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FRIENDS WITH BENEFITS: SOCIAL CAPITAL AND HOUSEHOLD FINANCIAL BEHAVIOR

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ABSTRACT

Using friendship data from Facebook, we study the relationship between three aspects of social capital with household financial behavior. We find that the most important measure of social capital in explaining stock market and saving participation is Economic Connectedness, defined as the fraction of one's social network with high socioeconomic status. One standard-deviation greater Economic Connectedness is associated with 9.5% greater stock market participation and 8.0% greater saving participation. Compared to Cohesiveness or Civic Engagement, Economic Connectedness explains more than 11 times the variation in stock market participation and more than 6 times the variation in saving participation. Using data on nonlocal friendships, we provide evidence supporting a causal link between household financial behavior and the income of one's friends. Furthermore, we provide evidence that greater opportunities for social interaction with wealthy individuals is associated with increased stock market and saving participation.

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1 Introduction

Over the past three decades, social capital — the quality of an individual's social network — has emerged as an important determinant of various political and economic outcomes (Durante et al. (2023)). In this paper, we apply Facebook friendship data to study the relationship between social capital and household financial behavior, and in particular, household stock market and saving participation.

Our primary findings are summarized in Figures 1 and 2. In these figures, Economic Connectedness is the aspect of social capital most strongly related to stock market and saving participation. Controlling for ZIP Code demographic characteristics and county fixed effects, a one-decile increase in Economic Connectedness is associated with an increase of 5.6% for stock market participation and 4.9% for saving participation.[1] This is more than 15 times the effect associated with all our other social capital measures combined. These associations suggest that the value of being connected with the *right* individuals is substantially more important for household investment than having tighter-knit friend groups (Cohesiveness) or a greater sense of community (Civic Engagement).

People with lower socioeconomic status have been found to have more present-oriented investing and saving habits and tend to have little social interaction with the wealthy, resulting in a poverty trap. Because the wealthy have greater access to resources and more experience investing, it has been argued that creating cross-class friendships is a critical step toward breaking this cycle (on these points, see Jackson (2022)). Cross-class friendships can result from greater opportunities to interact with wealthy individuals or from higher friending rates with the wealthy. This raises the question of which of these two is more important.

Facebook data can be used to disentangle the relative importance of opportunities and friending bias (a tilt, conditional on exposure, to friending the rich versus the poor) for finan-

[1]The slope of the best-fit line for EC in Figure 1 is 0.0087. The slope for the best-fit line for EC in Figure 2 is 0.015.

cial decisions. For example, Facebook group memberships, self-reported information, and friendship networks contain information about involvement with venues that provide opportunities for social interactions, such as schools, workplaces, and recreational locations. After identifying group membership, one can use the demographics of the members to differentiate between opportunities and friending bias.

To illustrate, consider an individual who is part of a basketball team with many affluent members. Being a member of this team provides opportunities to interact with High-SES individuals. However, membership does not guarantee High-SES friendships. Conditional on being a member of the team, there may still be barriers to new friendships with wealthy teammates, which results in a friending bias away from high-SES individuals.

To distinguish between these two effects, following Chetty et al. (2022b) we consider two aspects of Economic Connectedness: High-SES Exposure and Friending Bias. High-SES Exposure measures the fraction of high-SES individuals in the groups to which people belong (e.g., schools or athletic teams).[2] Friending Bias measures the rate at which individuals form friendships with low-SES individuals in group settings, relative to the socioeconomic makeup of those groups.

We find that High-SES Exposure is much more important than Friending Bias in explaining household stock market and saving participation. Controlling for ZIP Code demographic characteristics and county fixed effects, the effect of High-SES Exposure is over five times as large as that of Friending Bias. This finding suggests that providing opportunities to interact with wealthy individuals is especially important for improving financial behavior.

A challenge for research on social capital has been the absence of comprehensive data on the structure of social networks. Such data is crucial as social capital is rooted in human relationships. In the household finance literature, previous studies address such limitations by studying the relationship between particular manifestations of social capital, such as civic

[2]Chetty et al. (2022b) construct High-SES Exposure and Friending Bias based on six common contexts in which friends are made. This is limited to high schools, colleges, recreational groups, religious groups, workplaces, and neighborhoods.

engagement, and an outcome of interest, such as stock market participation. This resulted in the use of various community-wide proxies for social capital such as average credit scores and electoral participation, each of which is positively related to stock market participation (Guiso, Sapienza, and Zingales (2004), Bricker and Li (2017)).

Such research establishes trust as being an important community trait that influences stock market participation. However, the role of social networks and social capital in promoting participation is not well understood. Are there other aspects of social capital at the individual or community level that are important for stock market participation?

We study the effects of social capital on household financial behavior using extensive social network data from Facebook combined with U.S. household stock market and saving participation data from the IRS. Furthermore, drawing upon the research of Chetty et al. (2022a), we differentiate between three types of social capital to explore which aspects of social capital are most important for household financial decisions.

Various definitions have been offered for social capital in a large and interdisciplinary body of work (Fulkerson and Thompson (2008)). At heart, social capital is a measure of the value that arises from being in a group or by virtue of an individual's position in the social network. Definitions of social capital fall into two broad categories: social networks (e.g., friendships between different types of people or presence of cliques) and societal norms (e.g., civic engagement or trust in institutions). In this paper, as in Durante et al. (2023) and Guiso and Sodini (2013), we perform tests based on proxies that reflect both views of social capital.

We consider three ZIP Code-level measures of social capital from Chetty et al. (2022a): (1) Economic Connectedness, (2) Cohesiveness, and (3) Civic Engagement.

Economic Connectedness measures the fraction of one's social network neighbors who have high socioeconomic status. Especially among low-SES households, Economic Connectedness can be thought of as a type of bridging capital because it reflects (inversely) the degree of homophily by socioeconomic status.

Cohesiveness captures the likelihood that two friends of a focal individual are friends with each other. Cohesiveness can therefore be thought of as a type of bonding capital. It measures the tightness of a social network.

Lastly, Civic Engagement measures local rates of volunteering. This is not a network-based measure. Instead, as in several previous studies, it captures the sense of community and trust.

A basic implication of classic models of portfolio theory and asset pricing (Merton (1969), Sharpe (1964)) is that all investors, regardless of wealth or risk preferences, invest in risky assets. In reality, a substantial fraction of households do not own stock, suggesting that many households underinvest in this asset class. A large literature has explored this market participation puzzle (as reviewed in Guiso and Sodini (2013)).

A leading explanation is that investors have fixed costs of participation, which could be either pecuniary or psychic (Vissing-Jorgensen (2002)), which can be called "fixed setup costs" (Hirshleifer (1988)). In models based on this approach, individuals only invest if the expected benefit of stock market participation outweighs the cost. This is more likely to occur if an individual has a greater amount of wealth available to invest. This approach can explain the observed positive correlations between stock market participation and wealth (Vissing-Jorgensen (2002)) and between stock market participation and cognitive skills (Grinblatt, Keloharju, and Linnainmaa (2011), van Rooij, Lusardi, and Alessie (2011)). [3]

Empirically, knowing someone who participates in the stock market raises the likelihood of participating (Brown et al. (2008)), consistent with the observation of Shiller (1989) that "Investing in speculative assets is a social activity." A plausible mechanism is that social interactions with investors reduce fixed setup costs of participation. It could do so by providing information about how to invest (Hong, Kubik, and Stein (2004)), by increasing familiarity and psychological comfort with stock investing (Cao, Wang, and Zhang (2005),

[3]Stock market participation is also correlated with peer stock market participation (Brown et al. (2008)), peer stock investing performance (Kaustia and Knüpfer (2012)), political beliefs (Kaustia and Torstila (2011)), and trust in institutions (Giannetti and Wang (2016)).

Cao et al. (2009)) or by increasing the social utility from investing (Bursztyn et al. (2014)).

More generally, this argument suggests that social capital may increase stock market participation by reducing fixed setup costs of participation.[4] For example, since people with high-SES status are more likely to participate in the stock market, social connection to such investors should encourage participation. We therefore hypothesize that greater Economic Connectedness in a community positively predicts participation.

Previous studies, such as Guiso, Sapienza, and Zingales (2004), provide evidence that a different kind of social capital, trust within a community, increases stock market participation. In communities with low trust, investors are likely to have greater fear of expropriation by their broker, market institutions or firms. This trust-based mechanism motivates the hypothesis that the Civic Engagement positively predicts participation.

Finally, there is evidence that cohesiveness, the tendency for one's friends to be friends with each other, promotes the spread of information within communities (Alatas et al. (2016)). A more cohesive network allows friends to sanction each other more effectively for opportunistic behavior. It may also encourage more open discussion of uncomfortable topics, such as personal finances. We therefore hypothesize that more cohesive networks will result in greater participation.

Corresponding to each of the hypotheses about social capital and stock market participation is a hypothesis about social capital and saving participation. For reasons similar to the stock market predictions, we hypothesize that greater Economic Connectedness, and Cohesiveness Civic Engagement, encourage people to engage in positive rather than zero amounts of saving.

To test which aspect of social capital is most important for stock market and saving participation, we obtain U.S. Facebook data from `www.socialcapital.org` on household friendship networks. This friendship data is very extensive, making it relatively representative, and has been found to be associated with non-virtual friendship networks (Bailey et al.

[4]In this paragraph and the preceding, we focus on the decision to participate in the stock market. However, these arguments can analogously be applied to saving decisions.

(2018), Bailey et al. (2020)). The friendship connections are used to construct three types of measures of social capital – Economic Connectedness, Cohesiveness, and Civic Engagement. We combine this social network data with a representative sample of ZIP Code tax information from the IRS to understand the financial behavior of households in a given ZIP Code.

We start by estimating the univariate relation between household financial decisions and our social capital measures. We find that Economic Connectedness is overwhelmingly the aspect of social capital most strongly associated with both stock market participation and the saving participation. Alone, EC explains over 65% of the variation in stock market participation across ZIP Codes and over 63% of the variation in the saving participation. This is substantially larger than the explanatory power of Cohesiveness and Civic Engagement. The magnitude of the effect of Economic Connectedness remains large when we use data from the American Community Survey to control for demographic characteristics, such as income and education, that have been shown to affect stock market and saving participation. In a regression with all ZIP Code controls, all social capital measures and county fixed effects, a one-standard deviation increase in Economic Connectedness is associated with a 9.5 percentage point higher stock market participation rate, and a 8.0 percentage point higher saving rate. Cohesiveness and Civic Engagement are each much more weakly associated with participation rates. A one-standard deviation higher Cohesiveness is associated with an immaterial 0.04 percentage point higher stock market participation rate and a 0.5 percentage point higher saving rate. A one-standard deviation higher in Civic Engagement is associated with a 0.24 percentage point lower stock market participation rate and 0.13 percentage point lower saving rate.

The tests we have described are subject to possible endogeneity problems. A crucial one is that wealth is probably positively correlated with both financial participation and with Economic Connectedness (and perhaps other social capital proxies). Although we control for median income (and later for wealth in tests using PSID data), these controls may be

imperfect.

One version of this problem derives from reverse causality from financial behavior to Economic Connectedness. An individual who is interested in stock investing may befriend other stock investors. As stock investing is positively associated with wealth, these friends will tend to be wealthy, implying high Economic Connectedness.[5]

We employ two strategies to address endogeneity. First, we address reverse causality by performing a test similar to that of Chetty et al. (2022a), which uses childhood EC as the independent variable of interest. Current financial decisions as an adult cannot influence the formation of childhood friendships in the past. We find broadly similar results, which suggests that these results are unlikely to be driven by reverse causality.

This test does not, however, rule out other forms of endogeneity associated with imperfect controls for wealth. We therefore also apply a quasi-experimental approach, which exploits changes in the income of non-local friends as a plausibly exogenous shock to Economic Connectedness. We find that an increase in the income of non-local friends is positively associated with an increase in stock market participation and in saving participation. This evidence supports a causal effect of Economic Connectedness on stock market and saving participation.

As discussed earlier, we use data from Chetty et al. (2022b) to address the importance of two aspects of Economic Connectedness: High-SES Exposure and Friending Bias. Chetty et al. (2022b) create ZIP Code-level measures of High-SES Exposure and Friending Bias based on opportunities the average person in the ZIP Code has to interact with High-SES people and based on their tilt towards friending less wealthy people, conditional on opportunities. To do this, they assign Facebook users to groups (e.g., Lower Merion High School) from six contexts in which people are likely to make friends: high schools, colleges, religious

[5]A related manifestation of the problem of wealth correlations and reverse causality is the selection bias in the choice of location; wealthy individuals tend to choose to live in expensive neighborhoods. People tend to befriend others in their neighborhood, so this will induce an association between wealth and Economic Connectedness. Since the wealthy tend to invest in stocks, this also induces an association between Economic Connectedness and stock investing.

groups, recreational groups, workplaces and neighborhoods. Being a member of groups with high fractions of rich people increases the measure of High-SES Exposure. Conditional on the High-SES Exposure in these groups, friending low-SES individuals at a higher rate increases Friending Bias.

Using these ZIP Code level measures, we find that High-SES Exposure has a much stronger association than Friending Bias with household financial participation. This suggests that policies that facilitate interactions with wealthy individuals may improve household financial participation.

We next explore the stock market and saving participation of high-SES and low-SES individuals separately to determine whether our findings are similar for each group. For each subsample, we find that Economic Connectedness is the aspect of social capital most strongly related to stock market and saving participation.

Lastly, we take our hypothesis to PSID data, which provides rich information from surveys over time of U.S. households. Among other information, this survey collects data about whether a household owns equities and whether a household has a checking or savings account. We combine this household financial information with the ZIP Code social capital measures described before to examine what aspect of social capital is most important for household financial participation. Consistent with our ZIP Code findings, we find that Economic Connectedness is the most important measure of social capital in explaining the stock market and saving participation of these households.

The detailed information in the PSID data, such as the extent of social interaction, also allows us to tests between mechanisms through which being connected with wealthy individuals may influence financial decisions. We examine three distinct mechanisms: financial awareness, social utility, and keeping up with the Joneses.

Our evidence is most consistent with wealthy connections influencing stock market participation through financial awareness. We test this mechanism using three proxies for financial awareness: whether an individual has a business degree, has a finance occupation, and works

for a company in the finance industry. Splitting our sample into two groups for each financial awareness measure, we find that the relation between Economic Connectedness and stock market participation is strongest among the less financially aware group for each of the three measures. For saving participation, we find the same pattern for two of the three financial awareness measures.

In testing social utility, we find little evidence in support of these mechanisms. Using the same split sample approach, we do not find a stronger relation between Economic Connectedness and stock market participation among those who are more socially active or among those with more frequent religious attendance. The evidence from our study of potential channels is most consistent with theories of limited participation and fixed setup costs associated with financial discomfort or unawareness.

Taken together, these results further suggest that economic connectedness of individuals with different SES may influence the evolution of wealth inequality. From 1980 to 2022, the total return on the U.S. stock market was 8,586%. This greatly increased wealth for market participants relative to those who did not participate.

As high-SES individuals are more likely to participate in the stock market (see Guiso and Sodini (2013)), people with higher Economic Connectedness (i.e. those with more high-SES friends) will, all else equal, have more friends who participate in the stock market. Owing to homophily, high-SES individuals have high Economic Connectedness, promoting increased stock market investment and wealth inequality. However, one way to encourage investment among low-SES individuals, thereby reducing wealth inequality, may be to encourage friendships across socioeconomic classes.

This paper contributes to four streams of literature. First, it extends the literature on social capital by showing that social capital is positively associated with stock market and saving participation in the U.S.. As such, the paper contributes to the growing field of social finance (Hirshleifer (2020)). Furthermore, we document that Economic Connectedness is the most important social capital proxy in explaining household financial behavior.

Second, we contribute to the household finance literature on stock market participation. We show that the relationship between Economic Connectedness and stock market participation holds even after controlling for well-known determinants such as education, wealth, financial literacy, and race. We also show that the total ZIP Code-level dollar amount of stock market investment, divided by the total ZIP Code-level income, increases with EC. In other words, both the intensive margin and the extensive margin of stock market participation are positively associated with social capital.

Third, we contribute to the literature on household saving behavior by showing that Economic Connectedness is positively associated with saving participation. This relationship is economically substantial and highly significant even after controlling for well-known determinants of saving behavior. As with stock market participation, the total ZIP Code-level dollar amount of interest income, divided by the total ZIP Code-level income, increases with EC.

Fourth, we extend the literature on intergenerational transmission of poverty and lifetime wealth accumulation. All of the results mentioned previously are true for low-SES individuals. Having wealthy friends increases stock market and saving participation for low-SES households. Additionally, we find that exposure to high-SES individuals, as opposed to socioeconomic bias in friending, is important in explaining household stock market and saving participation.

2 Data Description

A wide variety of proxies for social capital have been used in past research, including cheating on school tests, blood donations, and turnout in elections. Chetty et al. (2022a) argue for the importance of three distinct aspects of social capital – Economic Connectedness, Cohesiveness, and Civic Engagement – and develop geographic measures for each type of social capital using data on friendships from Facebook. We follow Chetty et al. (2022a) in using these mea-

sures, and obtain data on them at the ZIP Code-level from `www.socialcapital.org`. We next describe these measures briefly; see Chetty et al. (2022a) for more details. Our measures of social capital are constructed using ZIP Code-level data from 2018. We focus on 2018 for the majority of our analysis because the Facebook data is only available for 2018.

Economic Connectedness measures the fraction of an individual's friends who have above-median income. Specifically, the primary definition is "two times the share of high-SES friends among low-SES individuals, averaged over all low-SES individuals in the ZIP Code." Chetty et al. (2022a) use Facebook data to estimate an individual's SES in a three-step process. First, the authors collect median income for each census-block group. Second, they estimate a gradient-boosted regression tree to predict household income using: age, sex, language, relationship status, location, college, donations, phone model price, mobile carrier, and Facebook usage variables. Third, they assign individuals an SES percentile rank in the national distribution based on birth cohort.

Cohesiveness is the tightness of the average circle of friends in a ZIP Code or how close together the members of a friend group are to one another. More precisely, it is measured as the "average fraction of an individual's friend pairs who are also friends with each other."

Lastly, Civic Engagement is the average level of prosocial involvement of members in the community. It is defined as the percentage of Facebook users who are members of a group which is predicted to be about 'volunteering' or 'activism' based on group title and other group characteristics. This measure is similar in spirit to the blood donations and electoral turnout measures used by Guiso, Sapienza, and Zingales (2004).

We obtain tax return information from the the IRS's Statistics of Income (SOI) database. The SOI breaks down tax returns for each tax season by geographic regions and adjusted gross income. Corresponding to our measures of social capital, the SOI data we collect is from Tax Year 2018 and contains information about the cross section of ZIP Codes from that year.

Within the SOI data, there are 8 AGI categories ranging from "Under $1" to "$200,000

or more". We exclude the "Under $1" group from the sample as it likely contains individuals with artificially low income who are not representative of low-SES individuals. Income under $1 can occur when a capital loss or business loss exceeds other gross income for a given tax year. We also exclude the $50,000 to $75,000 range, as the median income from 2018 falls within this category (the U.S. median household income was $63,179 in 2018, according the U.S. Census Bureau). This leaves us with three low-SES observations and three high-SES observations for each ZIP Code in 2018.

We assign an Economic Connectedness value to each AGI-ZIP Code group. For the three low-SES groups, we define Economic Connectedness as the fraction of high-SES friends among low-SES individuals. This is the primary measure used in Chetty et al. (2022a). For the three high-SES groups, we define Economic Connectedness as the fraction of high-SES friends among high-SES individuals. This is an analogous measure of Economic Connectedness for high-SES individuals, which is also constructed in Chetty et al. (2022a). For our main analysis, we create one observation per ZIP Code. To do this, we take the weighted average of Economic Connectedness per ZIP Code where the weights are determined by the number of tax returns in each AGI group.

We also use the SOI data to create investment and saving behavior proxies. There is no record to indicate if a household participates in the stock market, but tax returns contain several pieces of information that is diagnostic of participation. As a proxy for each household's participation in the stock market, our first variable of interest is the receipt of dividend income (Brown et al. (2008)). This variable takes a positive value if the household receives dividends from stocks or taxable equity mutual funds. For each ZIP Code, we compute the fraction of tax forms that received dividend income. Since there are households holding stocks that do not have dividend income, this is a lower bound on the fraction of households participating in the stock market.

We also measure saving participation at the ZIP Code level. Analogous to our stock market participation proxy, we use the fraction of households receiving interest income as a

proxy for saving participation. This is also a lower bound for saving participation, as there are likely households who save in non-interest bearing accounts or who do not receive enough interest income to be reported on tax forms.

Participation measures are useful to gauge the extensive margin of investment or saving (the decision to participate), but they do not measure how much of one's income is being allocated to stocks or to a savings account. To proxy for the intensive margin for stock market participation, we divide total ZIP Code-level dividend income by total ZIP Code-level adjusted gross income. Similarly, to proxy for the intensive margin of saving participation, we divide total ZIP Code-level interest income by total ZIP Code-level adjusted gross income.

Several variables other than social capital have been shown to help explain stock market participation and saving behavior across investors. To control for these variables, we collect demographic information for each ZIP Code in 2018 from the American Community Survey and use the natural logarithms of median income, total population, and population per square mile. We also include percent male, percent Black, percent Asian, percent Pacific Islander, percent Hispanic, median age, and percent with a high school education as controls. Additionally, using data from Stoddard and Urban (2020) we create a dummy variable for each state that has a state-mandated financial education requirement for high-school graduation.

Table 1 reports ZIP Code-level summary statistics for each of our variables of interest. The first two variables, *P(Div)* and *P(Int)* are dependent variables in our regressions and capture the probability that a tax return has dividend income or interest income, respectively. The average value of *P(Div)* is 0.177 and *P(Int)* 0.311, so our estimates seem comparable to other estimates of participation rates, bearing in mind that our estimates represent lower bounds.

Turning to proxies for social capital, *Economic Connectedness*, which measures the fraction of an individual's friend group with high SES, is slightly below one. This indicates that the average person in the average ZIP Code has slightly more low-SES friends than high-SES

friends. However, the standard deviation is 0.245, which indicates that there is a fair amount of variation across ZIP Codes. *Cohesiveness* captures the fraction of an individual's friend group that are in turn friends with each other. *Civic Engagement* captures the fraction of individuals in a ZIP Code who are members of 'volunteering' or 'activism' groups, as defined by Chetty et al. (2022a).[6]

Turning to controls, *Population Density, Population, Median Income, Percent Male, Percent Black, Percent Asian, Percent Islanders, Percent Hispanic* and *Median Age* are ZIP-Code-level variables that come from the American Community Survey. *Financial Literacy* is a dummy variable that equals one if a state had financial literacy high school graduation requirement in 2018. *High School* also comes from the American Community Survey and measures the fraction of a ZIP Code that has graduated high school.

Table 2 reports correlations for our variables of interest. Economic Connectedness is strongly associated with *P(Div)* and *P(Int)*. This is partially mechanical, as our construction of *EC* depends on the number of tax returns in each IRS AGI bucket for a given ZIP Code. This makes Economic Connectedness higher for ZIP Codes with higher incomes, so it is important in our regressions to include a control variable for median income and other proxies for socioeconomic status such as education.

3 Results

3.1 Stock Market Participation

We first estimate the relationship between social capital and stock market participation.

Table 3 reports results for eight regressions of ZIP Code-level stock market participation on our three measures of social capital. Each of the odd-numbered columns report results with no controls, while the even-numbered columns include controls for population, popu-

[6] *Cohesiveness* and *Civic Engagement* have much lower standard deviations than *Economic Connectedness*. We standardize all our variables in regressions to provide a comparable interpretation of economic significance among these social capital variables.

lation density, median income, race, age, gender, education, and financial literacy as well as county fixed effects. The first six specifications focus on an individual measure of social capital (i.e. EC, Cohesiveness, or Civic Engagement). The last two specifications include all three measures of social capital. In all specifications, we cluster standard errors by county, and we standardize all variables by their standard deviations.

The results from the first row of columns (1), (2), (7) and (8) indicate that Economic Connectedness is positively associated with the probability of having dividend income. Regardless of the specification, this relationship is highly significant and suggests that having high-SES friends is associated with greater participation in the stock market. In the model with full controls (column (8)), a one standard-deviation greater Economic Connectedness is associated with a 0.88 standard deviation greater stock market participation. Converted to percentage points, this indicates that having 12.5 percentage points more high-SES friends in a ZIP Code is associated with 9.5 percentage points higher stock market participation.[7] Economically, the magnitude of this relationship is quite large, an increase of $50\% = 0.09/0.18$ relative to the mean.

The effects are weaker for the other two measures of social capital. While Cohesiveness shows a positive relationship, a one standard-deviation increase in Cohesiveness is associated with a 0.004 standard deviation increase in stock market participation. Furthermore, the point estimate on Cohesiveness only becomes positive once control variables are included. Absent controls, Cohesiveness has a significantly negative relation with stock market participation. Civic Engagement, on the other hand, shows a mixed relationship with stock market participation once controls are included.

We can also compare the importance of these three explanatory variables using adjusted R^2 values. Column (1) indicates that Economic Connectedness explains over 65% of the variation in stock market participation. This is more than 20 times the variation explained by

[7] As described in Chetty et al. (2022a), Economic Connectedness is two times the average share of high-SES friends, so a 0.245 greater standard deviation of Economic Connectedness is equivalent to having 12.5 percent greater fraction of high-SES friends.

Cohesiveness (3.1%), and it is more than 11 times the variation explained by Civic Engagement (5.8%). These results indicate that Economic Connectedness is the most important aspect of social capital in explaining stock market participation.

3.2 Saving Participation

Next, we run a similar series of tests to study the relationship between social capital and saving behavior. Our proxy for saving participation is the fraction of all tax returns in a ZIP Code that report interest income.

Table 4 reports results for eight regressions of ZIP Code-level saving participation on our three measures of social capital. Each of the odd-numbered columns report results with no controls, while the even-numbered columns include controls for population, population density, median income, race, age, gender, education, and financial literacy as well as county fixed effects. The first six specifications focus on the measures of social capital (i.e. EC, Cohesiveness, or Civic Engagement) taken individually. The last two specifications include all three measures of social capital.

The saving results are notably similar to the stock market participation results. Again, Economic Connectedness is the most important aspect of social capital in explaining saving participation. The results from the first row of columns (1), (2), (7), and (8) show a positive relationship between Economic Connectedness and saving participation. This relationship is highly significant across all specifications and provides evidence that having high-SES friends is associated with greater saving rates.

The economic magnitude of this relationship is large. In the specification with full controls (column (8)), a one standard-deviation greater EC is associated with 0.66 standard deviations greater saving participation. This represents an increase of 8.0%, which is more than 25% relative to the mean (0.08/0.31).

Again, the other two measures of social capital are less important in explaining saving participation. They are very similar to the stock market participation results from Table 3.

Cohesiveness has a positive and statistically significant relationship with saving participation. However, its economic magnitude is less than one twelfth that of EC. A one standard-deviation greater Cohesiveness is associated with 0.046 standard deviation greater saving participation. After including controls and social capital measures, Civic Engagement has a negative relationship with saving participation.

A comparison of adjusted R^2 values conveys a similar message. Looking at the bottom row of columns (1), (3), and (5) of Table 3, Economic Connectedness explains nearly 64% of the variation in saving participation, while Cohesiveness explains none of the variation and Civic Engagement explains roughly 10% of it. Therefore, Economic Connectedness appears to be the most important aspect of social capital for explaining saving participation.

3.3 Causality

As discussed earlier, there are endogeneity concerns with the tests described so far, owing to omitted variables that may be correlated with both Economic Connectedness. A key possible concern is that our controls for income or wealth may be imperfect. A closely related problem is reverse causality—saving or stock market trading could influence social capital.

To address these causality concerns, we perform two sets of tests. Our first tests address reverse causality by using childhood friendship data. To address causality concerns more broadly, our second set of tests uses cross-county social network data and consider the effects of changes in the incomes of non-local friends.

3.3.1 Reverse Causality

An important concern for our tests is that stock market or saving participation behavior may influence an individual's social network. As discussed in the introduction, an individual who invests in the stock market might be attracted to and make friends at investment clubs or seminars. Because stock market participation increases with wealth, this results in having high-SES friends. This can induce a positive relationship between Economic Connectedness

and stock market participation could occur even if Economic Connectedness does not cause participation.

To address reverse causality, following Chetty et al. (2022a) we run a series of tests with childhood Economic Connectedness as the independent variable. The results are presented in Table 5.The first three columns present results in which $P(Div)$ is the dependent variable. The final three columns present results in which $P(Int)$ is the independent variable. Columns (2), (3), (5), and (6) include controls, and columns (3) and (6) include all three measures of social capital as independent variables.

The first three columns report a positive and statistically significant relationship between childhood Economic Connectedness and stock market participation. The last three columns report a positive and statistically significant relationship between childhood Economic Connectedness and saving behavior. In terms of economic magnitude, a one standard deviation increase in childhood economic connectedness is associated with a 2.2 percentage point increase in stock market participation and a 3.2 percentage point increase in saving participation. Taken together, these results show the same basic pattern as the results from Tables 3 and 4. Therefore, reverse causality is not likely to be the main driver of our findings.

3.3.2 Non-Local Income Shocks

We next address endogeneity more broadly by examining stock market and saving participation following income shocks to non-local friends.

As we have discussed, our tests may be biased by omitted variables that affect both Economic Connectedness and our dependent variables, as with income or wealth (if these are imperfectly controlled for). Such omitted variables can also cause self-selection. People with characteristics that promote stock market participation may also be the type of people who are attracted to living in regions with high Economic Connectedness.

To address endogeneity, we use a quasi-experimental approach that applies cross-county friendship data. We test whether the change in stock market participation of a given county

increases with the change in income of friends who are non-local to that county. Our identifying assumption is that the change in income of non-locals affects the stock market or saving participation of locals in a given county only through friendship linkages.

To conduct this analysis, we collect data measuring the social connectedness of county pairs, $SCI_{i,j}$ Bailey et al. (2018). This data records the relative probability that any two individuals from two given counties are friends on Facebook. We use this data to estimate, for a given county i, the average change in income of its non-local Facebook friends.

Our measure of change in non-local income for each county is:

$$\Delta NonlocalIncome_i = \left(1 - \frac{SCI_{i,i} * Pop_i}{\sum_{k=1}^{N} SCI_{i,k} * Pop_k}\right) * \frac{\sum_{j=1}^{N} SCI_{i,j} * Pop_j * \Delta Income_j}{\sum_{j=1}^{N} SCI_{i,j} * Pop_j} \quad (1)$$

where $j \neq i$ and county j is not within 250 miles of county i.

Here, for county i, we first multiply each social connectedness measure $SCI_{i,j}$ by the population of county j. As the population of county i is still implicitly in the denominator of this value, this quantity is an captures of the number of Facebook friends in county j per resident of county i. We then use these per person nonlocal-county friendships to weight the change in income of non-local counties from 2016 to 2017. We use lagged change in income for two reasons. First, we want to separate change in participation from current change in income. Second, we expect the change in income to take some time to affect the participation of distant friends. We exclude counties within 250 miles of county i, as well as county i itself, in our computation to detach our measure from potential local economic shocks. Finally, we multiply the weighted average by one minus the fraction of local friends in a given county. This accounts for the fact that some counties may have a greater fraction of local friends than other counties.

We then regress the change in a county's stock market participation or saving participation on $\Delta NonlocalIncome$. We measure changes in stock market and saving participation from 2017 to 2018 and include all control variables considered in earlier regressions at the

county level.

Table 6 indicates that the change in income of non-local friends is positively and significantly associated with changes in stock market and saving participation. In terms of economic magnitude, one standard-deviation greater change in non-local income leads to a 0.04 standard deviation greater change in stock market participation and a 0.05 standard deviation greater change in saving participation. While these numbers are small, the variables of interest in our regressions represent county-level changes, which experience little time-series variation, as is to be expected since people are not continually making participation decisions at short time horizons.

As these findings come from non-local friends, they are immune to effects coming directly from local economic conditions. Furthermore, we control for the change in income of the focal county to mitigate concerns about economic linkage between counties. Lastly, as the explanatory variable is based on the change in wealth to a "fixed" group of friends, the findings indicate that the *income*of one's friends matters in explaining stock market or saving participation.

3.4 High-SES Exposure and Friending Bias

We next consider whether High-SES Exposure or Friending Bias plays a larger role in the relation between Economic Connectedness and household financial behavior. In Chetty et al. (2022b), the authors break down Economic Connectedness into two components, High-SES Exposure and Friending Bias. For each Facebook user, the authors use self-reported data, liked pages, Facebook group membership and friendship networks to assign users to at most one group for each of six contexts in which friendships are commonly made. The contexts are high schools, colleges, religious groups, recreational groups, workplaces and neighborhoods.

For example, Facebook information could be used to identify a user that graduated from Glendale High School in California, earned her bachelor's degree from UCLA, and joined a pickleball club near her work with Kaiser Permanente in Los Angeles. This user

would be assigned to the Glendale High School group with classmates from high school, the UCLA group with classmates from college, the Los Angeles Pickleball group with her training partners, and the Kaiser Permanente group with her coworkers. Individuals who are members of multiple groups within the same context are assigned to the group in which they have the largest number of Facebook friends. Once group membership is determined, the fraction of High-SES members in each group is computed, and friendships within the group are identified.

Using this information about friend groups, High-SES Exposure is calculated by taking the average share of high-SES individuals in the groups for each user in a ZIP Code, and averaging across ZIP Code users. This measure provides an indication of how likely the average person in a ZIP Code is to have opportunities to interact with high-SES individuals.

Friending Bias, on the other hand, measures the propensity toward friending low-SES individuals in a given ZIP Code conditional on exposure. Based on the friendship groups identified, an individual's Friending Bias is calculated as the fraction of high-SES friends made from those groups divided by the average share of high-SES individuals among those groups, all of which is subtracted from one. As a final step, the individual friending bias of each individual in the ZIP code is averaged to create a ZIP code-level measure. More details about these measures can be found in Chetty et al. (2022b).

Distinguishing between High-SES Exposure and Friending Bias provides insight into the mechanism through which Economic Connectedness affects financial behavior. For instance, if High-SES Exposure is driving our results, then lack of cross-class interactions may be a key limiting factor for participation rates of low-SES households. If so, policies that opportunities for cross-class interactions would promote participation among low-SES households. In contrast, if our findings are driven by Friending Bias, then facilitating cross-class interactions wouldhave a minimal effect on participation.

To test whether High-SES Exposure or Friending Bias drives the relation between Economic Connectedness and financial behavior, we replicate our main regressions from Tables

3 and 4, replacing Economic Connectedness with High-SES Exposure and Friending Bias. The results are reported in Table 8.

The results from Table 8 show that High-SES Exposure is much more important for financial behavior than Friending Bias. In our specifications with all control variables, a one standard deviation greater High-SES Exposure is associated with a 0.691 standard deviation greater stock market participation and a 0.508 standard deviation greater saving participation. In comparison, the coefficient on Friending Bias is economically less important for both stock market (-0.055) and saving (-0.092) participation. Therefore, having the opportunity to interact with High-SES individuals appears to be an important mechanism behind the relation between Economic Connectedness and financial behavior.

3.5 Intensive Margins

We next explore how Economic Connectedness is related to the fraction of total income deriving from dividend income or from interest income. While our earlier tables provide evidence that Economic Connectedness helps explain variation in stock market and saving participation, these measures focus on extensive margins. This leaves open the question of whether, for a given participating individual, having wealthy friends encourages greater stock market investment and greater saving.

On the one hand, ZIP Codes with greater Economic Connectedness may save or invest more of their income than areas with less Economic Connectedness. If this is the case, then we should observe a greater fraction of income from investing and saving in areas with greater Economic Connectedness. On the other hand, areas with greater Economic Connectedness may not save more, but instead spread their money out more between the stock market and interest-bearing accounts. In this case, diversification might be playing a role, and we would not necessarily expect to see a greater fraction of income from investing or saving in areas with greater Economic Connectedness.

To test for effects at the intensive margin—whether the stock market and saving is

increasing with Economic Connectedness—we estimate similar regressions to those in Tables 3 and 4, replacing our dependent variables with ZIP Code-level total dividend income and total interest income, scaled by adjusted gross income. The results are reported in Table 9.

In column (1), we see a strong positive relation between Economic Connectedness and dividend income. The coefficient on Economic Connectedness indicates that a one standard deviation greater Economic Connectedness is associated with a 0.39 standard deviation greater percent of income from dividends. Control variables are added in columns (2) and (3); the effect from Economic Connectedness increases. As with our extensive margin results, Cohesiveness and Civic Engagement are economically less important.

Economic Connectedness is also positively related to interest income, as seen in columns (4)-(6). After including all controls and social capital measures, a one standard deviation greater Economic Connectedness is associated with a 0.65 standard deviation greater interest income. In comparison, the effect of Cohesiveness is close to one tenth as large, and Civic Engagement takes the opposite sign.

Overall, Table 9 provides evidence that Economic Connectedness is positively associated with the intensive margins of investing and saving behaviors.

3.6 Low SES vs. High SES

We next test whether the effect of household social capital on financial decisions depends on the household's SES. It is of special interest whether greater social capital is helpful for low-SES households.

In Table 10, we repeat our earlier analysis on two subsamples, once consisting of one observation per ZIP Code based on low-SES individuals, and one based on high-SES individuals. As the Economic Connectedness measures we obtain from Chetty et al. (2022a) provide values for high-SES and low-SES individuals for each ZIP Code, we simply use the ZIP Codes' standard EC values for the below-median sample and the analogous high-SES Economic Connectedness values for the above-median sample.

Column (1) indicates that among low-SES households, stock market participation is significantly increasing with EC and Civic Engagement. For Economic Connectedness, a one standard deviation greater EC is associated with a 0.44 standard deviation greater probability of stock market participation. The standard deviation of P(Div) for low-SES is 0.162. Therefore, the coefficient of 0.44 in column (1) corresponds to a 7.1 percentage point increase in stock market participation among low-SES households. This represents an increase of 44% relative to the mean participation rate of 0.162.

Moving to column (2), among high-SES households, stock market participation is increasing with all three aspects of social capital. Although the coefficients are larger in this column, high-SES individuals have higher average participation, so for such individuals the social capital measures matter less in percentage terms for stock market participation. The standard deviation of P(Div) for high-SES households is 0.252. Therefore, a one standard deviation increase in EC is associated with an increase in stock market participation of 18.1 percentage points for high-SES households. This represents a 36% increase relative to the mean participation rate of 0.499.

Moving to saving participation, we see a similar pattern. The coefficients on EC are statistically significant in columns (3) and (4), but the magnitude is larger for high-SES households. In terms of economic magnitude, the standard deviations of P(Int) are 0.303 and 0.230 for low-SES and high-SES households, respectively. Therefore, a one standard deviation increase in EC is associated with an increase of 11 percentage points for both low-SES and high-SES households.

In the final four columns, we consider the intensive margins of investing and saving for both high-SES and low-SES groups. Regardless of socioeconomic status, Economic Connectedness is positively related to the fraction of income from dividends and interest. The relationship is statistically significant in all columns.

The relation between the intensive margins and Economic Connectedness is especially pronounced among the high-SES group. When dividend income is the dependent variable,

the coefficient on Economic Connectedness is 0.63. When total interest is the dependent variable, the coefficient is 0.47. In comparison, the coefficients for the low-SES group are 0.27 and 0.23, respectively.

3.7 Robustness Tests

We have used the probability of receiving dividend income as a proxy for stock market participation. Another IRS datum that is informative about stock market participation is capital gain income. In the Appendix, we replicate our analysis of stock market participation using capital gain income as our dependent variable. Each of the results, presented in Tables A7 - A9 is consistent with our main analysis and interpretation. In fact, the coefficients are extremely similar.

In addition to our capital gain analysis, we have replicated our main findings using alternative measures for Cohesiveness and Civic Engagement, called Support Ratio and Civic Organizations. These alternate measures are described in Chetty et al. (2022a). Additionally, we consider a widely used proxy for social capital: voter turnout. The most granular data we have on voter turnout is at the county level. In Appendix Tables A10 - A12, we find that after considering these other measures, Economic Connectedness continues to be the most important aspect of social capital in explaining stock market and saving participation.

4 PSID Results

We next use PSID data to help identify the mechanism through which Economic Connectedness influences household savings and to examine the robustness of our findings. Using IRS tax forms as our primary measure of stock market participation has the advantage of covering nearly the entire tax-paying population of the United States. Furthermore, the information comes from information from actual tax returns, so it is likely quite accurate. However, the IRS data also has limitations. For example, it does not track individual households, which

would be needed for individual level tests on such variables as social interaction frequency. The PSID allows us to access such information.

PSID data consists of a set of survey responses conducted by the University of Michigan which contain detailed information about a broad sample of U.S. households followed over time. Among other information, this survey tracks whether a household owns equities and whether a household has a savings or checking account. These indicator variables are analogous to our ZIP Code participation measures. In addition, PSID allows us to control for population, income, wealth, race, age, gender, education, and financial literacy. Wealth is an important control which is not possible in our ZIP Code analysis. We merge the PSID data with the ZIP Code social capital data of (Chetty et al., 2022a) to examine how social capital is associated with household financial behavior.

In appendix tables A3 - A6, we find additional evidence in favor of our main results. Table A3 provides similar results to Table 3. Economic connectedness has a strong positive association with whether or not a household participates in the stock market. Furthermore, EC appears to be much more important in explaining stock market participation than the other aspects of social capital that we study. Similarly, Table A4 provides evidence that is congruent with the evidence from Table 4. Economic connectedness has a strong positive relationship with household saving participation. Additionally, EC seems to be much more important in explaining saving participation than the other two aspects of social capital that we study. Lastly, we replicate the results from Table 8 and Table 10 in Tables A5 and A6, respectively. Overall, the PSID sample provides additional evidence in support of our SOI analysis.

4.1 Mechanism

We next use the PSID data to examine why being economically connected influences stock market and saving participation. We test three mechanisms: financial awareness and social transmission bias or social utility.. A leading explanation for the stock market participation

puzzle is that investors have fixed setup costs of participation (Vissing-Jorgensen (2002)). Participation occurs when the benefit of participation exceeds the cost. While costs may be pecuniary, there is also evidence that learning how to invest (Hong, Kubik, and Stein (2004)) or the psychological discomfort of investing (Cao, Wang, and Zhang (2005), Cao et al. (2009)) can impede participation. As being economically connected can reduce such costs, we examine mechanisms where financial information reduces fixed setup costs, and refer to this channel broadly as financial awareness. Social transmission bias can cause greater risky investment such as stock market participation. Such investment is predicted to be increasing with proxies for social interactions (Han, Hirshleifer, and Walden (2020). Alternatively, in groups of high-SES individuals, people may enjoy casual discussions about investing, encouraging investment. This effect would also be increasing in the extent of social interactions. We refer to this channel as social utility.

We test the financial awareness mechanism using three proxies: whether an individual has a business degree, has a finance occupation, and works for a company in the finance industry. We hypothesize that increasing financial awareness has larger effects on individuals who start with low awareness. To test this, we split the sample into two groups for each financial awareness measure. The prediction is that the sensitivity of stock market participation to Economic Connectedness will be stronger in the group that has less financial awareness.

To test the social utility mechanism, we split the sample between those who are more versus less socially active or have more versus less religious attendance. The prediction is that there will be a greater sensitivity of stock market participation to Economic Connectedness among those who are more socially connected, i.e., are more socially active and have greater religious attendance.

4.2 Results

Our evidence is consistent with wealthy connections influencing stock market participation through financial awareness. As predicted, the relationship between EC and stock mar-

ket participation is strongest among the less financially aware group for each of the three measures. For saving participation, we find the same pattern for two of the three financial awareness measures. These patterns can be observed in Table 12.

In contrast, we find little evidence in support of the social transmission bias and social utility mechanisms. Using the same split sample approach, we do not find a stronger relation between Economic Connectedness and stock market participation among those who are more socially active or among those who have greater religious attendance. This evidence is presented in Table 13. Taken together, the evidence from our study of potential channels is most consistent with theories that explain participation through fixed setup costs related to financial awareness.

5 Conclusion

Despite high historical returns to investing in the U.S. stock market, many households do not own any stocks. As participating in the stock market is crucial to building wealth over the life-cycle, understanding what determines stock market participation is important for improving financial well-being.

Social capital has been proposed as a candidate for policy interventions to promote market participation and saving (Ban, Gilligan, and Rieger (2020)). One motivation for this is that social capital has been found to influence many economic and political outcomes. It is plausible that social capital can reduce the fixed costs, whether pecuniary or psychic, to investors of participating in the stock market or of saving for the future. Interacting with members in a community with higher socioeconomic status (who are, in general, more likely to participate in the market and have high rates of saving) can help individuals obtain useful information about how to participate in the stock market or to save for retirement.

In this paper, we apply friendship data from Facebook and financial data from the IRS to test the relationship between social capital and individual investment and saving behavior.

Using ZIP Code-level data constructed from the individual-level social networks of 27.2 million Facebook users and financial information from IRS tax returns, we consider three aspects of social capital: Economic Connectedness, Cohesiveness, and Civic Engagement.

Our evidence indicates that Economic Connectedness is especially important for household financial decisions. A one standard deviation increase in Economic Connectedness is associated with a 2.9% increase in stock market participation and a 5.0% increase in saving participation. Relative to their mean values, this represents an 18% increase in stock market participation and a 16% increase in saving participation. Furthermore, while Cohesiveness and Civic Engagement explain, at most, 8.7% of variation in stock market participation, Economic Connectedness explains 56.3%. Using changes in income of non-local friends as exogenous shocks to Economic Connectedness, we provide evidence in favor of a causal interpretation of these results.

The effect of Economic Connectedness on household financial behavior can derive from opportunities to interact with wealthy individuals or because of wealthy individuals' willingness to form friendships. Understanding which mechanism drives our findings clarifies whether facilitating cross-class encounters can suffice to improve outcomes, or whether improving friending rates for existing interactions is required. We test which of these two mechanisms has a greater effect on household financial behavior and find that the importance of High-SES Exposure is over seven times that of Friending Bias.

As discussed in the introduction, economists have argued that undersaving and insufficient stock market risk exposure, particularly among low-SES households, are barriers to lifetime well-being. A failure to invest can contribute to an intergenerational cycle of poverty.

We provide evidence that greater opportunities for social interaction with wealthy individuals is associated with financial behaviors that can improve lifetime wealth accumulation. For the average household, having more exposure to high-SES households is associated with increased stock market and saving participation. Cross-class interaction is common at casual restaurant chains such as Olive Garden and Applebee's (Massenkoff and Wilmers (2023)).

Among publicly funded spaces, libraries and parks provide the most opportunity for low-SES individuals to interact with high-SES individuals. Our findings suggest that the presence of cross-class establishments may promote stock market and saving participation of low-SES households.

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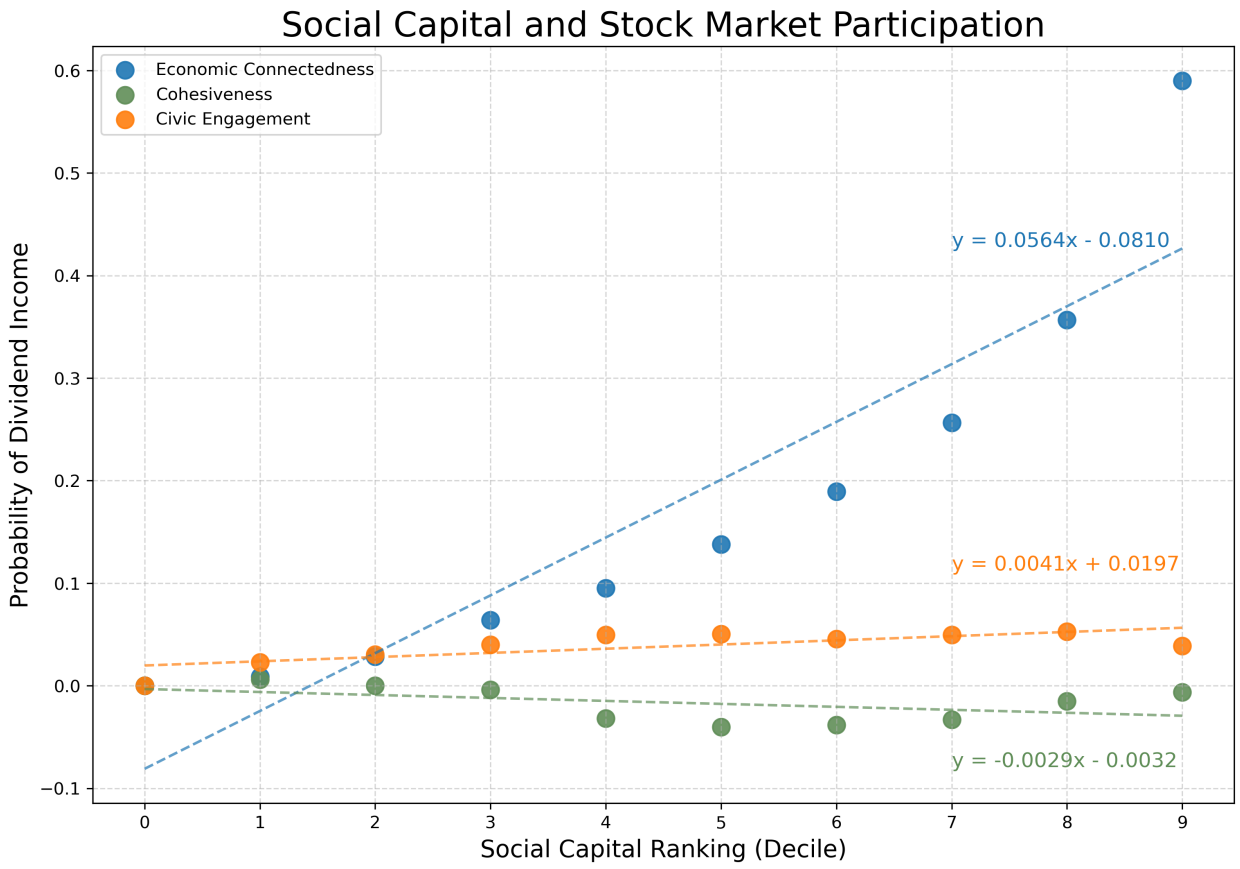

Figure 1: **Social Capital and Stock Market Participation.** This figure reports coefficients from a regression of ZIP Code-level stock market participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. We capture stock market participation with dividend income. Each measure of social capital is divided into ten groups. We include a total of 27 indicator variables, 9 for each of the three aspects of social capital. We also include controls for population, population density, median income, race, age, gender, education, and financial literacy as well as county fixed effects. The equations represent best-fit lines from regressions of social capital coefficients on decile ranking. The slopes of these lines represent the average increase in stock market participation that results from a 10% increase in a given aspect of social capital.

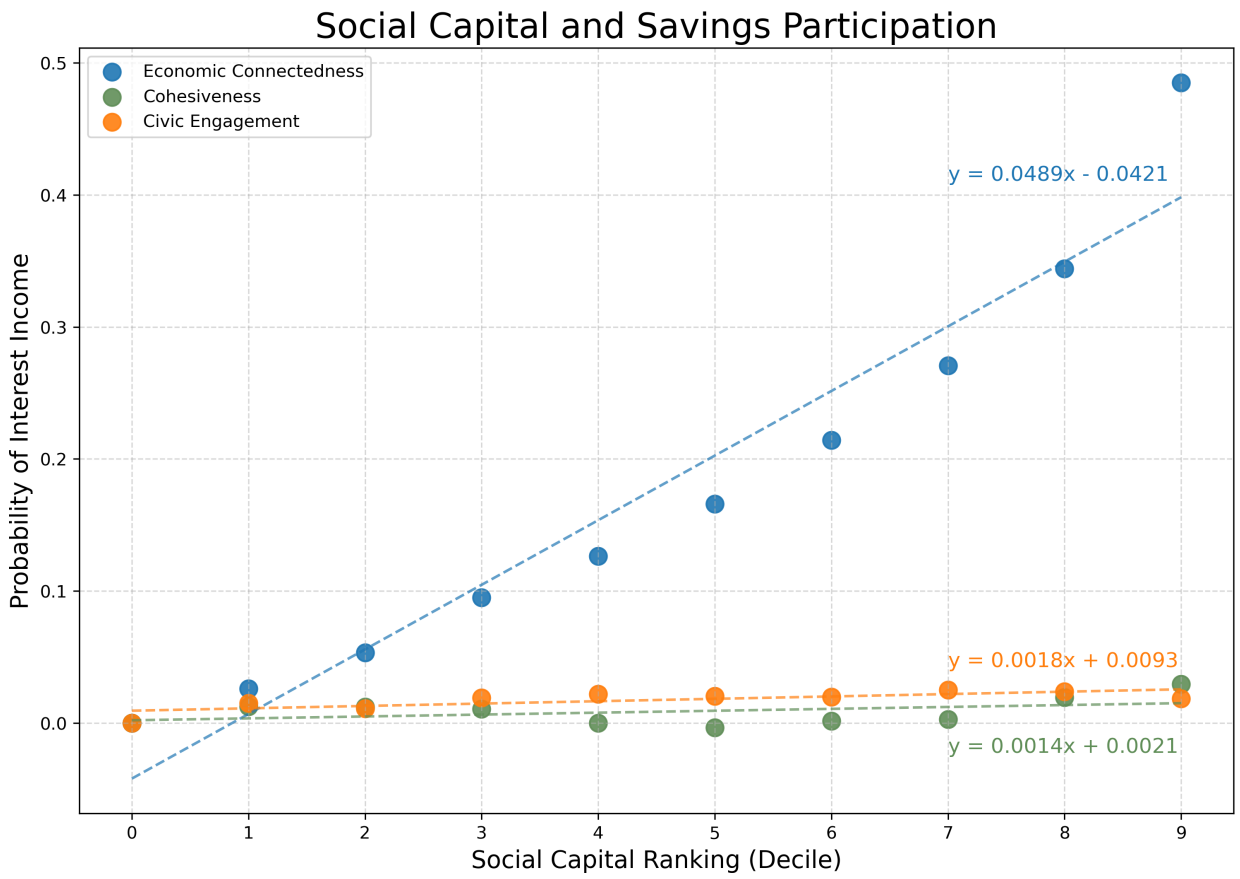

Figure 2: **Social Capital and Saving.** This figure reports coefficients from a regression of ZIP Code-level saving participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. We capture saving participation with nonzero interest income. Each measure of social capital is divided into ten groups. We include a total of 27 indicator variables, 9 for each of the three aspects of social capital. We also include controls for population, population density, median income, race, age, gender, education, and financial literacy as well as county fixed effects. The equations represent best-fit lines from regressions of social capital coefficients on decile ranking. The slopes of these lines represent the average increase in saving participation associated with a 10% increase in a given aspect of social capital.

Table 1: **Summary Statistics.** This table reports ZIP-Code-level summary statistics. *P(Div)* is the probability that a tax return has dividend income. *Div/AGI* is the total dividends in a ZIP Code divided by total county AGI. It captures the intensive margin of stock market participation. *P(Int)* is the probability that a tax return has interest income. *Int/AGI* is the total interest income in a ZIP Code divided by total county AGI. It captures the intensive margin of saving participation. *Economic Connectedness* is the first aspect of social capital that we study. It measures the fraction of an individual's friend group with high SES. *Cohesiveness* is the second aspect of social capital that we study. It captures the fraction of an individual's friend group that are friends with each other. *Civic Engagement* is the third aspect of social capital that we study. It captures the fraction of individuals in a ZIP Code who are members of 'volunteering' or 'activism' groups. The variables *Population, Median Income, Percent Male, Percent Black, Percent Asian, Percent Islanders, Percent Hispanic, and Median Age* are ZIP-Code-level control variables. *Financial literacy* is a dummy variable that equals one if a state had financial literacy high school graduation requirement in 2018. *Percent High School or Higher* measures the fraction of a ZIP Code that has graduated high school.

Variable	Obs.	Mean	Std	p25	p50	p75
P(Div)	22,535	0.177	0.108	0.101	0.158	0.227
P(Int)	22,535	0.311	0.122	0.225	0.302	0.392
Div/AGI	22,535	0.015	0.015	0.006	0.011	0.018
Int/AGI	22,535	0.006	0.005	0.003	0.005	0.008
Economic Connectedness	15,882	0.945	0.245	0.768	0.929	1.109
Cohesiveness	22,535	0.106	0.020	0.091	0.103	0.117
Civic Engagement	22,533	0.077	0.037	0.052	0.071	0.094
Ln(Population)	22,535	8.869	1.238	7.804	8.861	9.957
Ln(Median Income)	22,476	10.951	0.373	10.709	10.924	11.172
Percent Male	22,535	0.497	0.035	0.479	0.494	0.511
Percent Black	22,535	0.092	0.163	0.004	0.021	0.095
Percent Asian	22,535	0.028	0.061	0.001	0.007	0.026
Percent Islander	22,535	0.001	0.008	0.000	0.000	0.000
Percent Hispanic	22,535	0.105	0.161	0.016	0.042	0.114
Median Age	22,535	41.323	6.858	36.800	41.100	45.400
Financial Literacy	22,535	0.488	0.500	0.000	0.000	1.000
Percent HS or Higher	22,535	0.879	0.082	0.839	0.898	0.938

Table 2: **Correlation Matrix.** This table reports correlations for each of our variables of interest. *P(Div)* is the probability that a tax return has dividend income. *P(Int)* is the probability that a tax return has interest income. *Economic Connectedness* is the first aspect of social capital that we study. It measures the fraction of an individual's friend group with high SES. *Cohesiveness* is the second aspect of social capital that we study. It captures the fraction of an individual's friend group that are friends with each other. *Civic Engagement* is the third aspect of social capital that we study. It captures the fraction of individuals in a county who are members of 'volunteering' or 'activism' groups. *Population, Median Income, Percent Male, and Median Age* are ZIP Code-level control variables. *Financial literacy* is a dummy variable that equals one if a state had financial literacy high school graduation requirement in 2018. *Percent HS or Higher* measures the fraction of a ZIP Code that has graduated high school.

	P(Div)	P(Int)	EC	Cohes	CivEng	Pop	Inc	Male	Age	FinLit	HS+
P(Div)	1.00										
P(Int)	0.88	1.00									
EC	0.81	0.80	1.00								
Cohesiveness	-0.18	-0.02	-0.15	1.00							
Civic Engagement	0.24	0.32	0.35	0.09	1.00						
Ln(Population)	0.09	-0.09	-0.09	-0.52	-0.27	1.00					
Ln(Median Income)	0.73	0.69	0.81	-0.33	0.16	0.19	1.00				
Percent Male	-0.06	-0.01	0.02	0.07	0.07	-0.16	-0.01	1.00			
Median Age	0.33	0.42	0.20	0.23	0.23	-0.39	0.09	-0.05	1.00		
Financial Literacy	-0.05	-0.05	-0.09	0.00	-0.01	-0.02	-0.06	0.00	-0.05	1.00	
Percent HS or Higher	0.64	0.65	0.70	-0.13	0.35	-0.01	0.61	-0.09	0.26	-0.06	1.00

Table 3: **Probability of Stock Market Participation.** This table reports results for regressions of ZIP Code-level stock market participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. We capture ZIP Code-level stock market participation using the probability of dividend income. Columns (1) and (2) report results for Economic Connectedness. Columns (3) and (4) report results for Cohesiveness. Columns (5) and (6) report results for Civic Engagement. In columns (7) and (8), we include all three aspects of social capital in the regressions. In columns (2), (4), (6), and (8) we include controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div)	(2) P(Div)	(3) P(Div)	(4) P(Div)	(5) P(Div)	(6) P(Div)	(7) P(Div)	(8) P(Div)
EC	0.807***	0.869***					0.812***	0.878***
	(51.35)	(35.66)					(47.58)	(36.43)
Cohesiveness			-0.175***	-0.025*			0.038***	0.004
			(-9.23)	(-1.94)			(3.61)	(0.25)
Civic Engagement					0.240***	0.065***	0.000	-0.022**
					(15.13)	(7.11)	(0.04)	(-2.09)
Controls		YES		YES		YES		YES
County FE's		YES		YES		YES		YES
Observations	15,882	15,019	22,535	22,066	22,533	22,064	15,882	15,019
Adj. R^2	0.650	0.826	0.031	0.739	0.058	0.741	0.652	0.826

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: **Probability of Interest Income.** This table reports results for regressions of ZIP Code-level interest income on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. Columns (1) and (2) report results for Economic Connectedness. Columns (3) and (4) report results for Cohesiveness. Columns (5) and (6) report results for Civic Engagement. In columns (7) and (8), we include all three aspects of social capital in the regressions. In columns (2), (4), (6), and (8) we include controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Int)	(2) P(Int)	(3) P(Int)	(4) P(Int)	(5) P(Int)	(6) P(Int)	(7) P(Int)	(8) P(Int)
EC	0.796***	0.648***					0.801***	0.657***
	(58.22)	(38.27)					(58.27)	(39.23)
Cohesiveness			-0.019	0.018*			0.167***	0.046***
			(-0.88)	(1.81)			(14.68)	(4.09)
Civic Engagement					0.323***	0.056***	0.057***	-0.012*
					(18.31)	(8.07)	(5.52)	(-1.88)
Controls		YES		YES		YES		YES
County FE's		YES		YES		YES		YES
Observations	15,882	15,019	22,535	22,066	22,533	22,064	15,882	15,019
Adj. R^2	0.633	0.891	0.000	0.826	0.104	0.827	0.667	0.892

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: **Childhood Economic Connectedness.** This table reports results for regressions of the probability of dividend income (columns (1) - (3)) or the probability of interest income (columns (4) - (6)) on childhood EC. We include childhood EC instead of our standard measure of EC to address concerns related to reverse causality. In columns (1) and (2) and columns (4) and (5), we only include the focal aspect of social capital in our regressions, namely Childhood EC. In columns (3) and (6), we include all three aspects of social capital in our regressions. In columns (2), (4), (6), and (7) we include county fixed effects and controls for population, population density, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1)	(2)	(3)	(4)	(5)	(6)
	P(Div)	P(Div)	P(Div)	P(Div)	P(Int)	P(Int)
Child EC	0.589***	0.194***	0.208***	0.448***	0.257***	0.266***
	(36.43)	(6.78)	(7.77)	(28.81)	(9.89)	(10.37)
Cohesiveness			0.227***			0.151***
			(5.44)			(4.73)
Civic Engagement			0.020			-0.002
			(1.28)			(-0.15)
Controls		YES	YES		YES	YES
Observations	2728	2727	2727	2728	2727	2727
Adj. R^2	0.347	0.660	0.681	0.201	0.643	0.652

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: **Nonlocal Income Shocks.** This table reports results for regressions of the change in stock market participation (columns (1) and (2)) or the change in saving participation (columns (3) and (4)) on the change in income of nonlocal friends. The dependent variables capture changes from 2017 to 2018. The independent variable measures the change in the income of nonlocal friends from 2016 to 2017. Friends are classified as nonlocal if they live more than 250 miles from the focal county. In columns (2) and (4), we include changes in controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized.

	(1)	(2)	(3)	(4)
	Δ P(Div)	Δ P(Div)	Δ P(Int)	Δ P(Int)
Δ Nonlocal Income	0.047***	0.036*	0.119***	0.050*
	(2.88)	(1.74)	(5.89)	(1.82)
Controls		YES		YES
Observations	3141	3140	3141	3140
Adj. R^2	0.002	0.002	0.014	0.100

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: **Family Fixed Effects.** This table reports results from regressions on the PSID sample. The dependent variable is a participation dummy for household stock market participation (columns (1) and (2)) or household saving participation (columns (3) and (4)). The independent variables measure three aspects of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. In columns (2) and (4), we include controls for population, income, wealth, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustererd at the county level. Additionally, all columns include extended-family fixed effects as controls.

	(1)	(2)	(3)	(4)
	Stock	Stock	ChkSav	ChkSav
EC	0.109***	0.006	0.240***	0.071**
	(7.80)	(0.36)	(12.72)	(2.58)
Cohesiveness	-0.024*	-0.028	0.001	-0.014
	(-1.95)	(-1.44)	(0.03)	(-0.45)
Civic Engagment	-0.009	0.006	-0.020	0.028
	(-0.59)	(0.31)	(-1.26)	(1.61)
Controls		YES		YES
Family FE	YES	YES	YES	YES
Observations	8286	6009	8286	6009
Adj. R^2	0.249	0.266	0.225	0.176

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: **High-SES Exposure and Friending Bias.** This table breaks EC into two components: High-SES Exposure and Friending Bias. *High-SES Exposure* measures the fraction of group members who are high SES among groups to which an individual belongs. *Friending Bias* captures the bias for which an individual befriends low-SES people given the SES composition of a group. In all specifications, we include controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div)	(2) P(Div)	(3) P(Int)	(4) P(Int)
Exposure	0.699***	0.691***	0.510***	0.508***
	(23.22)	(22.76)	(21.70)	(21.35)
Friending Bias	-0.055***	-0.055***	-0.090***	-0.092***
	(-4.86)	(-4.75)	(-9.98)	(-10.14)
Cohesiveness		0.007		0.052***
		(0.36)		(3.94)
Civic Engagment		0.021		0.013
		(1.84)		(1.73)
Controls YES	YES	YES	YES	YES
County FE's	YES	YES	YES	YES
Observations	14650	14650	14650	14650
Adj. R^2	0.779	0.779	0.868	0.869

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: **Intensive Margin.** This table reports results for regressions of the total ZIP code-level dividend income divided by adjusted gross income (columns (1) - (3)) or the total ZIP code-level interest income divided by adjusted gross income (columns (4) - (6)) on aspects of social capital. In columns (1) and (2) and columns (4) and (5), we only include the focal aspect of social capital in our regressions, namely Economic Connectedness. In columns (3) and (6), we include all three aspects of social capital in our regressions. In columns (2), (3), (5), and (6) we include controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) Div/AGI	(2) Div/AGI	(3) Div/AGI	(4) Int/AGI	(5) Int/AGI	(6) Int/AGI
EC	0.392***	0.806***	0.834***	0.333***	0.584***	0.649***
	(21.43)	(18.36)	(18.48)	(13.18)	(13.70)	(13.92)
Cohesiveness			0.023			0.067***
			(1.08)			(3.32)
Civic Engagement			-0.068***			-0.146***
			(-3.82)			(-5.98)
Controls		YES	YES		YES	YES
County FE's		YES	YES		YES	YES
Observations	15882	15019	15019	15882	15019	15019
Adj. R^2	0.154	0.386	0.387	0.111	0.293	0.302

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: **Subsample Analysis.** This table reports results for regressions of various ZIP code-level measures of financial behavior on all three aspects of social capital. We split our regressions into two subsamples: below-median SES and above-median SES. Columns (1), (3), (5), and (7) are regressions on the low-SES subsample, and columns (2), (4), (6), and (8) are regressions on the high-SES subsample. The dependent variables are probability of dividend income (columns (1) and (2)), probability of interest income (columns (3) and (4)), total Zip code-level dividend income divided by adjusted gross income (columns (5) and (6)), and total Zip code-level interest income divided by adjusted gross income (columns (7) and (8)). In all specifications, we include all three aspects of social capital as independent variables. In all specifications, we include county fixed effect and include controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div) Low-SES	(2) P(Div) High-SES	(3) P(Int) Low-SES	(4) P(Int) High-SES	(5) Div Low-SES	(6) Div High-SES	(7) Int Low-SES	(8) Int High-SES
EC	0.438***	0.721***	0.376***	0.485***	0.272***	0.628***	0.228***	0.466***
	(17.32)	(37.73)	(20.37)	(20.93)	(6.99)	(21.04)	(6.40)	(16.13)
Cohesiveness	0.025	0.129***	0.077***	0.178***	-0.043*	0.122***	0.072***	0.127***
	(1.73)	(6.27)	(6.60)	(7.46)	(-2.39)	(4.63)	(3.78)	(6.35)
Civic Engagement	0.048***	-0.056***	0.027***	-0.022	0.011	-0.085***	-0.018	-0.143***
	(4.67)	(-3.68)	(3.60)	(-1.52)	(0.78)	(-4.85)	(-1.34)	(-6.31)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
County FE	YES	YES	YES	YES	YES	YES	YES	YES
Observations	18125	15034	18125	15034	18125	15034	18125	15034
Adj. R^2	0.733	0.472	0.830	0.297	0.468	0.290	0.538	0.182

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: **Alternative specification for EC.** This table reports results from various regressions that use an alternative methodology to combine EC. Instead of combining EC for low-SES individuals and EC for high-SES individuals into one ZIP code-level EC measure, this alternative specification keeps EC (which applies to low-SES) and EC_high as independent variables in all specifications. The dependent variables are: probability of dividend income (columns (1) and (2); probability of interest income (columns (3) and (4); total dividend income divided by AGI (columns (5) and (6); and total interest income divided by AGI (columns (7) and (8). All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div)	(2) P(Div)	(3) P(Int)	(4) P(Int)	(5) Div	(6) Div	(7) Int	(8) Int
EC	0.151***	0.042	0.367***	0.131***	-0.312***	-0.250***	-0.250***	-0.302***
	(4.88)	(1.61)	(15.37)	(8.23)	(-9.39)	(-6.91)	(-7.32)	(-7.08)
EC_high	0.675***	0.677***	0.452***	0.454***	0.744***	0.898***	0.654***	0.772***
	(21.14)	(32.25)	(18.35)	(21.27)	(21.27)	(24.89)	(15.07)	(18.76)
Cohesiveness	0.100***	0.048***	0.204***	0.080***	0.047***	0.072***	0.134***	0.116***
	(9.48)	(3.66)	(17.41)	(7.56)	(3.77)	(3.71)	(9.58)	(5.90)
Civic Engagement	0.019**	-0.022***	0.063***	-0.018***	0.021*	-0.059***	-0.019	-0.118***
	(2.02)	(-2.59)	(6.63)	(-2.94)	(1.85)	(-4.05)	(-1.47)	(-5.74)
Controls		YES		YES		YES		YES
County FE		YES		YES		YES		YES
Observations	18762	18108	18762	18108	18762	18108	18762	18108
Adj. R^2	0.624	0.817	0.626	0.881	0.247	0.440	0.183	0.354

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 12: **Financial Awareness Mechanism.** This table reports results from subsample regressions on the PSID data. Subsamples are split based on three proxies for financial awareness: whether or not the reference person has a business degree (columns (1) and (2)); whether or not the reference person works in a finance occupation (columns (3) and (4)); and whether or not the reference person works in the finance industry (columns (5) and (6)). All specifications include county fixed effects and controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

Panel A: Stock

	BusDeg=0	BusDeg=1	FinOcc=0	FinOcc=1	FinInd=0	FinInd=1
EC	0.055***	0.04	0.059***	0.009	0.058***	-0.043
	(3.01)	(0.76)	(3.70)	(0.15)	(3.66)	(-0.59)
Cohes.	-0.018	0.041	-0.007	0.024	-0.016	0.149**
	(-0.85)	(0.87)	(-0.31)	(0.35)	(-0.83)	(2.07)
Civ.Eng.	0.014	0.023	0.011	0.087	0.021	0.112*
	(0.73)	(0.60)	(0.62)	(1.46)	(1.15)	(1.94)
Controls	YES	YES	YES	YES	YES	YES
County FE	YES	YES	YES	YES	YES	YES
Obs	5989	811	6342	460	6408	384
Adj. R^2	0.156	0.2	0.172	0.181	0.168	0.286

Panel B: ChkSav

	BusDeg=0	BusDeg=1	FinOcc=0	FinOcc=1	FinInd=0	FinInd=1
EC	0.077***	0.039	0.074***	0.006	0.074***	0.217**
	(3.61)	(0.49)	(3.54)	(0.07)	(3.51)	(2.49)
Cohes.	-0.035	-0.046	-0.033	-0.125	-0.032	-0.011
	(-1.24)	(-0.68)	(-1.23)	(-1.39)	(-1.22)	(-0.11)
Civ.Eng.	0.038***	0.048**	0.034**	0.064	0.039***	-0.022
	(2.59)	(2.12)	(2.39)	(1.36)	(2.83)	(-0.40)
Controls	YES	YES	YES	YES	YES	YES
County FE	YES	YES	YES	YES	YES	YES
Obs	5989	811	6342	460	6408	384
Adj. R^2	0.162	0.062	0.161	0.126	0.165	0.076

Standardized beta coefficients; t statistics in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 13: **Social Utility Mechanism.** This table reports results from subsample regressions on the PSID data. Subsamples are split based on four proxies for social utility. For each proxy, households are split into below-median and above-median social utility. The four social utility proxies are: how frequently the reference person interacts socially (columns (1) and (2)); how frequently the spouse of the reference person interacts socially (columns (3) and (4)); how frequently the reference person attends religious services (columns (5) and (6)); and how frequently the spouse of the reference person attends religious services (columns (7) and (8)). All specifications include county fixed effects and controls for population, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

Panel A: Stock

	RPI=1	RPI=2	SPI=1	SPI=2	RPR=1	RPR=2	SPR=1	SPR=2
EC	0.034*	0.106***	0.085***	0.018	0.067***	0.042	0.089***	-0.003
	(1.71)	(3.18)	(3.20)	(0.84)	(3.87)	(1.13)	(4.31)	(-0.11)
Cohes.	-0.014	0.034	0.020	-0.010	0.006	-0.023	0.015	-0.033
	(-0.68)	(0.95)	(0.74)	(-0.47)	(0.30)	(-0.67)	(0.71)	(-1.14)
Civ. Eng.	0.046**	-0.053**	-0.010	0.030	0.015	0.023	0.015	0.022
	(2.28)	(-1.99)	(-0.44)	(1.33)	(0.69)	(0.85)	(0.69)	(0.83)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
County FE	YES	YES	YES	YES	YES	YES	YES	YES
Obs.	4867	1929	2985	3809	4508	2284	4152	2645
Adj. R^2	0.178	0.184	0.161	0.179	0.179	0.171	0.182	0.165

Panel B: ChkSav

	RPI=1	RPI=2	SPI=1	SPI=2	RPR=1	RPR=2	SPR=1	SPR=2
EC	0.097***	0.031	0.061**	0.072**	0.079***	0.062	0.097***	0.011
	(3.78)	(0.89)	(2.40)	(2.39)	(3.65)	(1.53)	(4.60)	(0.29)
Cohes.	-0.033	-0.048	-0.052	-0.029	-0.049*	-0.015	-0.026	-0.065*
	(-1.03)	(-1.27)	(-1.34)	(-1.22)	(-1.74)	(-0.36)	(-0.95)	(-1.86)
Civ. Eng.	0.037***	0.042	0.031	0.041**	0.037**	0.053**	0.023	0.053***
	(2.63)	(1.37)	(1.43)	(2.19)	(2.23)	(2.42)	(1.29)	(2.68)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
County FE	YES	YES	YES	YES	YES	YES	YES	YES
Obs.	4867	1929	2985	3809	4508	2284	4152	2645
Adj. R^2	0.185	0.114	0.132	0.183	0.167	0.165	0.149	0.200

Standardized beta coefficients; t statistics in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A1: **Summary Statistics - PSID.** This table reports household-level summary statistics. Stock is a dummy variable that equals one if a household holds non-IRA stock. ChkSav is a dummy variable that equals one if a household has a checking or savings account. *Economic Connectedness* is the first aspect of social capital that we study. It measures the fraction of an individual's friend group with high SES. *Cohesiveness* is the second aspect of social capital that we study. It captures the fraction of an individual's friend group that are friends with each other. *Civic Engagement* is the third aspect of social capital that we study. It captures the fraction of individuals in a ZIP Code who are members of 'volunteering' or 'activism' groups. *Exposure* is the the average share of high-SES individuals in the groups of the average user in a ZIP code. *Friending Bias* is one minus the fraction of high-SES friends made from an individual's groups divided by the avergage share of high-SES individuals among those groups. *Support Ratio* measures the rate at which paris of friends in a ZIP code have other friends in common. *Civic Organizations* measures the number of Facebook pages for civic organizations in a given Zip code. *Voter Turnout* measures the average voter turnout in a given county (this is the most granular data we were able to find for voter turnout). The variables *Population, Income, Male, Black, Asian, Islanders, Hispanic, and Age* are control variables. *Financial literacy* is a dummy variable that equals one if a state had financial literacy high school graduation requirement in 2018. *HS or Higher* is a dummy that equals one if a respondent has graduated from high school.

Variable	Count	Mean	SD	p25	p50	p75
Stock	9284	0.104	0.305	0.000	0.000	0.000
ChkSav	9284	0.777	0.416	1.000	1.000	1.000
Economic Connectedness	9066	1.043	0.370	0.710	1.037	1.360
Cohesiveness	9284	0.095	0.019	0.083	0.092	0.104
Civic Engagment	9284	0.063	0.031	0.039	0.059	0.079
Exposure	9009	1.048	0.299	0.823	1.042	1.277
Friending Bias	9009	-0.022	0.139	-0.139	-0.046	0.098
Support Ratio	9284	0.886	0.098	0.825	0.909	0.967
Civic Organizations	9271	0.014	0.016	0.008	0.012	0.017
Voter Turnout	9284	0.412	0.071	0.375	0.420	0.459
Population	9284	12.860	1.572	11.844	13.030	13.925
Income	9138	10.841	1.047	10.309	10.940	11.531
Male	9284	0.674	0.469	0.000	1.000	1.000
Black	9284	0.393	0.489	0.000	0.000	1.000
Asian	9284	0.015	0.121	0.000	0.000	0.000
Pacific Islander	9284	0.001	0.037	0.000	0.000	0.000
Hispanic	9284	0.116	0.320	0.000	0.000	0.000
Age	9284	46.463	19.148	33.000	43.000	59.000
Financial Literacy	9284	0.524	0.499	0.000	1.000	1.000
HS or Higher	9284	0.852	0.356	1.000	1.000	1.000

Table A2: **Correlation Matrix - PSID.** This table reports correlations for each of our variables of interest. *Stock* is a dummy variable that equals one if a household holds non-IRA stock. *ChkSav* is a dummy variable that equals one if a household has a checking or savings account. *Economic Connectedness* is the first aspect of social capital that we study. It measures the fraction of an individual's friend group with high SES. *Cohesiveness* is the second aspect of social capital that we study. It captures the fraction of an individual's friend group that are friends with each other. *Civic Engagement* is the third aspect of social capital that we study. It captures the fraction of individuals in a ZIP Code who are members of 'volunteering' or 'activism' groups. *Exposure* is the the average share of high-SES individuals in the groups of the average user in a ZIP code. *Friending Bias* is one minus the fraction of high-SES friends made from an individual's groups divided by the avergage share of high-SES individuals among those groups. *Support Ratio* measures the rate at which paris of friends in a ZIP code have other friends in common. *Civic Organizations* measures the number of Facebook pages for civic organizations in a given Zip code. *Voter Turnout* measures the average voter turnout in a given county (this is the most granular data we were able to find for voter turnout).

	Stock	Save	EC	Cohes	CivEng	Exp	Bias	SupRat	CivOrg	Vote
Stock	1.00									
ChkSav	0.17	1.00								
Economic Connectedness	0.29	0.37	1.00							
Cohesiveness	-0.04	0.04	-0.05	1.00						
Civic Engagement	0.13	0.20	0.40	0.17	1.00					
Exposure	0.28	0.33	0.93	-0.15	0.42	1.00				
Friending Bias	-0.17	-0.32	-0.76	-0.10	-0.22	-0.52	1.00			
Support Ratio	-0.07	0.01	-0.15	0.61	0.06	-0.28	-0.02	1.00		
Civic Organizations	0.03	0.02	0.06	0.12	0.19	0.06	-0.00	-0.03	1.00	
Voter Turnout	0.05	0.08	0.19	0.22	0.31	0.18	-0.04	0.13	0.13	1.00

Table A3: **Probability of Stock Market Participation - PSID.** This table reports results for regressions of household-level stock market participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. The dependent variable, Stock, is a dummy variable that equals one if a household owns non-IRA stock. Column (1) reports results for Economic Connectedness. Columns (2) reports results for Cohesiveness. Columns (3) reports results for Civic Engagement. In columns (4) and (5), we include all three aspects of social capital in the regressions. In columns (4) and (5) we include controls for population, income, wealth, race, age, gender, education, and financial literacy. In column (5), we include county fixed effects. All variables are standardized. All standard errors are clustered at the county level.

	(1) Stock	(2) Stock	(3) Stock	(4) Stock	(5) Stock
EC	0.290***			0.070***	0.055***
	(19.88)			(4.70)	(3.49)
Cohesiveness		-0.036**		-0.008	-0.005
		(-2.56)		(-0.57)	(-0.28)
Civic Engagement			0.129***	0.018	0.019
			(8.03)	(1.07)	(1.05)
Controls				YES	YES
County FE					YES
Observations	9066	9284	9284	6834	6819
Adj. R^2	0.084	0.001	0.017	0.173	0.178

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: **Probability of Interest Income - PSID.** This table reports results for regressions of household-level stock market participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. The dependent variable, Stock, is a dummy variable that equals one if a household owns non-IRA stock. Column (1) reports results for Economic Connectedness. Columns (2) reports results for Cohesiveness. Columns (3) reports results for Civic Engagement. In columns (4) and (5), we include all three aspects of social capital in the regressions. In columns (4) and (5) we include controls for population, income, wealth, race, age, gender, education, and financial literacy. In column (5), we include county fixed effects. All variables are standardized. All standard errors are clustered at the county level.

	(1) ChkSav	(2) ChkSav	(3) ChkSav	(4) ChkSav	(5) ChkSav
EC	0.368***			0.082***	0.077***
	(25.53)			(3.79)	(3.73)
Cohesiveness		0.040		-0.025	-0.033
		(1.36)		(-1.07)	(-1.27)
Civic Engagement			0.201***	0.028**	0.037***
			(11.85)	(2.14)	(2.78)
Controls				YES	YES
County FE					YES
Observations	9066	9284	9284	6834	6819
Adj. R^2	0.135	0.002	0.040	0.162	0.164

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: **High-SES Exposure and Friending Bias - PSID.** This table present results using the PSID sample. Each regression in the table breaks EC into two components: High-SES Exposure and Friending Bias. *High-SES Exposure* measures the fraction of group members who are high SES among groups to which an individual belongs. *Friending Bias* captures the bias for which an individual befriends low-SES people given the SES composition of a group. In all specifications, we include county fixed effects and controls for population, income, wealth, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) Stock	(2) Stock	(3) ChkSav	(4) ChkSav
Exposure	0.115***	0.117***	0.078***	0.056**
	(6.46)	(6.25)	(4.32)	(2.53)
Friending Bias	0.092***	0.092***	-0.031*	-0.036**
	(7.00)	(7.00)	(-1.78)	(-2.05)
Cohesiveness		-0.001		-0.037
		(-0.07)		(-1.35)
Civic Engagement		-0.003		0.039**
		(-0.19)		(2.61)
Controls	YES	YES	YES	YES
County FE	YES	YES	YES	YES
Observations	6771	6771	6771	6771
Adj. R^2	0.182	0.182	0.164	0.165

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: **Subsample Analysis - PSID.** This table reports results for regressions of household stock market participation and household saving participation on all three aspects of social capital. We split our regressions into two subsamples: below-median SES and above-median SES. Columns (1) and (3) are regressions on the low-SES subsample, and columns (2) and (4) are regressions on the high-SES subsample. The dependent variables are Stock (columns (1) and (2)) and ChkSav (columns (3) and (4)). In all specifications, we include all three aspects of social capital as independent variables. We also include county fixed effects and controls for population, income, wealth. race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) wtr_stock Los-SES	(2) wtr_stock High-SES	(3) wtr_chksav Los-SES	(4) wtr_chksav High-SES
ec	0.056	0.090***	0.080***	0.024
	(1.61)	(4.60)	(2.78)	(0.91)
clustering_zip	0.033	-0.028	-0.045	-0.027
	(1.05)	(-1.52)	(-1.23)	(-0.95)
volunteering_rate_zip	-0.035	0.002	0.027	0.038*
	(-1.05)	(0.09)	(1.15)	(1.85)
Controls	YES	YES	YES	YES
County FE	YES	YES	YES	YES
Observations	2921	3876	2921	3876
Adj. R^2	0.124	0.187	0.152	0.090

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: **Childhood EC: Capital Gain.** This table reports results for regressions of the probability of capital gain income on childhood EC. We include childhood EC instead of our standard measure of EC to address concerns related to reverse causality. In columns (1) and (2), we only include the focal aspect of social capital in our regressions, namely Childhood EC. In column (3), we include all three aspects of social capital in our regressions. In columns (2) and (3) we include controls for population, population density, median income, race, age, gender, education, and financial literacy. All variables are standardized.

	(1)	(2)	(3)
	P(CG)	P(CG)	P(CG)
Child EC	0.550***	0.189***	0.190***
	(34.57)	(6.79)	(6.83)
Cohesiveness			0.018
			(0.78)
Civic Engagement			-0.014
			(-1.02)
Controls		YES	YES
Observations	2728	2727	2727
Adj. R^2	0.302	0.675	0.675

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: **Probability of Stock Market Participation: Capital Gain Income.** This table reports results for regressions of county-level stock market participation on three facets of social capital: Economic Connectedness (EC), Cohesiveness, and Civic Engagement. We capture ZIP code-level stock market participation using the probability of capital gain income (or losses). Columns (1) and (2) report results for Economic Connectedness. Columns (3) and (4) report results for Cohesiveness. Columns (5) and (6) report results for Civic Engagement. In columns (7) and (8), we include all three aspects of social capital in the regressions. In columns (2), (4), (6), and (8) we include county fixed effects and controls for population, population density, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(CG)	(2) P(CG)	(3) P(CG)	(4) P(CG)	(5) P(CG)	(6) P(CG)	(7) P(CG)	(8) P(CG)
EC	0.800***	0.912***					0.804***	0.925***
	(46.78)	(33.97)					(42.87)	(34.76)
Cohesiveness			-0.179***	-0.031*			0.019*	-0.005
			(-9.67)	(-2.27)			(1.99)	(-0.36)
Civic Engagement					0.242***	0.065***	-0.005	-0.033**
					(15.64)	(6.71)	(-0.49)	(-2.92)
Controls		YES		YES		YES		YES
County FE		YES		YES		YES		YES
Observations	15882	15019	22535	22066	22533	22064	15882	15019
Adj. R^2	0.640	0.806	0.032	0.713	0.058	0.714	0.640	0.806

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9: **Intensive Margin: Capital Gain Income.** This table reports results for regressions of the total ZIP code-level capital gain income, divided by adjusted gross income, on aspects of social capital. In columns (1) and (2), we only include the focal aspect of social capital in our regressions, namely Economic Connectedness. In column (3), we include all three aspects of social capital in our regressions. In columns (2) and (3) we include county fixed effects and controls for population, population density, median income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) CG	(2) CG	(3) CG
EC	0.436***	0.807***	0.846***
	(19.41)	(17.32)	(17.65)
Cohesiveness			-0.010
			(-0.49)
Civic Engagement			-0.093***
			(-4.67)
Controls		YES	YES
County FE		YES	YES
Observations	15882	15019	15019
Adj. R^2	0.190	0.386	0.389

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10: **Alternative Measures of Social Capital - SOI.** This table compares the explanatory power of economic connectedness and two alternative measures of social capital: support ratio and civic organizations. The dependent variables are Stock (columns (1) and (2)) and ChkSav (columns (3) and (4). In all specifications, we include county fixed effects and controls for population, income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div)	(2) P(Int)	(3) Div/AGI	(4) Int/AGI
EC	0.816***	0.623***	0.673***	0.422***
	(33.62)	(37.32)	(16.08)	(8.72)
Support Ratio	-0.078***	-0.018	-0.132***	-0.104***
	(-8.37)	(-1.88)	(-6.41)	(-4.83)
Civic Organizations	0.072***	0.039***	0.197***	0.258***
	(5.38)	(4.85)	(5.28)	(3.78)
Controls	YES	YES	YES	YES
County FE	YES	YES	YES	YES
Observations	15006	15006	15006	15006
Adj. R^2	0.834	0.893	0.434	0.365

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: **Voter Turnout - SOI.** This table compares the explanatory power of economic connectedness and two alternative measures of social capital: support ratio and voter turnout. This table is at the county level due to the availability of voter turnout data. The dependent variables are P(Div), P(Int), Total Dividend / AGI, and Total Interest / AGI. In all specifications, we include controls for population, income, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) P(Div)	(2) P(Int)	(3) Tot. Div.	(4) Tot. Int.
EC	0.455***	0.551***	0.218***	0.468***
	(14.72)	(14.85)	(5.61)	(9.93)
Support Ratio	0.101***	0.146***	0.133***	0.126***
	(4.98)	(5.78)	(4.94)	(4.36)
Voter Turnout	0.069	0.022	0.075	0.025
	(1.61)	(0.65)	(1.83)	(0.86)
Controls	YES	YES	YES	YES
Observations	2994	2994	2994	2994
Adj. R^2	0.716	0.713	0.275	0.281

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: **Alternative measures of social capital - PSID.** This table compares the explanatory power of economic connectedness and three alternative measures of social capital: support ratio, civic organizations, and voter turnout. The dependent variables are Stock (columns (1) and (2)) and ChkSav (columns (3) and (4). In all specifications, we include county fixed effects and controls for population, income, wealth, race, age, gender, education, and financial literacy. All variables are standardized. All standard errors are clustered at the county level.

	(1) Stock	(2) Stock	(3) ChkSav	(4) ChkSav
EC	0.057***	0.065***	0.096***	0.097***
	(3.44)	(3.90)	(5.12)	(4.87)
Support Ratio	-0.011	-0.016	0.005	0.007
	(-0.48)	(-0.71)	(0.29)	(0.45)
Civic Organizations	0.036**		-0.004	
	(2.28)		(-0.37)	
Voter Turnout		-0.013		-0.006
		(-0.83)		(-0.39)
Controls	YES	YES	YES	YES
County FE	YES	YES	YES	YES
Observations	6818	6819	6818	6819
Adj. R^2	0.179	0.178	0.163	0.163

Standardized beta coefficients; t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$