Left Behind: Partisan Identity and Wealth Inequality

Da Ke[†]

May 7, 2019

Abstract

Using longitudinal household data, I document that Democrats are less likely than Republicans to invest in the stock market under Democratic presidencies, precisely when stock market return is substantially higher. This pattern contains even for college-educated and financially sophisticated individuals, and is best explained by their partisan identity. Moreover, the gap in stock market participation between Democrats and Republicans accounts for about half of their discrepancy in wealth accumulation over presidential cycles. A profound implication of these findings is that rising political polarization in the U.S. may be fueling wealth inequality.

The history of the distribution of wealth has always been deeply political, and it cannot be reduced to purely economic mechanisms. — Piketty (2014)

1. Introduction

The last four decades have witnessed growing wealth inequality in the U.S. (Saez and Zucman, 2016). Specifically, the richest 0.1 percent of families owned approximately 20 percent of the total household wealth in 2016, up from 7 percent in 1977. While the phenomenon is attracting considerable attention among policy makers and researchers alike, its underlying causes are not well understood.[1]

In this paper, I identify a novel amplifying mechanism for the increase in wealth inequality by analyzing the stock market participation decisions made by a sample of Democrats and Republicans over presidential cycles. This empirical analysis is motivated by recent work on wealth inequality that highlights the role of heterogeneous returns to wealth in matching the basic features of the wealth distribution (Benhabib and Bisin, 2018). One important source of the heterogeneity is household stock market participation (Guvenen, 2009; Favilukis, 2013), the aspect of financial investment behavior that I focus on in this paper.

Drawing data from a confidential geocode version of the National Longitudinal Survey of Youth 1979 Cohort, I first find that Democrats are on average less likely than Republicans to invest in the stock market, controlling for their education, income, wealth, and other relevant demographics. A closer look at this result reveals the central finding of this paper: the partisan gap in stock market participation turns out to be exclusively under Democratic presidencies, on both the extensive and intensive margins. In a complementary difference-in-difference analysis, I focus on years around party-switching elections and find the same pattern, with no evidence of a differential pretrend.

The above findings have important welfare implications because stock market return is substantially higher under Democratic presidencies (Santa-Clara and Valkanov, 2003). Over the 90-year period from 1927 through 2016, the average excess stock market return under Democratic presidencies is 10.7% per year, compared with only −0.2% under Republican

---

[1]Despite the large literature on wealth distribution, little attention has been devoted to understanding the dynamics of wealth inequality. Exceptions include Gabaix et al. (2016) and Kaymak and Poschke (2016).

presidencies. In other words, Democrats have been missing out on the substantial equity premium, all of which has been earned under Democratic presidencies.

I consider a range of explanations for my findings. First, I investigate whether the partisan gap in stock market participation under Democratic presidencies is driven by time-varying risk preferences. In the political cycle model proposed by Pástor and Veronesi (2018), risk aversion is higher under Democratic presidencies and so is the average stock market return. It is empirically unclear, however, whether and how the risk preferences of Democrats and Republicans would vary differentially over presidential cycles. Using hypothetical income gamble questions to capture their risk preferences (e.g., Kimball, Sahm, and Shapiro, 2009), I find, if anything, that Democrats become less risk averse relative to Republicans under Democratic presidencies, which would in fact work against identifying the partisan gap in stock market participation.

Second, I examine whether the gap can be explained by dynamic hedging motives over presidential cycles. For example, the newly elected Democratic president may favor industries in which disproportionately more Democrats are employed. Their labor income may therefore become more correlated with the stock market, which in turn induces hedging motives and reduces stockholdings (e.g., Merton, 1971; Viceira, 2001). To evaluate this income hedging hypothesis, I include sector-by-year fixed effects in the baseline regression to absorb all sources of variation across sectors over presidential cycles and the estimate of the partisan gap in stock market participation under Democratic presidencies remains largely unaffected.

A third possibility is that Republicans are simply on average better than Democrats at timing their entry in the stock market. To assess this interpretation, I focus on the subsample of financially unsophisticated individuals. If the gap in stock market participation between Democrats and Republicans is driven by their differences in market timing ability, a gap is not expected in this subsample because financially unsophisticated Democrats and Republicans are probably equally bad at market timing. On the contrary, I still find a partisan gap in stock market participation under Democratic presidencies among the financially unsophisticated,

which is about the same size as the gap that I find among financially sophisticated individuals.

The fact that financial knowledge is somehow irrelevant indicates that the chief driving force behind the gap in stock market participation between Democrats and Republicans may be deeply rooted in their basic values. This leads me to interpret my findings through the lens of partisan identity. Specifically, Democratic presidencies may intensify the identity of Democrats, whose political ideology is characterized, among other opinions, by a generalized antipathy towards capital markets (e.g., Kaustia and Torstila, 2011). In the language of Bénabou and Tirole (2011), Democrats are therefore disinclined to invest in stocks because market participation would induce cognitive dissonance and erode their partisan identity.

To evaluate this partisan identity hypothesis, I start by investigating whether Democratic presidencies indeed intensify the identity of Democrats. Drawing data from the American National Election Studies (e.g., Bordalo et al., 2016), I find that Democrats express higher levels of affection toward their party and consider themselves more liberal under Democratic presidencies. I proceed to focus on the subsample of college-educated individuals, who are arguably more motivated to protect their valued beliefs (Bénabou, 2015; Bénabou and Tirole, 2016). In this subsample, I find that the partisan gap in stock market participation under Democratic presidencies widens, which is consistent with the finding by D'Acunto (2018) who shows in an artefactual field experiment that the negative effect of anti-market rhetoric on investment decisions is stronger among subjects who have a college education or higher.

I conclude my analysis by gauging the importance of the partisan gap in stock market participation in generating persistent differences in returns to wealth between Democrats and Republicans. I first document that Democrats on average accumulate less wealth than Republicans and that the gap widens under Democratic presidencies. Then I show that the partisan gap in stock market participation accounts for about half of the widening gap in wealth accumulation between Democrats and Republicans under Democratic presidencies.

This paper relates to several literatures. First, economists have long been interested in understanding economic mechanisms underlying the statistical properties of the wealth

distribution. Recent theoretical work has underscored the role of heterogeneity in returns to wealth in matching the thick tail of the wealth distribution (e.g., Benhabib, Bisin, and Zhu, 2011). Empirical evidence in the literature supports this claim and reveals that some individuals consistently earn higher returns to wealth (e.g., Fagereng et al., 2018; Barth, Papageorge, and Thom, 2018). This paper proposes political ideology as an important source of the persistence in returns to wealth and documents a novel amplifying mechanism for the increase in wealth inequality in the U.S. since the late 1970s.

This paper also relates to the household finance literature, which focuses largely on the discrepancies between what is prescribed by rational models and how households actually make their financial decisions (Campbell, 2006). The literature attributes such discrepancies primarily to individual-level biases or mistakes (Guiso and Sodini, 2013; Campbell, 2016). Yet a more recent strand of the literature has shown that social influences such as cultural norms can be important factors (e.g., Ke, 2018; D'Acunto, Prokopczuk, and Weber, 2019). This paper emphasizes the role of political influences such as changing political landscape in shaping household financial investment decisions and contributes to a nascent strand of the literature at the intersection of political economy and household finance (e.g., Akey, Heimer, and Lewellen, 2018; Akey et al., 2018).

Finally, my work relates to the identity economics literature pioneered by Akerlof and Kranton (2000). A recent wave of work has highlighted the role of partisan identity in various economic settings. Examples include Mian, Sufi, and Khoshkhou (2018), which studies how partisan identity shapes economic expectation formation and household spending. Collecting political affiliation information from voter registration data, Kempf and Tsoutsoura (2019) show that the partisan identity of credit analysts distorts their credit rating decisions. In the mutual fund industry, Hong and Kostovetsky (2012) find that portfolio managers who make campaign donations to Democrats tilt their portfolios away from socially irresponsible firms. This paper explores the life-cycle investment behavior of Democrats and Republicans and highlights their discrepancy in wealth accumulation over presidential cycles.

One profound implication of the findings in this paper arises from the fact that the U.S. has become increasingly politically polarized. The ideological divide between the Democratic and Republican parties in Congress is currently at a historical high and has been rising in tandem with wealth inequality, as illustrated in Figure 1. This striking visual evidence, combined with the partisan identity channel that I highlight in this paper, suggests a largely unexplored, yet important possibility — rising political polarization in the U.S. may be fueling wealth inequality.[2]

The paper proceeds as follows. Section 2 describes the data. Section 3 presents the main results. Section 4 evaluates potential explanations. Section 5 discusses wealth accumulation processes and Section 6 concludes.

2. Data

Data are from a confidential geocode version of the National Longitudinal Survey of Youth 1979 Cohort (NLSY79), which was initiated in 1979 with a nationally representative sample of 12,686 individuals aged between 14 and 22. My sample period starts in 1994, when the NLSY79 began to collect information on individual retirement accounts that were lumped with safe assets in previous years, and it stops in 2012, the last year for which the financial asset information is available.[3]

The key feature of the NLSY79, for the purpose of my study, is that respondents self-report their partisan affiliations, which is advantageous over alternative measures of partisan affiliation in the literature. For example, financial contributions to political campaigns are commonly used to infer donors' political affiliations. While the methodology can be useful for high-profile individuals such as corporate executives and money managers, it is poorly suited

---

[2]In the small but growing political economy literature that investigates the rising political polarization in the U.S., causes have been proposed ranging from financial crises to cable news to import competition from China (Mian, Sufi, and Trebbi, 2014; Martin and Yurukoglu, 2017; Autor et al., 2017). Short-sighted government policies are recognized as the major consequence (Azzimonti, 2011; Krasa and Polborn, 2014).

[3]The NLSY79 has collected detailed asset information every other year since 1994 and every four years since 2000.

for a large population of individuals who do not contribute financially to political parties. While voter registration data cover a significantly larger population, they disproportionately miss those who are Hispanic, younger, and politically disengaged (Igielnik et al., 2018). Apart from these individual-level measures, partisan affiliations are sometimes inferred based on zip code of residence under the rationale that individuals residing in a zip code with stronger support for a certain party are more likely to be affiliated with that party (e.g., Meeuwis et al., 2018). However, such an inference could introduce measurement error bias because Democrats and Republicans hold vastly diverging views on the economy around presidential elections even if they live in the same zip code (Mian, Sufi, and Khoshkhou, 2018).

The NLSY79 also offers several advantages over other survey-based sources that provide self-reported measures of partisan affiliation, such as the Michigan Survey of Consumers or the Gallup Daily survey. First, the NLSY79 contains detailed information on household wealth, which is indispensable for my study on wealth inequality. In addition, household wealth is one of the most important determinants of household stock market participation and failing to control for it could introduce serious omitted variable bias. Second, the panel structure of the NLSY79 allows me to follow the same individuals over presidential cycles and their unobserved characteristics that are time-invariant are unlikely to drive my results due to the inclusion of household fixed effects. Third, the NLSY79 also gathers information on risk preference, industry of employment, and financial sophistication, all of which will play important roles in interpreting my findings.

To measure partisan affiliation, I follow Mian, Sufi, and Khoshkhou (2018) and use two questions from the 2008 wave of the NLSY79. One question asks: "Generally speaking, do you usually think of yourself as a Democrat, a Republican, an Independent, or what?" For those who do not respond "Democrat" or "Republican," a follow-up question asks: "Do you think of yourself as closer to the Democratic party, closer to the Republican party, or equally close to both?" My measure of partisan affiliation is Democrat if the individual answers "Democrat" in the first question or answers "closer to the Democratic party" in

the follow-up question. My measure is Republican if the individual responds "Republican" in the first question or responds "closer to the Republican party" in the follow-up question. Collecting answers to these two questions, I construct a sample of 3,928 Democrats and 2,061 Republicans from the NLSY79.[4]

I define stock market participation following Angerer and Lam (2009). On the extensive margin, a household participates in the stock market if the household owns any risky asset. Risky assets include common stocks, preferred stocks, stock options, corporate or government bonds, mutual funds, and individual retirement accounts.[5] On the intensive margin, the risky asset share of a household's portfolio is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others.

Table 1 presents summary statistics for my sample by partisan affiliation and provides preliminary evidence for a partisan gap in stock market participation. On average, less than half of the Democrats participate in the stock market. By contrast, more than two-thirds of the Republicans invest in stocks. The risky asset share follows the same pattern: Democrats on average hold 37 percent of their liquid wealth in stocks, whereas Republicans hold 50 percent.

Democrats and Republicans also differ in other dimensions in my sample. For example, single individuals account for more of the sample of Democrats, and white men account for more of the sample of Republicans. In addition, Democrats have low socioeconomic status relative to Republicans. While 49 percent of the Democrats attend college, 59 percent of the Republicans have a college education or higher. On average, Democrats also earn $32,000 less than Republicans in family income and possess $150,000 less in household wealth.

---

[4]I show in Section 3.4 that my main findings in this paper are robust to two alternative measures of partisan affiliation.

[5]Bonds are included in risky assets primarily because they were lumped with stocks and mutual funds in the questionnaires before 2004. Such misclassification due to the questionnaire design is unlikely to be critical because my findings are robust to classifying bonds as safe assets during the period from 2004 through 2012.

In addition, I draw survey data from the American National Election Studies (ANES) to evaluate a partisan identity interpretation of my findings. Containing data from more than 50,000 respondents between 1948 and 2016, the survey studies public opinion and political behavior around presidential elections (e.g., Bordalo et al., 2016). I focus on individual-level responses on political attitudes and ideologies, which enable me to examine the changing levels of partisanship over presidential cycles.

3. Results

The gap in stock market participation between Democrats and Republicans as in Table 1 may simply reflect, for example, the fact that Democrats on average possess less wealth than Republicans. In this section, I estimate the partisan gap in stock market participation as well as its evolution over presidential cycles in a multivariate regression framework.

3.1 Partisan Gap

To move beyond the descriptive statistics, I estimate the following empirical model:

$$y_{it} = \beta \cdot \text{Democrat}_i + \gamma' \mathbf{X}_{it} + \delta_{st} + \varepsilon_{it}, \tag{1}$$

where y is household stock market participation; Democrat indicates whether the respondent is a Democrat; $\mathbf{X}$ denotes a vector of controls that are important for household stock market participation decisions, including the sex, age, race, education, and marital status of the respondent; number of children; family income; and household wealth (Campbell, 2006; Guiso and Sodini, 2013).

In addition, I include state-by-year fixed effects, captured by δ_{st}, to absorb all unobserved sources of variation across states over presidential cycles (Gormley and Matsa, 2014). These fixed effects, made possible by the NLSY79 confidential geocode data, are particularly relevant for my analysis because Democrats and Republicans tend to disproportionately live in blue

and red states, respectively. Including state-by-year fixed effects ensures that my estimates are not driven by the changing local economic as well as political environments across states.

β, the coefficient of interest, measures the gap in stock market participation between Democrats and Republicans. I run ordinary least square regressions due to the inclusion of a large number of fixed effects. Standard errors are clustered at the household level because a household's stock market participation decision is likely to be correlated across years.

The results are reported in Table 2. In Column (1), I find that Democrats are by 5.5 percentage points less likely than Republicans to participate in the stock market, controlling for their education, income, wealth, and other relevant demographics in addition to the changing state-level economic and political environments. Since approximately half of the Democrats in my sample invest in the stock market, this implies an economically significant 11 percent difference in stock market participation between Democrats and Republicans.

In Column (2), I consider the intensive margin of stock market participation and find that Democrats on average allocate 3.8 percent less of their liquid wealth to risky assets than Republicans do. Given that the Democrats in my sample have an average risky asset share of 37 percent, this implies a 10 percent difference in stock share in liquid wealth between Democrats and Republicans, which is also economically significant.

These first results echo the main finding by Kaustia and Torstila (2011) that in Finland, left-wing voters and politician are less likely to invest in the stock market. They interpret their finding as evidence that personal values shape investment decisions. Specifically, the authors argue that left-wingers hold a generalized antipathy towards capital markets, which leads to their disinclination to invest in stocks.

3.2 Presidential Cycles

After documenting the partisan gap in stock market participation in the U.S. setting, I analyze how the gap evolves over presidential cycles by estimating the specification below:

$$y_{it} = \beta \cdot \text{Democrat}_i \times \text{D-president}_t + \theta_i + \gamma' \mathbf{X}_{it} + \delta_{st} + \varepsilon_{it}, \tag{2}$$

where the Democrat dummy in Equation 1 is subsumed by household fixed effects θ_i, which absorb all time-invariant unobserved household-specific characteristics that are important for stock market participation decisions, including IQ and other genetic endowments (e.g., Barnea, Cronqvist, and Siegel, 2010; Grinblatt, Keloharju, and Linnainmaa, 2011). D-president is a dummy equal to one if the president is a Democrat. β, the coefficient of interest, measures the partisan gap in stock market participation under Democratic presidencies in excess of the gap under Republican presidencies. Given that Democrats are on average less likely than Republicans to participate in the stock market, a negative estimate of β would indicate that the partisan gap in stock market participation widens under Democratic presidencies.

Table 3 presents the main findings of this paper. Column (1) reports evidence for the extensive margin of stock market participation without including household fixed effects. I find the striking result that the partisan gap in stock market participation documented above completely disappears under Republican presidencies. By contrast, Democrats are by 7.9 percentage points less likely than Republicans to participate in the stock market under Democratic presidencies. Since 43 percent of the Democrats in my sample invest in the stock market under Democratic presidencies, this implies an economically significant 18 percent difference in stock market participation between Democrats and Republicans under Democratic presidencies. Column (2) shows that if household fixed effects are included in the regression, the partisan gap in stock market participation widens by 7.5 percentage points under Democratic presidencies, with the adjusted R^2 almost doubling that in Column (1).

In the next two columns, I consider the intensive margin of stock market participation.

Column (3) shows that there is no significant difference in risky asset share between Democrats and Republicans under Republican presidencies. By contrast, under Democratic presidencies, Democrats on average allocate 5.4 percent less of their liquid wealth to risky assets than Republicans do. Given that the Democrats in my sample have an average risky asset share of 31 percent under Democratic presidencies, this implies an economically significant 17 percent difference in stock share in liquid wealth between Democrats and Republicans under Democratic presidencies. Column (4) shows that if household fixed effects are included in the regression, the partisan gap in risky asset share widens by 4.7 percent of the liquid wealth under Democratic presidencies, with the adjusted R^2 more than doubling that in Column (3).

The fact that the partisan gap in stock market participation is exclusively under Democratic presidencies has important welfare implications. This is largely due to the "presidential puzzle" documented by Santa-Clara and Valkanov (2003): stock market return is substantially higher under Democratic presidencies and there seems to be no obvious explanation. In their sample period from 1927 to 1998, the average excess stock market return under Democratic presidencies is 10.5% per year, compared with only 1.1% under Republican presidencies. Importantly, the puzzle survives an out-of-sample assessment and the Democrat-Republican return gap has widened sharply in recent decades (Pástor and Veronesi, 2018). In my sample period from 1994 to 2012, the Democrat-Republican return gap is as high as 18.5%. Therefore, limited stock market participation among Democrats under Democratic presidencies can be extremely costly to their welfare.

3.3 Party-Switching Elections

There may be a concern that the partisan gap in stock market participation under Democratic presidencies is driven by events other than presidential elections that impact Democrats and Republicans differentially. For example, perhaps Democrats are more vulnerable to oil shocks and less likely to participate in the stock market when the expected return is high. Or one may be concerned that the findings in this paper are merely driven by the 2008 crisis.

To address such concerns, I focus exclusively on years around the two party-switching elections in the sample: the 2000 election and the 2008 election. Specifically, I restrict the sample period to the two years closest to the election, one before and one after. Therefore, I effectively perform a difference-in-difference analysis for each party-switching election and examine the evolution of the partisan gap in stock market participation.

Results are presented in Table 4. Column (1) shows that around the 2000 election, the partisan gap in stock market participation under the presidency of Bill Clinton is by 7.1 percentage points wider than that under the presidency of George W. Bush. Column (2) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share under the presidency of Clinton is by 5.4 percent of the liquid wealth wider than that under the presidency of Bush. These estimates are largely similar to those in Table 3. Since the 2008 crisis is excluded from the sample period, the results from this analysis address the important concern that my findings could be driven entirely by the Great Recession.

In Columns (3) and (4), I focus on the 2008 election. Column (3) shows that the partisan gap in stock market participation under the presidency of Barack Obama is by 3.8 percentage points wider than that under the presidency of Bush. Column (4) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share under the presidency of Obama is by 3.4 percent of the liquid wealth wider than that under the presidency of Bush. Both estimates are again statistically and economically significant.

To further alleviate the identification concern, I investigate whether there is any pretrend before each party-switching election. Specifically, I shift the time window of four years around each party-switching election backward by four years and estimate the following empirical model:

$$y_{it} = \beta \cdot \text{Democrat}_i \times \text{Prior}_t + \theta_i + \gamma' \mathbf{X}_{it} + \delta_{st} + \varepsilon_{it}, \tag{3}$$

where Prior is a dummy equal to one if it is the earlier year between the two during the sample period and the rest of the specification is the same as in Equation 2. β, the coefficient of interest, measures the difference in the trend of household stock market participation

between Democrats and Republicans before the party-switching election.

Table IA1 reports the results. Columns (1) and (2) show that the size of the partisan gap in stock market participation, both on the intensive margin and on the extensive margin, remains largely the same over the four years before the 2000 election. I examine the 2008 election in the next two columns and again find no evidence of pretrend before the election. The absence of any pre-event trend in this table assuages the concern about unobserved confounds.

3.4 Robustness

Before investigating potential mechanisms underlying the main results, I examine whether these results are robust to alternative measures of partisan affiliation. One caveat of my measure of partisan affiliation is that it is time invariant. The concern is that an individual's partisan affiliation could change over time. This is in fact not particularly concerning given the evidence that political preference is partially genetically determined and evident since early childhood (Alford, Funk, and Hibbing, 2005; Block and Block, 2006). Nevertheless, to ensure that my results are not driven by the time-invariance feature, I employ two alternative measures of partisan affiliation and re-estimate the regressions in Table 3.

To construct the first alternative measure, I rely only on the first question that I use to construct my measure of partisan affiliation and exclude leaning Independents from my sample. To construct the second alternative measure of partisan affiliation, I use the following question from the 2008 wave of the NLSY79: "Do you think of yourself as a strong Democrat (Republican) or a not very strong Democrat (Republican)?" This is a follow-up question if the respondent answers "Democrat" or "Republican" to the first question that I use to construct my measure of partisan affiliation. Only Democrats and Republicans who strongly identify their partisan affiliation are included in my sample.

Table IA2 presents the results. Column (1) shows that the partisan gap in stock market participation widens by 8.1 percentage points under Democratic presidencies in the sample

13

excluding leaning Independents. The estimate of the widening effect is even larger than that in Table 3. Column (2) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share widens by 5.2 percent of the liquid wealth under Democratic presidencies in the leaning-Independent-excluded sample. The estimate of the widening effect is again higher than that in Table 3.

In Columns (3) and (4), I focus on the strong-affiliation sample. Column (3) shows that the partisan gap in stock market participation widens by 7.7 percentage points under Democratic presidencies. Column (4) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share widens by 4.3 percent of the liquid wealth under Democratic presidencies. Both estimates of the widening effect are similar in magnitudes to those in Table 3.

The two samples that are constructed based on the alternative measures of partisan affiliation include individuals who are arguably less likely to change their partisan affiliation over time than those in the main sample. The above robustness results indicate that the time-invariance feature of my measure of partisan affiliation is unlikely to contaminate my main findings.

4. Interpretations

In this section, I assess a number of potential mechanisms underlying the above findings.

4.1 Time-Varying Risk Aversion

One interpretation of my main findings is that the partisan gap in stock market participation under Democratic presidencies can be explained by time-varying risk aversion, which is a key feature in the political cycle model proposed by Pástor and Veronesi (2018). In their model, Democrats tend to get elected when risk aversion is high and so is the expected stock return. By contrast, Republicans tend to get elected when risk aversion is low and so is the

14

expected stock return.

However, it is empirically unclear whether and how the risk preferences of Democrats and Republicans would vary differentially over presidential cycles. To examine the role of time-varying risk aversion in explaining my findings, I use the hypothetical income gamble questions from the 1993 and 2004 waves of the NLSY79 as in Kimball, Sahm, and Shapiro (2009). Specifically, respondents are asked whether they would take a job that could, with equal probability, either double their family income or cut it by half, by third, or by 20%. Those who would not take the least risky gamble among the three are defined to be risk averse. The sample period for this analysis is around the presidential election of 2000 as in the first two columns of Table 4. Since the income gamble question is asked in the presidencies of Clinton and Bush, every respondent has one measure of risk preference for each presidency.

Table 5 reports the regression results. Column (1) shows that Democrats are on average more risk averse than Republicans under Republican presidencies. The partisan gap in risk aversion, if any, disappears under Democratic presidencies. Column (2) shows the same pattern, after household fixed effects are included in the regression. Specifically, if anything, Democrats become less risk averse relative to Republicans under Democratic presidencies. These findings suggest that taking time-varying risk aversion into account would in fact work against identifying the partisan gap in stock market participation under Democratic presidencies. Therefore, my main findings are unlikely to be explained by time-varying risk aversion.

Columns (3) to (6) confirm this idea. Specifically, Column (3) re-estimates the regression in the first column of Table 3 and shows that the partisan gap in stock market participation widens by 8.0 percentage points under Democratic presidencies. After I include time-varying risk aversion as a control in the regression in Column (4), I find that the widening effect becomes 8.1 percentage points, slightly higher than the estimate in Column (3), as expected. I also find that the risk aversion dummy is statistically significant, which confers validity to the risk aversion proxy constructed from the income gamble question. Specifically, for

individuals who become risk averse over time, they are by 2.8 percentage points less likely to participate in the stock market.

I consider the intensive margin of stock market participation in the last two columns. Column (5) re-estimates the regression in the second column of Table 3 and shows that the partisan gap in risky asset share widens by 5.9 percent of the liquid wealth under Democratic presidencies. Column (6) shows that the widening effect becomes 6.0 percent of the liquid wealth after time-varying risk aversion is included in the regression. The risk aversion dummy is statistically significant and individuals on average allocate 2.5 percent less of their liquid wealth to risky assets if they become more risk averse over time.

4.2 Dynamic Hedging Motives

Another interpretation of my main findings is that the partisan gap in stock market participation under Democratic presidencies may be driven by dynamic hedging motives of Democrats and Republicans over presidential cycles. Specifically, Democratic presidents may favor industries in which disproportionately more Democrats are employed, resulting in higher correlation between the labor income of Democratic workers and stock market returns and therefore lower stock market participation because of hedging motives (e.g., Merton, 1971; Viceira, 2001).

To assess the above hypothesis, I include sector-by-year fixed effects in the regression to absorb all sources of variation across sectors over presidential cycles. Sectors are classified into the following eleven categories: agriculture, forestry, and fishing; mining; construction; manufacturing; transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; services; public administration; and unemployment.

Results are presented in Table 6, with Columns (1) and (3) re-presenting the estimates in Table 3 for comparison. Column (2) shows that after sector-by-year fixed effects are included in the regression, the partisan gap in stock market participation widens by 7.1

16

percentage points under Democratic presidencies. The estimate is only slightly lower than that in Column (1) and still economically and statistically significant. Column (4) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share widens by 4.5 percent of the liquid wealth after the sector-by-year fixed effects are included in the regression. The widening effect again remains largely unaffected.

The above results indicate that dynamic hedging motives are unlikely to explain the partisan gap in stock market participation under Democratic presidencies. Meanwhile, the analysis can address concerns related to unemployment risk, given that unemployment is classified as one sector category. For example, Democratic workers may be more exposed to unemployment risk during recessions, precisely when Democratic candidates are more likely to get elected (Blinder and Watson, 2016; Pástor and Veronesi, 2018). Therefore, the partisan gap in stock market participation under Democratic presidencies may be driven by differences in exposure to unemployment risk between Democrats and Republicans during recessions. However, this is unlikely to be the case based on the above results from the regressions including sector-by-year fixed effects.

4.3   Market Timing Ability

Another potential explanation is that Republicans may simply on average be better than Democrats at timing their entry in the stock market. To evaluate this possibility, I focus on the subsample of financially unsophisticated individuals under the rationale that in this subsample, Democrats and Republicans are probably equally bad at market timing. If my main findings are driven by the differences in market timing ability between Democrats and Republicans, a partisan gap in stock market participation under Democratic presidencies should not be expected among the financially unsophisticated.

To measure financial sophistication, I collect answers to the five basic finance questions asked in the 2012 and 2014 waves of the NLSY79. These questions are designed to test respondents' understanding of diversification, inflation, compounding interests, time value

of money, and relation between bond price and interest rate (Lusardi and Mitchell, 2014). Those who can answer all the questions correctly are financially sophisticated. Otherwise, they are financially unsophisticated.

Table 7 reports the regression results. Column (1) shows that among financially unsophisticated individuals, the partisan gap in stock market participation widens by 6.1 percentage points under Democratic presidencies. In Column (3), I consider the intensive margin of stock market participation and find that the partisan gap in risky asset share widens by 3.7 percent of the liquid wealth under Democratic presidencies. Both estimates of the widening effect are statistically and economically significant, which suggests that differences in market timing ability between Democrats and Republicans are unlikely to explain the partisan gap in stock market participation under Democratic presidencies.

Table 7 also reports evidence from financially sophisticated individuals. Column (2) shows that among this subsample, the partisan gap in stock market participation widens by 6.6 percentage points under Democratic presidencies. Column (4) shows that for the intensive margin of stock market participation, the partisan gap in risky asset share widens by 4.8 percent of the liquid wealth under Democratic presidencies. Both estimates of the widening effect are again statistically and economically significant, similar in magnitudes to those reported in Columns (1) and (3).

The subsample analysis on the financially sophisticated can address concerns related to behavioral biases that financially sophisticated individuals are less subject to. For example, market participants tend to experience macroeconomic shocks before Democratic presidents are elected (Blinder and Watson, 2016; Pástor and Veronesi, 2018). One may argue that Democrats may be on average more subject to the behavioral bias induced by their personal experiences of macroeconomic shocks and therefore participate less in the stock market under Democratic presidencies (Malmendier and Nagel, 2011). In this case, we should expect the partisan gap in stock market participation under Democratic presidencies to narrow among financially sophisticated individuals. Yet the sizable partisan gap is preserved among the

financially sophisticated.

More generally, results in Table 7 indicate that the amplifying mechanism for wealth inequality that I identify in this paper is distinct from the one proposed by Lusardi, Michaud, and Mitchell (2017), who argue that an important source of the heterogeneity in returns to wealth arises from financial knowledge.

4.4 Partisan Identity

The fact that financial sophistication is somehow irrelevant suggests that the major driving force behind the partisan gap in stock market participation under Democratic presidencies may be related to deep-rooted personal values and beliefs. This leads me to consider a partisan identity interpretation of my findings. Specifically, Democratic presidencies may intensify the partisan identity of Democrats, whose political ideology is characterized, among other opinions, by a generalized antipathy towards capital markets (e.g., Kaustia and Torstila, 2011). In the language of Bénabou and Tirole (2011), Democrats are therefore disinclined to participate in the stock market because participation would induce cognitive dissonance and erode their partisan identity.[6]

To evaluate the above partisan identity hypothesis, I start by verifying whether Democratic presidencies intensify the identity of Democrats. Specifically, I retrieve a set of questions on political attitude and ideology over the period of 1972 to 2016 from the ANES data. In terms of attitude, respondents are asked whether there is anything they like or dislike about the Democratic party. In terms of ideology, respondents are asked to identify themselves as liberals, conservatives, or moderates. To measure partisan affiliation, I use the ANES questions that are identical to those in the NLSY79 and employ the same classification.

I examine partisanship over presidential cycles and results are presented in Table 8.

---

[6]One may argue that because of their partisan identity, Democrats will have a rosier view of the economy under Democratic presidencies (Bartels, 2002; Mian, Sufi, and Khoshkhou, 2018), which will render them more likely to participate in the stock market. While I fully embrace the possibility, this expectation channel of partisan identity would work against finding the partisan gap in stock market participation that I document in this paper and seems to be empirically dominated by the proposed belief channel of partisan identity.

Column (1) shows that Democrats are by 37.5 percentage points more likely than Republicans to say anything positive about the Democratic party under Republican presidencies, controlling for their education, income, and other relevant demographics in addition to the changing state-level economic and political environments. The gap widens by 9.0 percentage points under Democratic presidencies, which implies an economically significant 24 percent increase. Similarly, Column (2) shows that Democrats are by 22.1 percentage points less likely than Republicans to say anything negative about the Democratic party under Republican presidencies. The gap widens by 9.4 percentage points under Democratic presidencies, which implies a substantial 42 percent increase.

In Column (3), I consider political ideology and find that Democrats are by 35.1 percentage points more likely than Republicans to identify themselves as liberals under Republican presidencies. The gap widens by 9.2 percentage points under Democratic presidencies, which implies a sizable 26 percent increase. Taken together, the evidence in this table supports that Democratic presidencies intensify the partisan identity of Democrats.

I proceed to focus on the subsample of college-educated individuals, who are arguably more motivated to protect their partisan identities and valued beliefs (Bénabou, 2015; Bénabou and Tirole, 2016). Table 9 reports the regression results. Column (1) shows that among Democrats and Republicans who do not attend college, the partisan gap in stock market participation widens by 4.7 percentage points under Democratic presidencies. By contrast, the partisan gap in stock market participation among college-educated individuals widens by 8.9 percentage points under Democratic presidencies, as shown in Column (2).

In Columns (3) and (4), I examine the intensive margin of stock market participation. Column (3) shows that the gap in risky asset share among Democrats and Republicans who do not pursue college education widens by 2.1 percent of the liquid wealth and this widening effect is statistically insignificant. By contrast, Column (4) shows that the gap in risky asset share among individuals who have a college education or higher widens by 6.3 percent of the liquid wealth under Democratic presidencies.

Complementary to my empirical findings, D'Acunto (2018) shows in an online experiment that the negative effect of anti-market rhetoric on investment decisions is also stronger among college-educated subjects. The above results also indicate that the amplifying mechanism for wealth inequality that I identify in this paper is distinct from the one proposed by Barth, Papageorge, and Thom (2018), who argue that genetic endowments related to human capital accumulation are one important source of the heterogeneity in returns to wealth.

5. Wealth Accumulation

The combination of a sizable partisan gap in stock market participation and substantial equity premium exclusively under Democratic presidencies prescribes important household welfare implications. In the final part of my analysis, I make progress on quantifying the importance of the amplifying mechanism for wealth inequality that I identify in this paper.

I start by investigating the wealth accumulation processes of Democrats and Republicans over presidential cycles. Specifically, I estimate the following empirical model:

$$y_{it} = \beta \cdot \text{Democrat}_i \times \text{D-president}_t + \theta_i + \gamma' \mathbf{X}_{it} + \delta_{st} + \varepsilon_{it}, \tag{4}$$

where the dependent variable, y, is log household wealth. The rest of the specification is the same as in Equation 2, except that $\mathbf{X}$ includes all the controls but household wealth. β, the coefficient of interest, measures the difference in household wealth growth between Democrats and Republicans under Democratic presidencies relative to Republican presidencies.

Table 10 presents the results. Column (1) shows that Democrats on average possess 23.2 percent less wealth than Republicans under Republican presidencies and the gap widens by 6.4 percentage points under Democratic presidencies. Column (2) includes household fixed effects and shows that the gap in household wealth between Democrats and Republicans widens under Democratic presidencies by 7.5 percentage points. In other words, the average return to wealth for Democrats is 7.5 percentage points lower than that for Republicans

under Democratic presidencies relative to Republican presidencies.

Next, I investigate the contribution of the partisan gap in stock market participation under Democratic presidencies to explaining the widening gap in household wealth between Democrats and Republicans over presidential cycles. In Column (3), I include the household stock market participation dummy as an explanatory variable in the regression and find that the estimate of the widening gap in household wealth between Democrats and Republicans under Democratic presidencies is no longer statistically significant. I find a similar pattern in Column (4) where I include risky asset share instead as a control in the regression. These findings suggest that the partisan gap in stock market participation under Democratic presidencies can explain a substantial portion of the widening gap in wealth accumulation between Democrats and Republicans under Democratic presidencies.

To quantify the importance of the partisan gap in stock market participation under Democratic presidencies, I calculate its indirect effect in the spirit of a mediation analysis. In Column (5), I re-estimate the specification in Table 3 without controlling for household wealth and find that the partisan gap in stock market widens by 8.0 percentage points under Democratic presidencies. Thus, the indirect effect through the extensive margin of stock market participation is 4.8 percentage points ($0.080 \times 0.598 = 0.048$). Compared with the direct effect of 2.7 percentage points in Column (3), the partisan gap in stock market participation under Democratic presidencies accounts for 64 percent of the gap in wealth accumulation between Democrats and Republicans over presidential cycles.

Similarly, Column (6) shows that without controlling for household wealth, the gap in risky asset share between Democrats and Republicans widens by 5.1 percent of the liquid wealth under Democratic presidencies. The indirect effect through the intensive margin of stock market participation is therefore 3.4 percent ($0.051 \times 0.674 = 0.034$). Compared with the direct effect of 4.0 percent in Column (4), the partisan gap in risky asset share under Democratic presidencies explains 46 percent of the gap in returns to wealth between Democrats and Republicans over presidential cycles.

6. Conclusion

I analyze data from a longitudinal U.S. household survey and document that Democrats are by 7.5 percentage points less likely than Republicans to participate in the stock market under Democratic presidencies, precisely when stock market return is substantially higher. This pattern cannot be explained by time-varying risk preferences, dynamic hedging motives, or market timing ability. I provide evidence in support of a partisan identity interpretation. I further show that the partisan gap in stock market participation under Democratic presidencies accounts for 46 to 64 percent of the difference in returns to wealth between Democrats and Republicans over presidential cycles.

Despite the fact that wealth inequality and political polarization have marched hand in hand over the past century, little is known about whether and how these two phenomena are linked.[7] While certainly not conclusive, the evidence in this paper points to an overlooked consequence of rising political polarization, namely, growing wealth inequality. What are other amplifying mechanisms underlying the potential positive impact of political polarization on wealth inequality? Is there any feedback effect of wealth inequality on political polarization? What are the policy implications of the relationship between these two phenomena? I leave these important questions for future research.

---

[7]A small political science literature has begun to examine the potential link between income inequality and political polarization (e.g., McCarty, Poole, and Rosenthal, 2006; Voorheis, McCarty, and Shor, 2016).

References

Akerlof, G. and R. Kranton. 2000. Economics and identity. *The Quarterly Journal of Economics* 115: 715–753.

Akey, P., C. Dobridge, R. Heimer, and S. Lewellen. 2018. Pushing boundaries: political redistricting and consumer credit. Working Paper.

Akey, P., R. Heimer, and S. Lewellen. 2018. Politicizing consumer credit. Working Paper.

Alford, J., C. Funk, and J. Hibbing. 2005. Are political orientations genetically transmitted? *American Political Science Review* 99: 153–167.

Angerer, X. and P. Lam. 2009. Income risk and portfolio choice: an empirical study. *The Journal of Finance* 64: 1037–1055.

Autor, D., D. Dorn, G. Hanson, and K. Majlesi. 2017. Importing political polarization? The electoral consequences of rising trade exposure. NBER Working Paper No. 22637.

Azzimonti, M. 2011. Barriers to investment in polarized societies. *American Economic Review* 101: 2182–2204.

Barnea, A., H. Cronqvist, and S. Siegel. 2010. Nature or nurture: what determines investor behavior? *Journal of Financial Economics* 98: 583–604.

Bartels, L. 2002. Beyond the running tally: partisan bias in political perceptions. *Political Behavior* 24: 117–150.

Barth, D., N. Papageorge, and K. Thom. 2018. Genetic endowments and wealth inequality. *Journal of Political Economy* forthcoming.

Bénabou, R. 2015. The economies of motivated beliefs. *Revue d'économie politique* 125: 665–685.

Bénabou, R. and J. Tirole. 2011. Identity, morals, and taboos: beliefs as assets. *The Quarterly Journal of Economics* 126: 805–855.

———. 2016. Mindful economics: the production, consumption, and value of beliefs. *Journal of Economic Perspectives* 30: 141–64.

Benhabib, J. and A. Bisin. 2018. Skewed wealth distributions: theory and empirics. *Journal of Economic Literature* 56: 1261–1291.

Benhabib, J., A. Bisin, and S. Zhu. 2011. The distribution of wealth and fiscal policy in economies with finitely lived agents. *Econometrica* 79: 123–157.

Blinder, A. and M. Watson. 2016. Presidents and the US economy: an econometric exploration. *American Economic Review* 106: 1015–1045.

Block, J. and J. Block. 2006. Nursery school personality and political orientation two decades later. *Journal of Research in Personality* 40: 734–749.

Bordalo, P., K. Coffman, N. Genaioli, and A. Shleifer. 2016. Stereotypes. *The Quarterly Journal of Economics* 131: 1753–1794.

Campbell, J. 2006. Household finance. *The Journal of Finance* 61: 1553–1604.

———. 2016. Restoring rational choice: the challenge of consumer financial regulation. *American Economic Review* 106: 1–30.

D'Acunto, F. 2018. Tear down this Wall Street: anti-market rhetoric and investment. Working Paper.

D'Acunto, F., M. Prokopczuk, and M. Weber. 2019. Historical antisemitism, ethnic specialization, and financial development. *The Review of Economic Studies* 86: 1170–1206.

Fagereng, A., L. Guiso, D. Malacrino, and L. Pistaferri. 2018. Heterogeneity and persistence in returns to wealth. CESifo Working Paper No. 7107.

Favilukis, J. 2013. Inequality, stock market participation, and the equity premium. *Journal of Financial Economics* 107: 740–759.

Gabaix, X., J. Lasry, P. Lions, and B. Moll. 2016. The dynamics of inequality. *Econometrica* 84: 2071–2111.

Gormley, T. and D. Matsa. 2014. Common errors: how to (and not to) control for unobserved heterogeneity. *Review of Financial Studies* 27: 617–661.

Grinblatt, M., M. Keloharju, and J. Linnainmaa. 2011. IQ and stock market participation. *The Journal of Finance* 66: 2121–2164.

Guiso, L. and P. Sodini. 2013. Household finance: an emerging field. *Handbook of the Economics of Finance* 2(B): 1397–1532.

Guvenen, F. 2009. A parsimonious macroeconomic model for asset pricing. *Econometrica* 77: 1711–1750.

Hong, H. and L. Kostovetsky. 2012. Red and blue investing: values and finance. *Journal of Financial Economics* 103: 1–19.

Igielnik, R., S. Keeter, C. Kennedy, and B. Spahn. 2018. Commercial voter files and the study of U.S. politics. Pew Research Report.

Kaustia, M. and S. Torstila. 2011. Stock market aversion? Political preferences and stock market participation. *Journal of Financial Economics* 100: 98–112.

Kaymak, B. and M. Poschke. 2016. The evolution of wealth inequality over half a century: the role of taxes, transfers and technology. *Journal of Monetary Economics* 77: 1–25.

Ke, D. 2018. Who wears the pants? Gender identity norms and intra-household financial decision making. Working Paper.

Kempf, E. and M. Tsoutsoura. 2019. Partisan professionals: evidence from credit rating analysts. NBER Working Paper No. 25292.

Kimball, M., C. Sahm, and M. Shapiro. 2009. Risk preferences in the PSID: individual imputations and family covariation. *American Economic Review* 99: 363–368.

Krasa, S. and M. Polborn. 2014. Social ideology and taxes in a differentiated candidates framework. *American Economic Review* 104: 308–22.

Lusardi, A., P. Michaud, and O. Mitchell. 2017. Optimal financial knowledge and wealth inequality. *Journal of Political Economy* 125: 431–477.

Lusardi, A. and O. Mitchell. 2014. The economic importance of financial literacy: theory and evidence. *Journal of Economic Literature* 52: 5–44.

Malmendier, U. and S. Nagel. 2011. Depression babies: do macroeconomic experiences affect risk taking? *The Quarterly Journal of Economics* 126: 373–416.

Martin, G. and A. Yurukoglu. 2017. Bias in cable news: persuasion and polarization. *American Economic Review* 107: 2565–2599.

McCarty, N., K. Poole, and H. Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches.* The MIT Press.

Meeuwis, M., J. Parker, A. Schoar, and D. Simester. 2018. Belief disagreement and portfoilo choice. NBER Working Paper No. 25108.

Merton, R. 1971. Optimum consumption and portfolio rules in a continuous-time model. *Journal of Economic Theory* 3: 373–413.

Mian, A., A. Sufi, and N. Khoshkhou. 2018. Partisan bias, economic expectations, and household spending. Working Paper.

Mian, A., A. Sufi, and F. Trebbi. 2014. Resolving debt overhang: political constraints in the aftermath of financial crises. *American Economic Journal: Macroeconomics* 6: 1–28.

Pástor, L. and P. Veronesi. 2018. Political cycles and stock returns. NBER Working Paper No. 23184.

Piketty, T. 2014. *Capital in the 21st Century.* Harvard University Press.

Poole, K. and H. Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting.* New York: Oxford University Press.

Saez, E. and G. Zucman. 2016. Wealth inequality in the United States since 1913: evidence from capitalized income tax data. *The Quarterly Journal of Economics* 131: 519–578.

Santa-Clara, P. and R. Valkanov. 2003. The presidential puzzle: political cycles and the stock market. *The Journal of Finance* 58: 1841–1872.

Viceira, L. 2001. Optimal portfolio choice for long-horizon investors with nontradable labor income. *The Journal of Finance* 56: 433–470.

Voorheis, J., N. McCarty, and B. Shor. 2016. Unequal incomes, ideology and gridlock: how rising inequality increases political polarization. Working Paper.

Table 1. Summary Statistics

This table reports summary statistics on a sample of Democrats and Republicans from the National Longitudinal Survey of Youth 1979 Cohort. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Family income and net worth are deflated in 2010 dollars by the price index for personal consumption expenditures.

	Democrats (N = 3,928)		Republicans (N = 2,061)	
	Mean	SD	Mean	SD
Risky asset invest	48.97%	49.99%	67.84%	46.71%
Risky asset share	37.11%	42.15%	50.22%	40.91%
Male	44.98%	49.75%	54.57%	49.79%
Age	40.55	6.51	40.33	6.47
White	37.05%	48.30%	77.97%	41.44%
College	49.03%	49.99%	58.55%	49.27%
Married	48.39%	49.98%	72.28%	44.76%
Number of children	1.22	1.25	1.45	1.26
Family income (in thousands)	60.53	75.38	93.01	109.65
Net worth (in thousands)	139.92	370.38	290.16	543.07
Observations	21,393		11,900	

Table 2. Partisan Gap in Stock Market Participation

This table reports regression results for the partisan gap in stock market participation. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat. Standard errors are clustered at the household level and levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risky Asset Invest	Risky Asset Share
	(1)	(2)
Democrat	−0.055***	−0.038***
	(0.009)	(0.007)
Male	−0.017**	−0.013**
	(0.008)	(0.006)
Age	0.001	0.001
	(0.002)	(0.001)
White	0.099***	0.058***
	(0.009)	(0.008)
College	0.159***	0.115***
	(0.008)	(0.007)
Married	0.178***	0.135***
	(0.008)	(0.007)
Number of children	−0.024***	−0.011***
	(0.003)	(0.002)
Family income	0.647***	0.415***
	(0.046)	(0.037)
Net worth	0.130***	0.104***
	(0.007)	(0.007)
State × Year FE	Yes	Yes
Observations	33,287	33,287
Adj. R^2	0.241	0.211

Table 3. Partisan Gap in Stock Market Participation over Presidential Cycles

This table reports regression results for the partisan gap in stock market participation over presidential cycles. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risky Asset Invest		Risky Asset Share	
	(1)	(2)	(3)	(4)
Democrat × D-president	−0.080***	−0.075***	−0.052***	−0.047***
	(0.010)	(0.010)	(0.009)	(0.009)
Democrat	0.001		−0.002	
	(0.011)		(0.010)	
Controls	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes
Household FE	No	Yes	No	Yes
Observations	33,287	33,174	33,287	33,174
Adj. R^2	0.242	0.478	0.212	0.435

Table 4. Party-Switching Elections: Difference-in-Difference Analysis

This table reports the partisan gap in stock market participation around party-switching elections in a difference-in-difference framework. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Bush II (2000 vs. 2004)		Obama (2008 vs. 2012)	
	Risky Asset Invest	Risky Asset Share	Risky Asset Invest	Risky Asset Share
	(1)	(2)	(3)	(4)
Democrat × D-president	−0.071***	−0.044***	−0.038***	−0.034***
	(0.016)	(0.016)	(0.014)	(0.014)
Controls	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Observations	7,952	7,952	8,656	8,656
Adj. R^2	0.445	0.399	0.524	0.472

Table 5. Time-Varying Risk Aversion

This table analyzes the effect of time-varying risk aversion around the presidential election of 2000. In each presidency, a hypothetical gamble question is asked. Risk aversion is a dummy equal to one if the respondent would not take a job that could, with equal probability, either double the family income or cut it by 20%. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risk Aversion		Risky Asset Invest		Risky Asset Share	
	(1)	(2)	(3)	(4)	(5)	(6)
Democrat × D-president	−0.022	−0.029	−0.080***	−0.081***	−0.059***	−0.060***
	(0.020)	(0.022)	(0.017)	(0.017)	(0.015)	(0.015)
Democrat	0.020					
	(0.016)					
Risk averse				−0.028**		−0.025**
				(0.014)		(0.012)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	No	Yes	Yes	Yes	Yes	Yes
Observations	9,152	7,420	7,420	7,420	7,420	7,420
Adj. R^2	0.020	0.179	0.444	0.445	0.399	0.400

32

Table 6. Dynamic Hedging Motives

This table analyzes the effect of dynamic hedging motives. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 are included and standard errors are clustered at the household level. Sectors are classified into the following eleven categories: agriculture, forestry, and fishing; mining; construction; manufacturing; transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; services; public administration; and unemployment. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risky Asset Invest		Risky Asset Share	
	(1)	(2)	(3)	(4)
Democrat $\times$ D-president	-0.075***	-0.071***	-0.047***	-0.045***
	(0.010)	(0.010)	(0.009)	(0.009)
Controls	Yes	Yes	Yes	Yes
State $\times$ Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Sector $\times$ Year FE	No	Yes	No	Yes
Observations	33,174	33,174	33,174	33,174
Adj. R^2	0.478	0.480	0.435	0.438

Table 7. The Effect of Financial Knowledge

This table analyzes the effect of financial knowledge. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. The respondent is financially sophisticated if this individual can answer correctly all the five questions that test understanding of diversification, inflation, compounding interests, time value of money, and relation between bond price and interest rate. Otherwise, the respondent is financially unsophisticated. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risky Asset Invest		Risky Asset Share	
	Unsophisticated	Sophisticated	Unsophisticated	Sophisticated
	(1)	(2)	(3)	(4)
Democrat $\times$ D-president	-0.061***	-0.066***	-0.037***	-0.048**
	(0.014)	(0.024)	(0.013)	(0.022)
Controls	Yes	Yes	Yes	Yes
State $\times$ Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Observations	17,635	4,777	17,635	4,777
Adj. R^2	0.456	0.427	0.412	0.433

Table 8. Partisanship over Presidential Cycles

This table examines partisanship over presidential cycles using data from the Amerian National Election Studies. The sample period is from 1972 to 2016. Anything Positive (D) is a dummy equal to one if the respondent says anything positive about the Democratic party. Anything Negative (D) is a dummy equal to one if the respondent names anything negative about the Democratic party. Liberal is a dummy equal to one if the respondent self-identifies as a liberal. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls include the sex, age, race, education, marital status, and family income of the respondent. Standard errors are clustered at the state level and levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Anything Positive (D)	Anything Negative (D)	Liberal
	(1)	(2)	(3)
Democrat × D-president	0.090***	−0.094***	0.092***
	(0.018)	(0.015)	(0.018)
Democrat	0.375***	−0.221***	0.351***
	(0.012)	(0.016)	(0.022)
Controls	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes
Observations	15,079	15,079	15,079
Adj. R^2	0.225	0.185	0.231

Table 9. The Effect of College Education

This table analyzes the effect of college education. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 except for education are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Risky Asset Invest		Risky Asset Share	
	Noncollege	College	Noncollege	College
	(1)	(2)	(3)	(4)
Democrat × D-president	−0.047***	−0.089***	−0.021	−0.063***
	(0.016)	(0.013)	(0.014)	(0.012)
Controls	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Observations	15,745	17,403	15,745	17,403
Adj. R^2	0.453	0.442	0.407	0.418

Table 10. Partisan Gap in Wealth Accumulation over Presidential Cycles

This table analyzes household wealth accumulation over presidential cycles. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Controls in Table 2 except for household wealth are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

	Log Household Wealth				Risky Asset Invest	Risky Asset Share
	(1)	(2)	(3)	(4)	(5)	(6)
Democrat × D-president	−0.064*	−0.075**	−0.027	−0.040	−0.080***	−0.051***
	(0.034)	(0.030)	(0.029)	(0.029)	(0.011)	(0.010)
Democrat	−0.232***					
	(0.042)					
Risky asset invest			0.598***			
			(0.021)			
Risky asset share				0.674***		
				(0.024)		
Controls	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	No	Yes	Yes	Yes	Yes	Yes
Observations	28,257	27,941	27,941	27,941	27,941	27,941
Adj. R^2	0.373	0.717	0.731	0.731	0.443	0.417

Figure 1. Wealth Inequality and Political Polarization in the United States

This figure plots wealth inequality and political polarization in the United States over the past century. Wealth inequality is defined as the share of total household wealth owned by the top 0.1 percent of families (Saez and Zucman, 2016). Political polarization is defined as the distance between party means of DW-NOMINATE scores, which measure congressional ideology using legislators' roll-call votes (Poole and Rosenthal, 1997). The wealth inequality data are from Zucman's website and the political polarization data are from voteview.com.
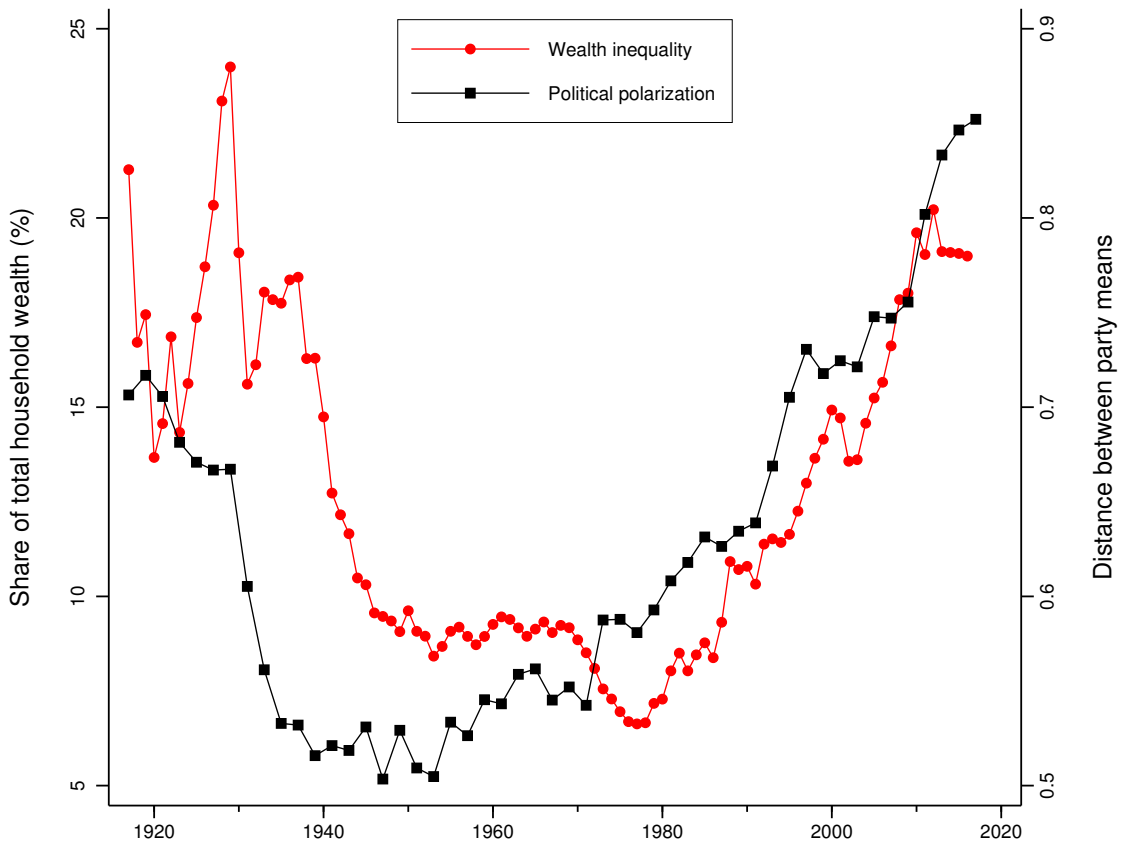
Table IA1. Party-Switching Elections: Pretrends

This table reports the trend of partisan gap in stock market participation before party-switching elections. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat. Prior indicates whether it is the earlier year in the subsample. Controls in Table 2 are included and standard errors are clustered at the household level. Levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

| | Pre-Bush II (1996 vs. 2000) | | Pre-Obama (2004 vs. 2008) | |
| | Risky Asset Invest | Risky Asset Share | Risky Asset Invest | Risky Asset Share |
	(1)	(2)	(3)	(4)
Democrat × Prior	−0.006	0.010	−0.002	−0.006
	(0.017)	(0.014)	(0.014)	(0.014)
Controls	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Observations	7,592	7,592	8,906	8,906
Adj. R^2	0.512	0.475	0.497	0.450

Table IA2. Robustness: Alternative Measures of Partisan Affiliation

This table re-estimates the baseline regressions in Table 3 using alternative measures of partisan affiliation. The leaning-Independent-excluded sample excludes Democratic-leaning and Republican-leaning Independents from the main sample. The strong-affiliation sample includes only respondents who strongly identify their partisan affiliation. Risky asset invest is a dummy equal to one if the household owns any risky asset. Risky assets include stocks, government or corporate bonds, mutual funds, and individual retirement accounts. Risky asset share is the value of risky assets scaled by total liquid wealth, which is the total value of risky assets and safe assets. Safe assets include savings and checking accounts, money market funds, certificates of deposit, U.S. savings bonds, and personal loans to others. Democrat indicates whether the respondent is a Democrat and D-president indicates whether the president is a Democrat. Standard errors are clustered at the household level and levels of significance are denoted as follows: * if $p < 0.10$; ** if $p < 0.05$; *** if $p < 0.01$.

| | Leaning-Independent-Excluded | | Strong Affiliation | |
| | Risky Asset Invest | Risky Asset Share | Risky Asset Invest | Risky Asset Share |
	(1)	(2)	(3)	(4)
Democrat × D-president	−0.081***	−0.052***	−0.077***	−0.043***
	(0.011)	(0.010)	(0.015)	(0.014)
Controls	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
Observations	27,904	27,904	16,169	16,169
Adj. R^2	0.472	0.430	0.466	0.430