a \$1,000 prize now. Scaled by 1,000, from 2006 survey.
Income	Total net family income in the past calendar year. Scaled by 1,000, from 2008 survey.
Indebt	Equal to 1 if the answer is 'in debt' on the following question: "Suppose you were to sell all of your major possessions (including your home), turn all of your investments and other assets into cash, and pay all of your debts. Would you have something left over, break even, or be in debt?" from 2008 survey.
Job_riskaver	1: the respondent is willing to take a new job that will either double the income or cut it in half with equal probabilities. 2: the respondent is willing to take a new job that will either double the income or cut it by a third with equal probabilities, but is not willing to take the job if it can cut the income in half. 3: the respondent is willing to take a new job that will either double the income or cut it by 20% with equal probabilities, but is not willing to take the job if it can cut the income by a third. 4: the respondent is not willing to take a new job that will either double the income or cut it by 20% with equal probabilities, from 2006 survey.
Leverage	Debt/Asset, where debt is the sum of credit card debt, car loans, business debt, student loans, mortgages/home equity loans/back taxes/home improvement loans, other debt on residential properties, debt to other businesses, and informal borrowing, from 2008 survey.
Male	Equal to 1 if the respondent is male, from 2008 survey.
Married	Equal to 1 if the respondent is married, from 2008 survey.
Married with Children	The county-level percentage of households that are married-couple families with own children under 18 years. The 2008 variable is based American Community Survey 2008 data. The 1980 variable is based on the US census 1980 data.
Miss Pmt	Equal to 1 if the respondent has completely missed a payment or been at least 2 months late in paying any of the bills in the last 5 years, from 2008 survey.
Net worth	Family net worth, created by summing all asset values and subtracting all debt. Scaled by 1,000, from 2008 survey.
Numchild	Number of children in the household, from 2008 survey.

Appendix: Variable Definition (Continued)

Variable name / Description	
Racial Fragmentation	The racial fragmentation index defined following Alesina and Ferrara (2002 JPE, p.214) as $1 - \sum_k S_{ki}^2$, where i represents the state, k represents the following races: (1) White (not Hispanic or Latino); (2) Hispanic or Latino; (3) Black or African American; (4) Asian; (5) American Indian and Alaska Native; (6) Native Hawaiian and other Pacific Islander; (7) Others. S_{ki} represents the share of race i in the total population of county i . The 2008 variable is based on the county-level race data from American Community Survey 2008. The 1980 variable is based on the county-level race data from US census 1980 that include only White, Black or African American, American Indian and Alaska Native, Asian or Pacific Islander, and others.
Religion	Religion the respondent was raised in and is in 9 categories: Protestant, Baptist, Episcopalian, Lutheran, Methodist, Presbyterian, Roman Catholic, Jewish, and Other, from 1979 survey.
Retire	Sum of the values of employer-sponsored retirement accounts and IRA/Keogh/other tax advantaged accounts. Scaled by 1,000, from 2008 survey.
Saving_pref	How much (in percentage) the respondent would be willing to save rather than spend if he/she received an amount equal to Fin_riskaver, from 2006 survey.
Trauma_current	Equal to 1 if the respondent is currently divorced, separated, or widowed, from 2008 survey.
Trauma_past	Equal to 1 if the respondent has ever experienced divorce, separation, or loss of spouse in the past, from 1979-2006 surveys.
Trust	Generally speaking, how often can you trust other people? (1: Never, 2: Once in a while, 3: About half the time, 4: Most of the time, 5: Always), from 2008 survey.

Figure 1: **Sorts of Debt and Asset Management Measures based on Trust**

Figure 1A plots the probability of being indebt, missing a payment, and filing bankruptcy and the mean leverage ratios of households in the high (H) and low (L) trust groups. Households of individuals with the trust level of 3 or above are assigned to the high trust group and those with the trust level of 1 or 2 are assigned to the low trust group. The means of the dummy variables of being indebt, missing a payment, and filing bankruptcy are reported as the probability. Figure 1B plots of mean retirement savings, total assets, and net worth in thousands of dollars for the high and low trust groups. Data points are shown at the top of each bar.

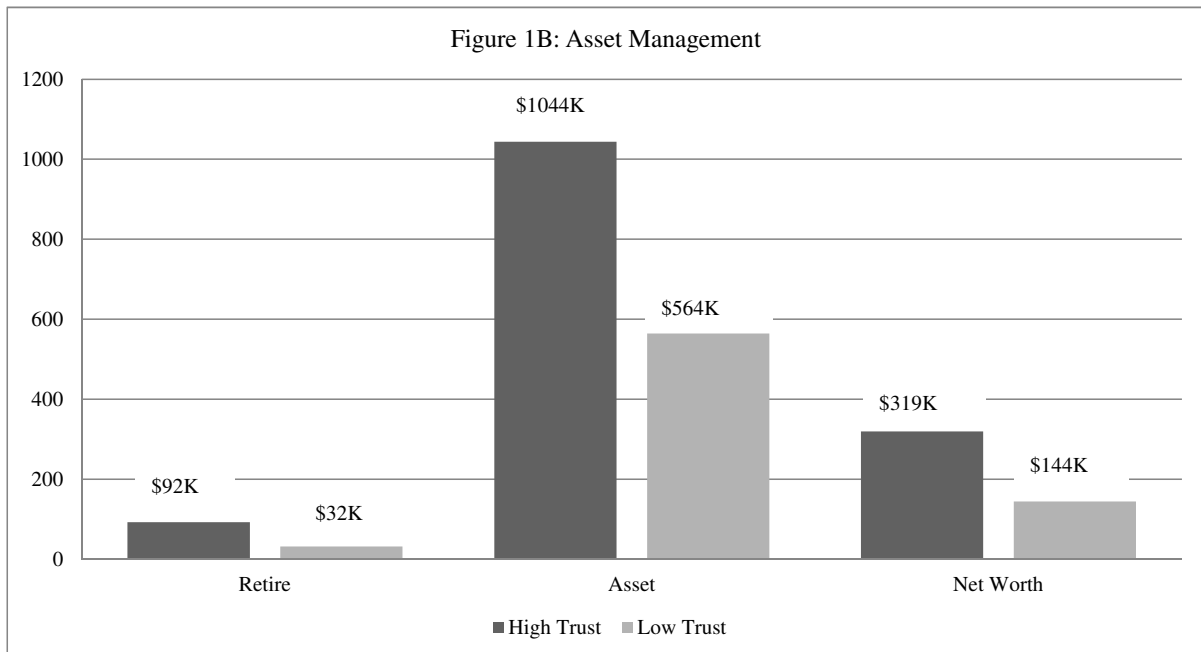
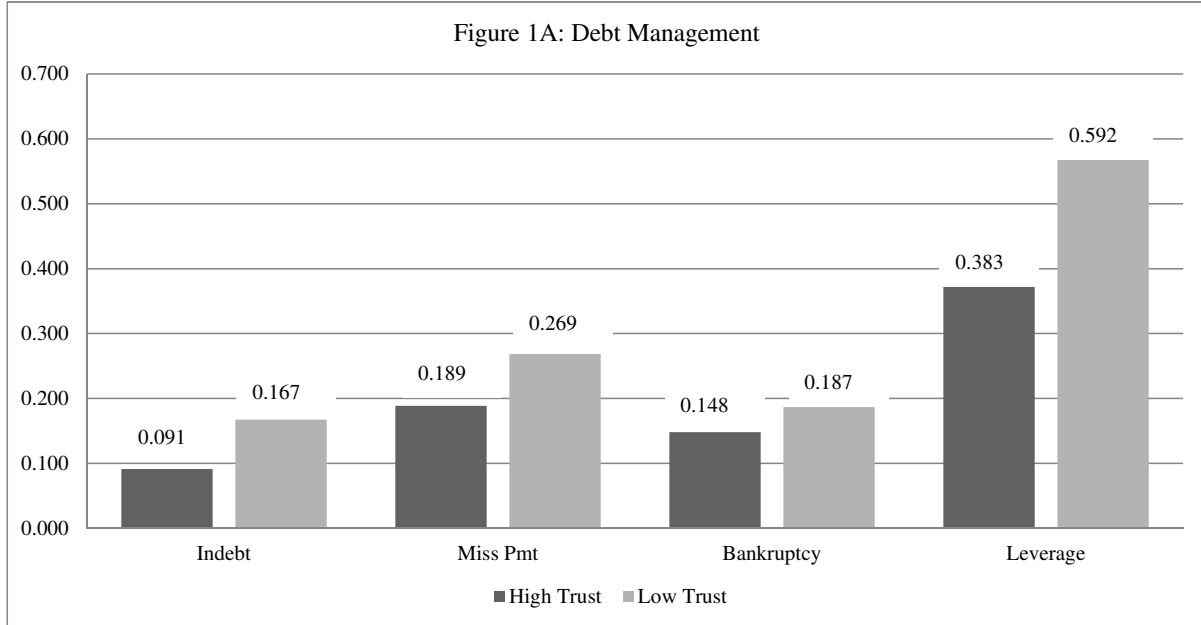


Table 1: **Sample Statistics**

This table reports the summary statistics for the variables used in our analyses. To avoid the influence of extreme values, leverage, retirement savings (Retire), and asset are winsorized at 99th percentiles. Income and net worth are top coded at the 2% in the survey. All variables are defined in the Appendix.

Panel A: Trust Variables								
Variable	N	Mean	Stdev	10th	25th	50th	75th	90th
Trust	7,673	2.95	1.02	2	2	3	4	4
(Trust=1)	7,673	0.09	0.29	0	0	0	0	0
(Trust=2)	7,673	0.25	0.43	0	0	0	1	1
(Trust=3)	7,673	0.29	0.45	0	0	0	1	1
(Trust=4)	7,673	0.35	0.48	0	0	0	1	1
(Trust=5)	7,673	0.02	0.14	0	0	0	0	0

Panel B: Financial Outcome Variables								
Indebt	7,539	0.12	0.32	0	0	0	0	1
Miss Pmt	7,633	0.22	0.41	0	0	0	0	1
Bankruptcy	7,645	0.16	0.37	0	0	0	0	1
Leverage	7,006	0.45	1.24	0	0.02	0.14	0.41	0.83
Retire (\$K)	7,672	71.41	245.46	0	0.00	0.40	59.00	200.00
Asset (\$K)	7,673	878.85	1,672.78	0.60	30.00	280.30	931.69	2265.00
Net worth (\$K)	7,433	263.95	548.16	0	6.20	86.00	282.01	640.00

Panel C: Control Variables								
Income (\$K)	6,660	73.65	75.56	9.00	26.00	56.00	97.00	147.20
Age	7,673	46.67	2.24	44	45	47	48	50
Male	7,673	0.49	0.50	0	0	0	1	1
Married	7,673	0.56	0.50	0	0	1	1	1
Famsize	7,673	2.84	1.49	1	2	3	4	5
Numchild	7,673	1.05	1.16	0	0	1	2	3
Edu_high	7,584	0.54	0.50	0	0	1	1	1
Edu_college	7,584	0.24	0.43	0	0	0	0	1
Edu_gradprof	7,584	0.07	0.25	0	0	0	0	0
Edu_other	7,584	0.02	0.15	0	0	0	0	0
Finance Industry	6,298	0.04	0.21	0	0	0	0	0
AFQT_math	7,340	93.67	18.53	73	78	89	108	123
AFQT_verbal	7,340	91.74	21.27	60	75	96	110	117
Job_riskaver	7,115	3.06	1.19	1	2	4	4	4
Fin_riskaver (\$K)	6,807	4.85	3.44	0	1.00	5.00	8.00	10.00
Save_pref (%)	6,896	49.36	38.03	0	0	50	90	100
Impatience (\$K)	6,914	1.37	24.98	0	0.10	0.25	1.00	1.20

Table 1: **Sample Statistics (Continued)**

Panel D: Determinants of Trust								
Variable	N	Mean	Stdev	10th	25th	50th	75th	90th
No Religion	7,638	0.04	0.20	0	0	0	0	0
Protestant	7,638	0.04	0.20	0	0	0	0	0
Baptist	7,638	0.30	0.46	0	0	0	1	1
Episcopalian	7,638	0.01	0.11	0	0	0	0	0
Lutheran	7,638	0.05	0.22	0	0	0	0	0
Methodist	7,638	0.07	0.26	0	0	0	0	0
Presbyterian	7,638	0.03	0.16	0	0	0	0	0
Roman Catholic	7,638	0.34	0.47	0	0	0	1	1
Jewish	7,638	0.01	0.09	0	0	0	0	0
Religion Others	7,638	0.10	0.29	0	0	0	0	0
Black	7,617	0.30	0.46	0	0	0	1	1
Puerto Rican	7,617	0.03	0.17	0	0	0	0	0
Mexican, Hispanic, Cuban	7,617	0.14	0.35	0	0	0	0	1
Hawaiian, Indian American	7,617	0.04	0.19	0	0	0	0	0
Asian	7,617	0.01	0.09	0	0	0	0	0
European	7,617	0.36	0.48	0	0	0	1	1
American	7,617	0.05	0.21	0	0	0	0	0
Ethnicity Others	7,617	0.06	0.23	0	0	0	0	0
Trauma_current	7,673	0.27	0.44	0	0	0	1	1
Trauma_past	7,673	0.43	0.50	0	0	0	1	1
Racial Fragmentation (2008)	6,114	0.47	0.17	0.22	0.36	0.51	0.60	0.67
Married with Children (2008)	6,399	0.22	0.05	0.17	0.19	0.22	0.26	0.29
High School Population (2008)	6,399	0.85	0.06	0.75	0.82	0.86	0.89	0.92
Racial Fragmentation (1980)	6,567	0.31	0.17	0.04	0.15	0.32	0.47	0.51
Married with Children (1980)	6,567	0.32	0.07	0.24	0.27	0.32	0.36	0.40
High School Population (1980)	6,567	0.63	0.11	0.47	0.58	0.65	0.71	0.76

Table 2: **Trust and Financial Outcomes**

This table reports the regression results of household financial outcomes on the level of individual trust with a set of control variables. Regressions (1)-(3) are probit regressions and the average marginal effect (probability) is reported as the coefficient. Regressions (4)-(7) are OLS regressions. The dependent variables are a dummy for indebtness (Indebt), a dummy for missing a payment or being late in paying bills (Miss Pmt), a dummy for ever filing for bankruptcy (Bankruptcy), leverage, logarithm of retirement savings (Retire), logarithm of total asset (Asset), and logarithm of net worth (Net Worth). The logarithm of variables are defined as $\log(1+\text{variable})$. For negative net worth, Log Net Worth is defined as $-\log(1-\text{Net Worth})$. The key independent variable is the level of individual's trust (Trust). All variables are defined in the Appendix. We report the z -statistics for probit regressions, (1)-(3), and t -statistics for OLS regressions, (4)-(7), below the coefficients in italics. The z/t -statistics are based on robust standard errors adjusted for clustering at the county level. The statistical significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***.

Panel A: Univariate Regressions							
Dependent Variables:							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
Trust	-0.040***	-0.041***	-0.021***	-0.114***	0.582***	0.714***	0.711***
	<i>-11.71</i>	<i>-8.50</i>	<i>-4.92</i>	<i>-6.93</i>	<i>22.74</i>	<i>22.58</i>	<i>22.52</i>
(Pseudo) R^2	2.4%	1.0%	0.4%	0.8%	6.9%	8.4%	6.8%
Observations	7,456	7,548	7,560	6,934	7,587	7,588	7,352

Table 2: **Trust and Financial Outcomes (Continued)**

Panel B: Multivariate Regressions							
Dependent Variables:							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
Trust	-0.011*** <i>-2.77</i>	-0.022*** <i>-3.47</i>	-0.021*** <i>-3.60</i>	-0.062*** <i>-2.63</i>	0.091*** <i>3.06</i>	0.094*** <i>3.09</i>	0.113*** <i>3.30</i>
log(1+Income)	-0.041*** <i>-8.69</i>	-0.046*** <i>-6.73</i>	-0.002 <i>-0.27</i>	-0.193*** <i>-5.80</i>	0.742*** <i>20.58</i>	1.063*** <i>22.12</i>	1.009*** <i>19.19</i>
Age	0.000 <i>0.25</i>	0.001 <i>0.42</i>	0.001 <i>0.34</i>	0.001 <i>0.10</i>	0.001 <i>0.04</i>	-0.011 <i>-1.06</i>	0.013 <i>0.95</i>
Male	-0.001 <i>-0.12</i>	-0.044*** <i>-3.71</i>	-0.043*** <i>-3.97</i>	-0.029 <i>-0.87</i>	-0.133** <i>-2.46</i>	-0.021 <i>-0.46</i>	0.068 <i>1.09</i>
Married	-0.036*** <i>-3.41</i>	-0.051*** <i>-3.38</i>	-0.004 <i>-0.26</i>	-0.147*** <i>-2.70</i>	0.727*** <i>9.80</i>	0.842*** <i>10.83</i>	0.808*** <i>8.06</i>
Famsize	0.001 <i>0.20</i>	0.001 <i>0.10</i>	-0.021** <i>-2.34</i>	0.018 <i>0.49</i>	-0.058 <i>-1.53</i>	-0.238*** <i>-5.26</i>	-0.115** <i>-2.37</i>
Numchild	-0.004 <i>-0.52</i>	0.020* <i>1.69</i>	0.024** <i>2.34</i>	-0.002 <i>-0.06</i>	0.058 <i>1.32</i>	0.257*** <i>4.92</i>	0.147** <i>2.48</i>
Edu_high	-0.013 <i>-0.97</i>	0.002 <i>0.11</i>	0.018 <i>0.97</i>	0.027 <i>0.42</i>	0.162* <i>1.89</i>	0.449*** <i>4.37</i>	0.372*** <i>3.25</i>
Edu_college	-0.002 <i>-0.14</i>	-0.005 <i>-0.21</i>	-0.018 <i>-0.83</i>	0.054 <i>0.66</i>	0.466*** <i>4.41</i>	0.668*** <i>5.68</i>	0.503*** <i>3.73</i>
Edu_gradprof	0.006 <i>0.27</i>	-0.062* <i>-1.87</i>	-0.130*** <i>-3.71</i>	0.168 <i>1.52</i>	0.511*** <i>3.51</i>	0.629*** <i>4.67</i>	0.382** <i>2.02</i>
Edu_other	0.035 <i>1.39</i>	0.033 <i>0.77</i>	-0.001 <i>-0.02</i>	0.115 <i>0.95</i>	0.660*** <i>3.57</i>	0.537*** <i>2.99</i>	0.384* <i>1.70</i>
Finance industry	-0.048* <i>-1.94</i>	-0.041 <i>-1.46</i>	0.023 <i>0.88</i>	-0.079** <i>-2.43</i>	0.242* <i>1.79</i>	0.173 <i>1.62</i>	0.111 <i>0.78</i>
AFQT_math	-0.001*** <i>-3.74</i>	-0.001*** <i>-2.69</i>	-0.002*** <i>-3.12</i>	-0.001 <i>-0.97</i>	0.017*** <i>6.72</i>	0.006*** <i>3.11</i>	0.007*** <i>2.90</i>
AFQT_verbal	0.000 <i>1.02</i>	0.002*** <i>3.18</i>	0.001 <i>1.48</i>	0.000 <i>0.26</i>	0.004* <i>1.73</i>	0.006*** <i>2.92</i>	0.010*** <i>3.93</i>
Job_riskaver	-0.002 <i>-0.75</i>	-0.016*** <i>-3.45</i>	0.001 <i>0.16</i>	-0.033* <i>-1.66</i>	-0.002 <i>-0.07</i>	0.063*** <i>2.69</i>	0.108*** <i>3.84</i>
Fin_riskaver	0.001 <i>0.51</i>	0.005** <i>2.32</i>	0.003 <i>1.57</i>	0.006 <i>1.04</i>	-0.006 <i>-0.83</i>	0.007 <i>0.89</i>	-0.009 <i>-0.85</i>
Save_pref	-0.001*** <i>-5.18</i>	-0.001*** <i>-5.48</i>	-0.001*** <i>-4.64</i>	-0.002*** <i>-3.64</i>	0.003*** <i>3.51</i>	0.003*** <i>3.83</i>	0.006*** <i>7.09</i>
Impatience	0.000 <i>0.37</i>	-0.000 <i>-0.78</i>	-0.004* <i>-1.73</i>	-0.000 <i>-0.58</i>	0.003*** <i>8.19</i>	0.000 <i>1.00</i>	0.001* <i>1.69</i>
State dummies	yes	yes	yes	yes	yes	yes	yes
Intercept	yes	yes	yes	yes	yes	yes	yes
(Pseudo) R^2	14.1%	6.4%	6.4%	5.7%	35.5%	49.1%	37.5%
Observations	4,574	4,625	4,636	4,447	4,647	4,647	4,582

Table 3: Determinants of Trust

This table reports the OLS regression results of the determinants of trust. The dependent variable is the level of individual's trust (Trust). The independent variables include dummies for various religion in which the individual is raised, the various dummies for various ethnicity groups, a dummy for life trauma, a dummy for being a volunteer, the county-level racial fragmentation index, the percentage of household in the county that are married with own children, and the percentage of high school graduates in population of the county, where the county refers to the residing county of the individual in 2008 or 1980. All variables are defined in the Appendix. We report *t*-statistics in italics that are based on robust standard errors adjusted for clustering at the county level. The statistical significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***.

	(1)	(2)	(3)	(4)	(5)
<i>Religion-Raised</i>					
No Religion	-0.045	-0.68			-0.090
Protestant	-0.038	-0.62			-0.051
Baptist	-0.081*	-1.75			-0.069
Episcopalian	0.352***	4.28			0.253***
Lutheran	0.173***	2.78			0.073
Methodist	0.134**	2.35			0.148**
Presbyterian	0.091	1.19			0.138
Roman Catholic	0.100**	2.30			0.027
Jewish	0.322***	2.61			0.202
<i>Ethnicity</i>					
Black	-0.473***	-9.00			-0.455***
Puerto Rican	-0.629***	-8.92			-0.520***
Mexican, Hispanic, Cuban	-0.361***	-6.99			-0.273***
Hawaiian, Indian American	-0.137*	-1.83			-0.020
Asian	-0.062	-0.52			-0.134
European	0.073	1.63			0.109**
American	-0.049	-0.66			0.036
<i>Life Experience</i>					
Trauma_past		-0.191***	-7.53		-0.132***
<i>2008 Community attributes</i>					
Racial Fragmentation			-0.330***	-2.96	-0.146
Married with Children			1.783***	6.20	0.979***
High-School Population			1.742***	6.35	0.597**
<i>1980 Community attributes</i>					
Racial Fragmentation				-0.770***	-8.79
Married with Children				0.275	1.25
High-School Population				0.980***	7.82
Intercept	yes	yes	yes	yes	yes
<i>R</i> ²	8.5%	0.9%	2.6%	3.5%	10.2%
Obs	7,499	7,588	6,114	7,469	5,952

Table 4: **Trust and Financial Outcomes: Instrumental Variable Approach**

This table reports the regression results of household financial outcomes on the level of individual trust with a set of control variables. Regressions (1)-(3) are probit regressions and the average marginal effect (probability) is reported as the coefficient. Regressions (4)-(7) are OLS regressions. The dependent variables include a dummy for indebtness (Indebt), a dummy for missing a payment or being late in paying bills (Miss Pmt), a dummy for ever filing for bankruptcy (Bankruptcy), leverage, logarithm of retirement savings (Retire), logarithm of total asset (Asset), and logarithm of net worth (Net Worth). The logarithm of variables are defined as $\log(1+\text{variable})$. For negative net worth, Log Net Worth is defined as $-\log(1-\text{Net Worth})$. The key independent variable is the instrumented trust (Trust*) from the first-stage regression, in which trust is regressed on the instrumental variables together with other control variables used in the second-stage regression. The control variables are identical to those in Table 2 except for Panel B where we include an additional control variable (Trauma_current). We report the z -statistics below the coefficients in italics which are based on robust standard errors adjusted for clustering at the county level. The statistical significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***.

Panel A: Using Religion-Raised and Ethnicity as Instruments							
	Dependent Variables:						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
Trust*	-0.185*** <i>-4.72</i>	-0.241*** <i>-7.01</i>	-0.086 <i>-0.85</i>	-0.073 <i>-0.42</i>	0.678** <i>2.41</i>	0.919*** <i>3.50</i>	1.492*** <i>4.38</i>
Controls/Intercept	<i>Same as in Panel B of Table 2</i>						
Obs	4,524	4,575	4,586	4,401	4,597	4,597	4,533
Panel B: Using Trauma_past as Instrument							
Trust*	-0.179*** <i>-2.87</i>	-0.228*** <i>-4.00</i>	-0.279*** <i>-20.67</i>	-1.094* <i>-1.80</i>	3.147** <i>2.43</i>	1.297* <i>1.81</i>	4.235** <i>2.47</i>
Controls/Intercept	<i>All controls in Panel B of Table 2 plus Trauma_current</i>						
Obs	4,574	4,625	4,636	4,447	4,647	4,647	4,582
Panel C: Using 2008 Community Characteristics as Instruments							
Trust*	-0.249*** <i>-12.44</i>	-0.263*** <i>-7.69</i>	-0.029 <i>-0.21</i>	-0.873* <i>-1.83</i>	1.332* <i>1.87</i>	2.839*** <i>2.71</i>	3.374** <i>2.41</i>
Controls/Intercept	<i>Same as in Panel B of Table 2</i>						
Obs	3,682	3,715	3,722	3,573	3,730	3,730	3,678
Panel D: Using 1980 Community Characteristics as Instruments							
Trust*	-0.234*** <i>-5.08</i>	-0.265*** <i>-8.95</i>	-0.028 <i>-0.20</i>	-0.618 <i>-1.21</i>	1.170* <i>1.79</i>	2.576*** <i>2.81</i>	2.597** <i>2.28</i>
Controls/Intercept	<i>Same as in Panel B of Table 2</i>						
Obs	4,512	4,558	4,569	4,387	4,579	4,579	4,515

Table 5: **Trust and Financial Outcomes: Subsample Analyses**

This table reports the regression results of household financial outcomes on the level of individual trust with a set of control variables for subsamples split based on education (Panel A), income (Panel B), and gender (Panel C). Regressions (1)-(3) are probit regressions and the average marginal effect (probability) is reported as the coefficient. Regressions (4)-(7) are OLS regressions. The dependent variables are a dummy for indebtness (Indebt), a dummy for missing a payment or being late in paying bills (Miss Pmt), a dummy for ever filing for bankruptcy (Bankruptcy), leverage, logarithm of retirement savings (Retire), logarithm of total asset (Asset), and logarithm of net worth (Net Worth). The logarithm of variables are defined as $\log(1+\text{variable})$. For negative net worth, Log Net Worth is defined as $-\log(1-\text{Net Worth})$. We report the coefficients of the key independent variable (Trust). The control variables are identical to those in Panel B of Table 2. In Panel A, individuals with other education are excluded. We report the z -statistics for probit regressions, (1)-(3), and t -statistics for OLS regressions, (4)-(7), below the coefficients in italics. The z/t -statistics are based on robust standard errors adjusted for clustering at the county level. The statistical significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***.

Panel A: Subsamples based on education							
	Dependent Variables:						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
Low	-0.013**	-0.025***	-0.022***	-0.042	0.087**	0.082**	0.099**
(Below college)	<i>-2.38</i>	<i>-3.04</i>	<i>-2.90</i>	<i>-1.48</i>	<i>2.53</i>	<i>2.31</i>	<i>2.37</i>
High	-0.005	-0.011	-0.016	-0.088*	0.066	0.077*	0.107*
(College or above)	<i>-0.88</i>	<i>-1.14</i>	<i>-1.60</i>	<i>-1.95</i>	<i>1.08</i>	<i>1.69</i>	<i>1.80</i>
Panel B: Subsamples based on income							
Low	-0.022***	-0.026***	-0.021**	-0.128***	0.109***	0.108**	0.172***
(Below median)	<i>-2.74</i>	<i>-2.60</i>	<i>-2.20</i>	<i>-2.77</i>	<i>3.62</i>	<i>2.25</i>	<i>3.01</i>
High	-0.004	-0.017**	-0.021***	-0.005	0.063	0.072**	0.030
(median or above)	<i>-1.11</i>	<i>-2.09</i>	<i>-2.78</i>	<i>-0.29</i>	<i>1.21</i>	<i>2.32</i>	<i>0.77</i>
Panel C: Subsamples based on gender							
Female	-0.018***	-0.027***	-0.030***	-0.099***	0.126***	0.106**	0.155***
	<i>-2.98</i>	<i>-2.79</i>	<i>-3.26</i>	<i>-3.01</i>	<i>2.84</i>	<i>2.46</i>	<i>3.04</i>
Male	-0.004	-0.017**	-0.015*	-0.019	0.064	0.068	0.067
	<i>-0.68</i>	<i>-2.05</i>	<i>-1.85</i>	<i>-0.57</i>	<i>1.53</i>	<i>1.64</i>	<i>1.37</i>

Table 6: **The Non-Linear Effect of Trust on Financial Outcomes**

This table reports the regression results of household financial outcomes on different levels of individual trust with a set of control variables. Regressions (1)-(3) are probit regressions and the average marginal effect (probability) is reported as the coefficient. Regressions (4)-(7) are OLS regressions. The dependent variables include a dummy for indebtness (Indebt), a dummy for missing a payment or being late in paying bills (Miss Pmt), a dummy for ever filing for bankruptcy (Bankruptcy), leverage, logarithm of retirement savings (Retire), logarithm of total asset (Asset), and logarithm of net worth (Net Worth). The logarithm of variables are defined as $\log(1+\text{variable})$. For negative net worth, Log Net Worth is defined as $-\log(1-\text{Net Worth})$. The key independent variable is the four higher levels of individual's trust (Trust=2, 3, 4, 5), which is compared to the lowest level of trust (Trust=1). The control variables are identical to those in Table 2. We report the z -statistics for probit regressions, (1)-(3), and t -statistics for OLS regressions, (4)-(7), below the coefficients in italics. The z/t -statistics are based on robust standard errors adjusted for clustering at the county level. The statistical significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***.

Panel A: Regressions without Controls							
Dependent Variables:							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
(Trust=2)	-0.076*** <i>-6.35</i>	-0.029* <i>-1.72</i>	0.020 <i>1.30</i>	-0.204** <i>-2.14</i>	0.593*** <i>7.82</i>	1.048*** <i>9.22</i>	0.989*** <i>7.49</i>
(Trust=3)	-0.103*** <i>-8.93</i>	-0.071*** <i>-3.90</i>	-0.001 <i>-0.05</i>	-0.307*** <i>-3.47</i>	1.106*** <i>14.82</i>	1.541*** <i>13.97</i>	1.494*** <i>11.86</i>
(Trust=4)	-0.150*** <i>-12.98</i>	-0.125*** <i>-7.33</i>	-0.044*** <i>-2.66</i>	-0.420*** <i>-4.93</i>	1.894*** <i>23.84</i>	2.522*** <i>22.82</i>	2.485*** <i>20.93</i>
(Trust=5)	-0.064** <i>-2.43</i>	-0.070** <i>-2.04</i>	-0.047 <i>-1.39</i>	-0.259* <i>-1.90</i>	1.001*** <i>5.23</i>	1.261*** <i>4.96</i>	1.181*** <i>4.39</i>
Intercept	yes	yes	yes	yes	yes	yes	yes
(Pseudo) R^2	2.9%	1.1%	0.6%	1.0%	7.7%	9.7%	7.8%
Obs	7,456	7,548	7,560	6,934	7,587	7,588	7,352

Continued...

Table 6: **The Non-Linear Effect of Trust on Financial Outcomes (Continued)**

Panel B: Regressions with Controls							
Dependent Variables:							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Indebt	Miss Pmt	Bankruptcy	Leverage	Log Retire	Log Asset	Log Net Worth
(Trust=2)	-0.033**	-0.006	0.012	-0.173	0.022	0.289**	0.252*
	-2.25	-0.26	0.56	-1.35	0.21	2.26	1.69
(Trust=3)	-0.035**	-0.036	-0.023	-0.253**	0.138	0.265**	0.319**
	-2.54	-1.49	-1.05	-2.11	1.34	2.15	2.20
(Trust=4)	-0.048***	-0.058**	-0.048**	-0.287**	0.247**	0.437***	0.457***
	-3.27	-2.28	-2.08	-2.46	2.22	3.58	3.13
(Trust=5)	-0.030	-0.060	-0.024	-0.064	0.158	0.238	0.293
	-1.06	-1.24	-0.53	-0.30	0.74	1.00	0.97
Controls/Intercept	Same as in Panel B of Table 2						
(Pseudo) R^2	14.2%	6.5%	6.5%	5.9%	35.5%	49.2%	37.6%
Obs	4,574	4,625	4,636	4,447	4,647	4,647	4,582

Table 7: **Correlation Matrix**

This table reports the Pearson correlation matrix among the financial outcome variables (Panel A) and the correlations among the independent variables and trust (Panel B). Bold face indicates statistical significance at the 5% level. All variables are defined in the Appendix.

Panel A: Correlation of Financial Outcome Variables						
	Indebt	Miss Pmt	Bank -ruptcy	Leverage	Retire	Asset
Misspmt	0.234					
Bankruptcy	0.073	0.145				
Leverage	0.386	0.188	0.083			
Retire (\$K)	-0.096	-0.089	-0.072	-0.079		
Asset (\$K)	-0.160	-0.127	-0.080	-0.141	0.381	
Net Worth (\$K)	-0.175	-0.150	-0.127	-0.148	0.458	0.715

Table 7: Correlation Matrix (Continued)

		Panel B: Correlation of Control Variables															
	Trust	Log Income	Age	Male	Married	Famsize	Num child	Edu_ high	Edu_ college	Edu_ gradprof	Edu_ other	Fin_ Ind	AFQT math	AFQT verbal	Job_ riskav	Fin_ riskav	Save_ pref
Log Income	0.28																
Age	0.00	0.00															
Male	-0.01	0.04	-0.01														
Married	0.19	0.51	0.01	0.02													
Famsize	0.11	0.29	-0.08	-0.06	0.48												
Numchild	0.10	0.24	-0.11	-0.08	0.34	0.86											
Edu_high	-0.07	-0.11	-0.01	0.03	-0.06	-0.05	-0.06										
Edu_college	0.15	0.24	0.00	-0.04	0.10	0.06	0.08	-0.60									
Edu_gradprof	0.15	0.21	0.02	-0.03	0.09	0.05	0.07	-0.29	-0.15								
Edu_other	0.01	0.02	-0.01	-0.01	0.00	0.00	0.01	-0.17	-0.09	-0.04							
Finance Industry	0.05	0.08	-0.02	-0.06	0.02	-0.01	0.00	-0.03	0.07	0.01	-0.02						
AFQT_math	0.35	0.43	0.05	0.08	0.23	0.10	0.13	-0.24	0.35	0.31	0.04	0.09					
AFQT_verbal	0.37	0.44	0.13	-0.05	0.22	0.06	0.09	-0.12	0.32	0.24	0.04	0.09	0.77				
Job_riskaver	0.05	0.14	0.00	-0.04	0.08	0.03	0.04	0.03	0.02	0.01	0.01	0.00	0.08	0.11			
Fin_riskaver	0.00	0.01	0.01	0.02	0.00	-0.02	-0.01	0.00	0.01	0.02	0.00	0.02	0.01	0.02	0.00		
Save_pref	0.04	0.09	0.04	-0.01	0.04	0.00	0.00	-0.03	0.04	0.05	0.02	0.03	0.03	0.02	0.01	0.25	
Impatience	-0.01	-0.01	0.00	0.00	-0.01	-0.02	-0.01	0.02	-0.01	-0.01	0.00	0.00	-0.02	-0.02	0.01	0.00	0.00