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ABSTRACT

Using a proprietary dataset of the portfolio holdings of millions of US households, we document that investors who believe in different models of the world update their beliefs differently in response to a public signal. We identify households ex ante that hold different models of the world using political party affiliation (probabilistically inferred from zip code), and our public signal is the unexpected outcome of the US national election of 2016. Relative to Democrats, Republican investors actively increase the equity share and market beta of their portfolios following the election. The rebalancing is due to a small share of investors making large adjustments. We conclude that this behavior is driven by belief heterogeneity because of extensive controls for differential hedging needs or preferences, including detailed controls for age, wealth, income, state, and even county-employer-period fixed effects.

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In most theories of financial markets, investors agree about the probabilities of different states of the world in equilibrium, and so assets are used to pool individual risks and to allocate aggregate risk optimally across investors. Such agreement is a general consequence of Bayesian updating, as investors learn from prices in the markets in which they trade. In practice however, many participants in asset markets seem to disagree about returns. When investors disagree about probabilities, they use assets to bet against each other and financial markets may not price or allocate aggregate risk efficiently. In theoretical models, disagreement increases cross-sectional variation in portfolio holdings, trade in assets, and the volatility of asset prices, all features of asset markets that pose challenges to traditional models with agreement.[1]

In this paper, we show that investors who hold ex ante different models of the world (or tight priors) increase trading and differentially adjust their portfolio holdings in response to a common public signal. Our specific measure of ex ante heterogeneity is investors' (likely) political party affiliation measured from political donations at the zip-code level. The public signal we study is the unexpected outcome of the US national election of 2016. We analyze portfolio behavior using a proprietary dataset containing the portfolios, trades, and characteristics of millions of anonymized households covering trillions of dollars in investable wealth. We construct a subsample that is reasonably representative of "typical" American investors with some retirement savings: households with retirement savings accounts in the middle 80% of the age-adjusted distribution of retirement wealth, who we call *retirement investors*.[2]

We find that, following the election, newly pessimistic investors (likely Democrats) rebalance their portfolios out of equity and into safer assets and newly optimistic investors (likely Republicans) rebalance out of safe assets and into equity, both over a six to nine-month horizon following the election. Consistent with theoretical models with heterogeneous (non-Bayesian) updating of beliefs, the amount of trading among these investors rises following the election. We conclude that this rebalancing behavior is predominantly driven by differential updating of *beliefs* because our detailed account-level data allows us to control for factors that might impact behavior directly other than through beliefs.[3] In particular, we employ extensive controls for factors that capture differences in hedging demand, liquidity shocks, risk aversion, and other preference parameters. Our interpretation based on this revealed-preference methodology is consistent with survey-reported beliefs about the future of the US economy, which show large divergence by party about the expected future performance of the US economy following the election, but little divergence in expected future economic situations of individuals.

[1] The variation in portfolio positions and the volume of trade in assets are significantly underestimated by quantitative rational expectations models (Guiso et al., 2002; Calvet et al., 2007; Curcuru et al., 2010). Theoretical models with (non-Bayesian) heterogeneity in beliefs can mitigate these puzzles (Miller, 1977; Harris and Raviv, 1993; Harrison and Kreps 1978; Morris, 1996; Scheinkman and Xiong 2003; Banerjee and Kremer, 2010; Simsek, 2013).

[2] As we describe, we create this sample using cutoffs from the 2016 Survey of Consumer Finance. Retirement investors represent 40% of households, 47% of retirement wealth, and 41% of household investable wealth in the US.

[3] In the revealed-preference approach, beliefs and preferences are only separable through assumptions such as these about how each impacts behavior. Throughout the paper, we use the term *preferences* to refer to the elements of investor objective functions that are distinct from *beliefs* and the investor's maintained model of the economy.

Quantitatively, the average effect of the election on portfolio allocations is modest: following the election, the most Republican zip codes increase the equity shares of their portfolios by roughly half a percent relative to the most Democratic zip codes. But this relatively small average result masks substantial heterogeneity. Most of our investors do not rebalance; only a third of our investors actively change their portfolio at all in any given year.[4] Among the investors who do rebalance, the election had a much larger effect. For the sample of investors who rebalanced in our pre-sample year, the effect of the election on equity share is twice as large. More strikingly, seventy five percent of our effect comes from investors who change the equity share of their portfolio by more than twenty five percent. These patterns echo both the attenuation puzzle – the low correlation between portfolio holdings and reported beliefs – documented in Ameriks et al. (forthcoming), and the finding that changes in reported beliefs do not predict the likelihood of trading but do predict the direction of trading conditional on a trade (Giglio et al., 2019).

We conclude that the differences in rebalancing are due to different updating of *beliefs* because we control extensively for the following other channels through which the election might be correlated with differential portfolio behavior. First, we show that the differences in trading behavior between Republican and Democratic voters are not due to ex ante differences in portfolio holdings but are due to active rebalancing, net of any differences in passive portfolio appreciation. Not only do the ex ante differences between Republicans and Democrats happen to be economically small in October 2016, but all our main results control for characteristics of initial wealth and portfolio holdings.

Second, another way the election outcome might cause rebalancing is through differences in real economic outcomes for Republicans and Democrats, and so may cause different changes in hedging needs. For example, Republican voters might be disproportionately employed in industries, firms, or regions that will be more favorably affected by the policies of the new government.[5] However, we show that our findings are robust to controlling for a range of indicators of differences in hedging needs related to both labor income and local economic conditions, including county-employer-period fixed effects.

Third, since we are using the election as our identifying event, a typical concern is whether there are contemporaneous factors other than the outcome of the election that can explain our findings. But the outcome of the 2016 election was an unlikely event and the policy differences between presidential candidates were large. We show that the portfolio share of equity moves similarly for Republicans and Democrats in the year prior to the election, suggesting that any underlying trends in the economy were not differentially affecting Democratic and Republican

[4] This passivity is consistent with previous research on the behavior of typical American investors (rather than high net worth individuals or those who select into active trading platforms), such as the Madrian and Shea (2001) and Choi et al. (2004) studies of just retirement wealth.

[5] Such concerns are discussed in e.g. Pastor and Veronesi (2018) and Autor et al. (2017).

voters prior to the election. Finally, we find similar but smaller portfolio changes around the outcome of the 2012 presidential election (but with the parties' roles reversed).

Thus, we interpret our evidence as showing that the election outcome changed beliefs and caused Republicans to become relatively more optimistic about the future performance of the US economy and to buy assets more exposed to US economic growth from Democrats who on average became more pessimistic. However, we cannot rule out some alternative interpretations because beliefs cannot be separated from *arbitrary* preferences variation using a revealed-preference methodology. As an example, our findings could be due to Republicans and Democrats consuming different bundles of goods which have prices that are differentially exposed to the outcome of the election even after conditioning on observable factors.

In addition to the revealed-preference approach, we show that survey evidence on reported beliefs provides further corroboration that the differences in trading are driven by beliefs. We use data from the University of Michigan Survey of Consumer Confidence to show that Republicans report becoming much more optimistic about the future of the US economy at the time of the election, and vice versa for Democrats (Curtin, 2017). A large literature (discussed in Section VI) shows that survey-reported beliefs correlate with economic behaviors. We contribute to this literature by isolating a specific source of variation, heterogeneity in beliefs, and controlling for other relevant factors that could affect both beliefs and behavior. Our results thus strengthen the case for a causal channel from belief heterogeneity to heterogeneity in behavior. Adding further support to our conclusion that changes in portfolios are not driven by differential economic impact of the election, both groups report little change in views about their own individual economic situations (as Huberman et al., 2018, also document).

In the final two sections of the paper we investigate whether the election affected savings rates differentially and analyze heterogeneity in reallocation across different groups of the population, different accounts, and alternative portfolio measures. We find no evidence that saving rates changed differentially by political affiliation, measured either from account net inflows or contribution rates. But account flows can represent movement of funds across financial institutions and our findings are statistically imprecise. While we cannot observe directly whether consumer spending changed differentially by political affiliation, as shown in Gerber and Huber (2009, 2010), our result is consistent with Mian et al. (2017) finding no differences in consumption in 2016 across counties with different political affiliations.

In terms of heterogeneity, consistent with people of different genders interpreting the public event differently, we find that on average men rebalance into equity following the election and women rebalance into relatively safe assets. We also find that the rebalancing is larger for investors in late middle age and wealthier investors, for investors with personal (non-retirement) accounts, and in accounts that are not eligible for financial advice.

What are the theoretical implications of our results?

Our paper supports theories of asset markets in which beliefs are updated heterogeneously. Examples include theories of identity, motivated beliefs, and robust control with heterogeneous

non-traded endowments (Brunnermeier and Parker, 2005; Benabou and Tirole, 2011; Hansen and Sargent, 2009). Most closely related to our results, Benabou and Tirole (2011, Section VI) develop a model of stake-dependent beliefs in which people's investment choices are affected by what their allocations would imply about their beliefs. In this interpretation, the election made political identity more salient, and more solid for Republicans (more fragile for Democrats), and so led to portfolio reallocation to equities (safer assets for Democrats). One particular dimension of our findings that supports this theory is that when we condition on county of residence we control for differences in the supply of information, like differences in local newspapers or access to cable news. Thus our findings are consistent with the differences in beliefs being 'deep' like identity and not driven by access to different information sources.[6] The theory that identity determines beliefs is also consistent with the relation between the jobs that investment professionals hold and their own investment choices (Linnainmaa, Melzer, and Previtero, forthcoming; Cheng, Raina, and Xiong, 2014).

Second, heterogeneous non-Bayesian updating could also arise from a variety of psychological biases in which people differentially update.[7] Gennaioli, Nicola, and Andrei Shleifer, 2010Barber and Odean (2007) for example document how attention leads to costly over-trading among a sample of active traders. Further, there is evidence suggesting that sentiment might affect risk-taking (e.g. Edmans et al., 2007). In our context, the election could have affected beliefs which in turn drove both investment behavior and sentiment. In general, the previously-documented effect of sentiment may operate through beliefs.

Third, the fact that few investors rebalance by large amounts is indicative of significant informational, psychic, or real barriers to trading. There are no monetary costs of reallocating wealth in most retirement accounts, and simple inattention seems an implausible explanation for this pattern of behavior given the public event in question and its extensive media coverage. We also find that older investors, who tend to be more engaged in managing their savings, rebalance more in response to the election. And investors who delegate more -- who have a larger fraction of their wealth invested in automatic investment products such as target date funds or accounts managed by an advisor -- rebalance by less.

Finally, the fact that differential trade into and out of equities occurs over many months following the election suggests that this sluggish adjustment is not costly, potentially because there is little market impact of the change in beliefs. In a back-of-the-envelope calculation, we show that the net demand for equity due purely to disagreement caused by the election is on the order of a few billion dollars. The slow trading may be due to costs of rebalancing, but it is also

[6] Although beliefs may be amplified or perpetuated by choice of media, they still represent choices driven by initial political identity. Note however that our controls for supply are incomplete in the sense that new media platforms (e.g. Twitter, Facebook, etc.) target at the individual level with little relation to geography. See the related work of Gentzkow and Shapiro (2006), Mullainathan and Shleifer (2005), and Martin and Yurukoglu (2017).

[7] Overconfidence for example can create differences in attention and so updating, as can differential limited and/or selective recall (Gennaioli, Nicola, and Andrei Shleifer, 2010).

consistent with investors being aware that asset prices do not rapidly incorporate their party-specific beliefs and so they need not react immediately to this change in beliefs.

In terms of previous empirical work, our paper also adds to a literature which has provided more indirect evidence that investors interpret public signals differently. The volume of asset trading rises after public signals (e.g. Kandel and Pearson, 1995), survey beliefs or stated forecasts widen (e.g. Bamber et al., 2009; Carlin et al., 2014), and stock prices move in predictable ways (see the survey Hong and Stein, 2007) that are related to economic disagreement (Li and Li, 2018). Our results are also consistent with beliefs being the driving force in earlier work which shows that the behavior of investors is related to their individual past experiences, personal outcomes, or peer networks (e.g. Grinblatt and Keloharju, 2000; Vissing-Jorgensen, 2003; Malmendier and Nagel, 2011; Cookson and Niesser, forthcoming; Bailey et al., 2018). Relative to these literatures, our contribution is the precision with which we are able to separate the effect of differences in beliefs from differences in preferences or hedging needs.

Finally, our paper also relates to a substantial literature in political science documenting that political affiliations capture dogmatically-held models of the world, and lead people to interpret public news differently. Bartels (2002) and Gaines et al. (2007) document a partisan bias in perceptions of changes in economic performance and military outcomes, respectively (see also Curtin, 2016). Subsequent work tries to distinguish whether this disagreement arises due to factors such as selective exposure, selective attention, motivated processing, and respondent bias (cheerleading). There is some evidence that cash incentives reduce reported disagreement between party affiliates (Prior, 2007; Prior, Sood, and Khanna, 2015; Bullock, Gerber, Hill, Huber, 2015). Finally, and most closely related to our current paper, Kempf and Tsoutsoura (2019) show that the ratings given by professionals at credit rating are influenced by their political affiliations.

I. The Public Signal: The 2016 US Election

The public signal about the future performance of the US economy that we study is the unexpected outcome of the 2016 US national election.[8] We believe that this event is almost uniquely suited for measuring how households who believe in different political models of the world update in response to a publicly observable signal.

First, the election outcomes – the winning presidential candidate and the party control of the House and Senate – were very public events. Thus, our results are unlikely to be due to differences in attention. Conditional on observing the outcome, households may process the information at different speeds or take different amounts of time to act, but there is no ex ante reason to believe that this differs by party affiliation.

[8] While the outcome of the presidential race was highly unlikely and the main news revealed by the election, we measure the effect of all the electoral outcomes including for example the fact that the Republican party won a majority in the US Senate, an event with roughly even odds prior to the election.

Second, this election was not correlated with other significant events. Such a correlation would weaken our claim that the differences we uncover are due to different interpretations about a given piece of news about future economic policies and performance.

Third, this presidential election, and the Republican party achieving a majority in the Senate, constitute a very large and unexpected change in expected future US economic policy. While all presidential elections affect policy, the 2016 election involved two candidates with quite different policy proscriptions. More importantly, the outcome of the election was unexpected. For most other types of news about the economy or other changes in governance, such as most elections, legislation, and court decisions, information percolates slowly into the economy and the timing of its arrival is hard to pinpoint.

For a measure of the probability of the outcome of the presidential election, we look at the market prices of two contracts traded on Betfair that pay $1 conditional on the respective party winning the election. State prices of course reflect marginal utilities as well as probabilities, but Betfair is a UK-based internet betting exchange and because of US regulations, it is hard for American investors to enter this market.[9] Thus, these prices differ from probabilities only to the extent that the marginal utility of the UK investors are different across outcomes of the US presidential election. The market predicted a Democratic victory the entire year before the election and with roughly 75% likelihood during the six months prior to the election rising to over 80% on the eve of the election (see Appendix Figure A.1). This stability contrasts slightly with polling data (which is survey-based hypothetical choice data) which has larger swings around events like national conventions and in which the odds appear close to even at times.

Fourth, we can use differences in political affiliation as ex ante measures of differences in investors' models of the world. This measure is not derived from any economic behavior like portfolio allocation, for which differences might be directly due to differences in preferences like risk aversion or differences in income dynamics and resulting hedging needs. That said, a correlation between political affiliation and preference or hedging needs is of course possible, since beliefs about the economy are not randomly assigned but form endogenously. So our analysis will provide evidence that while there are ex ante differences in the portfolios of Republicans and Democrats on average, the changes in portfolio allocations in response to the election are not driven by these ex ante differences in economic exposure.[10] A related benefit is that we can use other household-level data that measures political affiliation to show how household responses differ along other dimensions, and in particular, we present evidence on survey measures of economic beliefs in Section VII.

All four features of this event are important for our study, and important to consider in any study of the relationship between beliefs and behavior. In our case, people of different party

[9] Alternative sources of betting market data on elections are Intrade, the Iowa Electronic Market (IEM), and PredictIt. Intrade shut down in 2013. IEM is open to US households but is capped at $500 and does not trade a contract on the outcome of the election (only contracts based on vote shares). PredictIt also has capped trading, and like the IEM, is relatively small.

[10] It is also that case that political affiliation may be associated with different views of the likelihood of the outcomes of the 2018 election or the policies that are implemented conditional on the outcome. These are subsumed into what we measure.

affiliations are continually responding to all sorts of information and changes in their economic environment. And our hypothesis is that they are responding differently maybe along many dimensions of identity (such as gender, as we investigate). Without the ability to differentiate households ex ante and without a large, public signal, we could not separate the belief-driven portfolio response of households to the election from the effects of other factors.[11]

II. Party Affiliation

The particular measure of different models of the world that we use is political party affiliation. Our main measure of likely political affiliation is based on publicly available data on individual campaign donations during the 2015-2016 election cycle from the Federal Election Commission aggregated to the zip code level. We restrict attention to contributions from individuals to political action committees associated with the two main parties or with their presidential nominees and with at least $20 million in donations (see Appendix A.1 for further details). For each zip code, we count the number of donors to either party. We limit our analysis to zip codes with at least 10 donating individuals and measure the *Republican contribution share* of a zip code as the number of donors to the Republican party or the Republican presidential nominee divided by the total number of donors in that zip code. Figure 1 shows the geographical distribution of the Republican contribution share aggregated from zip codes to counties.

For robustness, we also confirm that our results hold for three alternative measures of likely political affiliation. First, we consider the dollar-weighted version of Republican contribution share defined as the dollars donated to the Republication party or the Republican presidential nominee divided by the total amount donated in that zip code to either party.[12] Second, we use data on votes for the presidential election at the county level and define the Republican share of a county as the number of votes for the Republican candidate divided by the total number of votes to both parties' candidates.[13] Finally, we use county-level vote share for the Republican Presidential candidate in the 2012 election (eliminating any sui generis effects of particular candidates in 2012).

All of our measures surely have some mismeasurement. To the extent that mismeasurement is classical, our main results are attenuated.

[11] To the extent that the arrival of other information also causes households with different political affiliations to behave differently, then it will bias our measured responses. How big is this bias? As we show, during the period before the election, the portfolios of households of different political affiliations behaved similarly, consistent with the arrival of little political news or other news that might be differentially interpreted. See our discussion in Section IV.

[12] We find that donations weighted by people are more precise and more differentiating than donations weighted by dollars. Our hypothesis is that this is because the value-weighted donations measure is sensitive to outliers; a single wealthy donor can swing the measure for the whole area.

[13] Data are from David Leip's Atlas of U.S. Presidential Elections at uselectionatlas.org.

III. Data on Households' Portfolios

Our main data are anonymized, account-level data on financial holdings from a large US financial institution. We have access to anonymized information on all accounts held directly at the firm by individual investors. For these accounts we observe end-of-month account balances and holdings, and all inflows, outflows, and transfers at a daily frequency. We observe assets at the CUSIP level for 87% of wealth. For the remaining 13% we observe only the characteristics of the fund the wealth is invested in. We aggregate all accounts – pre-tax, taxable, and un-taxed – across all members of a household and track household portfolios.[14] The data cover millions of households and trillions in financial wealth.

We also have access to some information on the characteristics of the investors themselves. We define the head of the household by selecting the (oldest) individual with the highest total assets, and we use the head's characteristics as that of the household for non-financial information like age and to assign the household to a NAICS industry of employment. Our main sample uses information from one year before to one year after the election, from October 31, 2015 to October 31, 2017.

While this data provides a unique view in retirement savings and the portfolio allocations of US households, there are two potential weaknesses of our data. First, while we observe a significant share of US households, this is obviously not a randomly selected sample. In particular, most observed household wealth is retirement savings and few households have very high net worth (as we document subsequently). Our analysis does not require a random sample, but we would like to understand the relationship between our sample and the US population. The second potential weakness is that we do not necessarily observe all the investable wealth of the households in our sample. One way this occurs is that we only observe one member of the household for some households. The other is that some households have wealth at other institutions.

To address these issues, we select a sub-sample of our data that meets a set of criteria which is likely to be reasonably representative of the US population that also meets this set of criteria. We focus on households with moderate levels of retirement wealth, which we call *retirement investors* (RIs). Specifically, we define RIs as households with heads of households between the ages of 25 and 85 without extremely high or low retirement wealth, defined as all wealth in retirement saving accounts of all types (excluding defined benefit plans and Social Security).

We use the 2016 Survey of Consumer Finances (SCF) to understand how the population of RIs compares to the US population and how well the wealth and portfolio holdings of the RI subsample of our account-level data compare to the RI subsample in the US. We focus on households with some retirement wealth. Using the 2016 SCF, we run quantile regressions of the log of retirement wealth on a third order polynomial in age. We then drop households with retirement wealth

[14] Where there are multiple households that co-own a given retail account, we assign each account to a single individual by selecting the (oldest) owner with the highest total assets. This yields a unique mapping from investment accounts to households.

below the estimated 10th percentile or above the 90th by age.[15] This RI sub-sample of the SCF captures 40.0% of the US population, 47.3% of retirement wealth (roughly 50% of retirement wealth is held by the top 10 percent), and 41.0% of investable wealth held by households in the US according to the SCF. Investable wealth is defined as money market funds, non-money market funds, individual stocks and bonds, certificate of deposits, quasi-liquid retirement wealth, and other managed accounts.[16] Figure 2 shows the wealth distributions of the US population and of our subsample in the 2016 SCF.

Applying the same cutoffs to our data provides a sample of millions of investors and well more than a trillion in investable wealth.[17] The first panel of Figure 3 shows that the retirement wealth distribution of our RI sample of households lines up well with that measured by the SCF. The second panel of Figure 3 shows that our data also match reasonably well the distribution of total investable wealth in the SCF, but that our data is missing some non-retirement wealth mainly for households with more than 500,000 in investable wealth.

To characterize portfolio risk taking, we classify fund and security holdings into equity, long-term bonds, short-term bonds, and alternative assets (e.g. real estate and precious metals).[18] We calculate market betas by regressing fund and security excess returns on the market excess return over the period 2007-2017, requiring at least 24 months of return observations. We also use other security-level information, such as international and sector exposures. The details are in Appendix A.2.

Column 1 of Table 1 shows the details of the portfolios held by our RI sample, as of just prior to the election shock. Our average RI has $156,500 in investable wealth, of which 81 percent is in retirement accounts. Close to two thirds of wealth is invested in equity (the sum of directly held equity, equity funds, and the equity amount of funds that invest across asset types), and the portfolios have an average market beta of 0.75 (0.71 if households are weighted by wealth). The second column of Table 1 shows that, relative to the estimates from the SCF, our data capture most retirement wealth of RIs but miss a large share of non-retirement investable wealth (which we know from Figure 3 occurs for higher net worth households).

[15] The age cutoff selects 92.4% of the U.S. population and 97.5% of retirement wealth and 94.8% of investable wealth according to the SCF. The restriction to having retirement wealth selects 50.0%, 97.5% and 88.8% respectively. For age 35 the 10th and 90th percentile cutoffs are roughly $5,000 and $32,000, and for age 65 they are roughly $32,000 and $1,000,000. For use in our sample, because we select our sample at the initial date October 31, 2015, we first translate these retirement wealth cutoffs from the SCF at the end of 2016 to cutoffs at the initial date by matching the corresponding quantiles of retirement wealth in our dataset between the two dates.

[16] In the SCF, "other managed accounts" includes personal annuities and trusts with an equity interest and managed investment accounts." Excluded categories of financial wealth are checking and savings accounts, saving bonds, cash value of life insurance, and other financial assets.

[17] We perform two additional screens in our sample. First, we select households with at least 50% of investable wealth in observable portfolio assets. Because of account types, we cannot measure characteristics like market exposures for a limited set of assets. Average holdings in these assets are less than 1.5% of total investable wealth. This restriction excludes only 1.3% of households in our RI sample. Second, we limit ourselves to households that have portfolio holdings between 20% and 500% of initial assets in every month. This gives us a balanced panel and drops people who start or stop using the firm during this period.

[18] Holdings in alternative assets are on average less than 1% of total assets and we do not separately analyze this investment class.

In addition to wealth information on all households, we observe age, gender, marital status, and zip code for the vast majority of individuals.[19] For a subset of households, we can construct an indicator variable for each employer, and we use the employer's NAICS code to assign each such household to a three-digit industry. For a subset of these households, we also observe annual income.

Column 1 of Table 2 shows that the average age of household heads in our RI sample is 50 years old, 43% of household heads are female, and 75% are married. Our sample is also tilted towards younger households than the SCF sample of RIs (see Appendix Figure A.2). This difference likely stems from attrition by households who can withdraw from retirement accounts without penalty starting at age 59.5. The average household income is $101,600 and the median is $78,000.

Figure 4.a shows a scrambled map of the share of households in each US county that are in our sample of RIs. We calculate these shares using the number of households in the 2010 US Census for every county in the US, and then randomly reallocate the shares across counties in each state. Figure 4.b shows the density of the share of population in each county that is in our RI dataset. We remind the reader that RI households represent only half of the US population (according to the SCF) and that we are using the term *household* when we in fact may only observe one of two (or more) earning and investing members.

Finally, we use each investor's zip code of residence one year prior to the election to link investors to our zip or county measures of political party affiliation. Our sample is tilted towards households that live in Democratic zip codes according to our contributions measure.[20]

Tables 1 and 2 show the distribution of asset holdings and demographics by party affiliation of the zip code of the households just prior to the election. There are differences across zip codes associated with party affiliation, but they are small. Equity share varies by less than a percent across groups, and market beta (equally weighted) has almost no variation. Nevertheless, in our analysis, we control for pre-election equity share, as well as many other individual characteristics.

IV. Household Portfolio Reallocation

This section shows that likely Republican households increased the exposure of their portfolios to US economic growth after the 2016 presidential election relative to likely Democratic households. We show that this effect is not driven by passive appreciation and is largely driven by active trades by households that had actively traded previously. We also show that this finding is robust to many controls for differences in preferences or hedging needs across households. Finally, we show that the average behavior is driven by a small share of households that make large changes in their portfolios.

[19] Some data on marital status comes from a commercial consumer database and we treat entries that were not collected at the household level as missing. This database also has measures of education, home ownership, and household composition.

[20] Appendix Figures A.3.a and A.3.b show the distribution of our households across areas with different political affiliations.

A. Graphical analysis

To begin, we simply plot the data. Figure 5 shows the change in the average portfolio share of equities (relative to October 31, 2016) for households in zip codes with different shares of contributions to each party, relative to the baseline share at the end of October 2016. The top panel in Figure 5 displays equally-weighted portfolio shares, the bottom figure displays the value-weighted portfolio shares, which sum the value of equity across all households in each group before dividing by total investable wealth for that group.

First, for all groups, the share of wealth invested in equities decreased prior to the election and rebounded afterwards, which suggests that something caused reduced investment in the stock market by the majority of households regardless of party affiliation.[21] This rebalancing might have been election relation – due for example, to information revealed during the political race or the approaching uncertainty of the election – or it could simply represent rebalancing after a half decade of relatively good stock market returns.

Second, and our main result, the share of wealth invested in equities rises in predominantly Republican zip codes relative to predominantly Democratic zip codes following the election. Specifically, households living in Republican zip codes increased their equity exposure by roughly 0.4% percent of their wealth relative to those in the most Democratic zip codes, consistent with increased optimism about the economy by Republicans relative to Democrats.

Third, there are minimal differences in the evolution of the portfolio shares in equity across areas with different political affiliations prior to the election. During this time, there is information arriving about the likely outcome of the election, but the total change in probability over this period prior to the election is smaller than that on the one day of the election (see Appendix Figure A.1). The similarity of the movements in the equity share before the election is consistent with our evidence that there are only small prior differences in equity shares across zip codes with different political leanings. These zip codes are surely not the same, but are also not affected very differently by economic news (and the limited political news) in the year prior to the election.[22]

We find similar results for long bonds and safe assets. Figures 6.a and 6.b show that households in zip codes that are predominantly Republican decreased the shares of their portfolios invested in both long-term bonds and short-term bonds (including MMMFs and CDs) following the election relative to those in zip codes that are predominantly Democratic. Appendix Figures A.4.a and A.4.b show the corresponding asset-weighted plots.

These results can be summarized by the differences in market betas of portfolios by likey political affiliation. Figure 7.a shows that movements in market beta are very similar prior to the election

[21] Roughly two thirds of the pre-election decline comes from allocation decisions of households (see Figures 12.b and A.5). Post-election, allocation decisions on average are equity neutral.

[22] Figure 9.a does show a small rise in equity share in Democratic zip codes relative to Republican zip codes prior to the election, which is consistent with the slowly increasing probability of a Democratic victory in the presidential election during this period.

across political affiliations, and diverge post election, with market beta rising relatively more in Republican zip codes post election.

One concern with these results so far is the possibility that these movements may be due to inactivity, initial differences in holdings, and appreciation resulting from the post-election stock market increase following the election. Republicans may hold more equity or equities with higher beta, and so have had a disproportionate increase in the equity share of their portfolios due to the post-election increase in stock prices. Like most wealth for the typical American household, the majority of the wealth that we observe is retirement wealth which is notably "sleepy." While we address these concerns in a regression framework subsequently, we present three transparent pieces of evidence that rejects this hypothesis here.

First, we find larger differential effects by party affiliation when we focus on households that are more active in the past, where an "active" household is defined as one that had at least one trade or exchange not associated with an account inflow or outflow during the year November 2014 to October 2015 (the year prior to our main sample). This sample is 29.5 percent of our original sample (Table 2). Figure 7.b shows that the portfolios of ex ante active traders have much larger differential increases in their market betas post-election than the typical investors. Figure 8.a shows that active traders have much larger relative increase in equity share for mostly Republican zip codes post-election, on the order of 1% of their investable wealth on average, a large effect. (Figures A.5.a and A.5.b in the Appendix show the corresponding plots for long bonds and safe assets, respectively, for the sample of active traders.)

Second, we measure the difference in active rebalancing in two different ways. The composition of an investors' portfolio is changed by revaluations, reallocations, and inflows and outflows related to deposits and withdrawals. We measure rebalancing into equity by focusing on changes in equity share driven by either transfers of assets into or out of equity or withdrawals or inflows that change equity shares.

Our first method to measure rebalancing is simply to construct and track hypothetical portfolios as if there were no change in valuations of funds or securities. Figure 8.b plots equity shares of these hypothetical price-constant portfolios and shows that prior to the election, rebalancing out of equity was nearly identical across the distribution of zip codes by political affiliation. After the election, Republican zip codes reallocated wealth into equity, while primarily Democratic zip codes reallocated wealth out of equity. The total reallocation is roughly the same size as the total difference shown in Figure 5. Note that in Figure 8.b we also observe mostly Republican zip codes reducing their equity shares slightly more than other zip codes over the year prior to the election, which is consistent with the small amount of news that comes out pre-election as the chances of a Democratic victory rise.

Second, we measure excess equity trading for household i in month t as

$$Excess\ Equity\ Trades_{i,t} = \frac{Equity\ Trades_{i,t} - Equity\ Share_{i,t-1} Total\ Trades_{i,t}}{Assets_{i,0}}.$$

Figure A.6 in the Appendix shows cumulative excess equity trades from the end of October 2015. We again find that the relative movement in portfolio share is driven by rebalancing and not by *ex-ante* differences in portfolios and differences in post-election performance. Figures A.7.a and A.7.b show the same plots for excess long-term and short-term bond trades (defined analogously).

While these results present the data in a transparent manner, they do not address the concern that the differential reallocation we observe is driven by different preferences or differential changes in the stochastic process of labor income (or other endowment income) and so are due to differences in hedging needs. In general, many things change both behavior and beliefs, and so may contaminate any analysis of the effect of beliefs on behavior. In our specific case, we have identified a particular source of variation in beliefs, which allows us to address the main ways in which the election may have directly impacted behavior other than through beliefs. For example, the election outcomes raised the probability of reductions in personal and corporate tax rates, changes in personal tax deductions through itemization, increases in barriers to trade, and reductions in various regulations, and the stock prices of companies in different industries were impacted quite differently (as we discuss in Section VIII). To the extent that affiliates of one party or the other are impacted differently by these policies, or tend to work for or live near winning industries, then the political outcome may differentially affect their future incomes and cost of living. The next subsection addresses the concern that the differences in rebalancing are driven by the different economic effects of the election rather than different interpretations of the election.

B. Quantitative regression analysis

Both to control for differences in hedging needs and to quantify the differences in portfolio allocations across households, we now run a set of regressions of household equity shares on the Republican share of donations at the zip code level. We use portfolios exactly one year before the election to construct initial positions and create a sample of portfolio holdings every three months, starting with the end of January 2016 and ending with the end of October 2017, so we have four observations before the election (denoted -3, -2, -1, and 0 for October 31, 2016) and four periods after the election (1, 2, 3, and 4).

We estimate an equation of the form:

$$P_{i,t} = \sum_{s \neq 0} \left(\beta_s R_{z(i)} + \theta_s' X_i\right) 1_{t=s} + \tau_t + \tau_i + \eta_{i,t},$$

where $P_{i,t}$ is household i's portfolio share in equity at time t, $R_{z(i)}$ is the time-invariant Republican share of donations in zip code $z(i)$, X_i are individual control variables, $1_{t=s}$ is an indicator variable which takes the value 1 when period t=s, and τ_t and τ_i are period-specific and individual-specific intercepts, respectively. Standard errors are clustered at the zip code level.

Our main effects of interest are the coefficients on Republican share in each three-month period following the election (β_t for t=1, 2, 3 and 4) which measure the differential effect of Republican share relative to October 31 (because we impose $\beta_0 = 0$).

It is important to emphasize that the effects of our control variables are allowed to be different in every three-month period, just like the effect of the Republican share. Thus, when we control for a variable, we are not controlling for its average effect pre-election and post-election (as in common parlance), but we are controlling for differences related to this control variable in the specific quarter post-election.[23]

To show that the differences in portfolios that we observe are due to differences in beliefs rather than differential hedging demands, we make use of many control variables, X_i, related to differences that might arise from differences in preferences, incomes, other wealth or the ways these factors are exposed to economic policies. Our baseline set of controls are second-order polynomials in initial equity share, age, and log initial wealth, which are as noted all interacted with quarterly indicator variables. Initial equity share and wealth are measured as of October 2015. These controls are designed to confirm that our quantitative results are not biased by initial differences that might be due to difference in, for example, risk aversion.

Table 3 shows the cumulative change, from the end of October, in equity share of Republican zip codes relative to Democratic zip codes from this baseline regression.[24] In the bottom row, we list the percentage of investors in the RI sample that are included in each regression. Recall that we require at least 10 donations in a zip code to calculate the zip code Republican contribution share. For 90.9% of investors in our RI sample, this yields a measure of political affiliation. In later columns, sample coverage drops when additional controls are included.

The first column of Table 3 shows our baseline result without controls and the second column shows the result with the baseline controls. During the first three months following the election, people in a zip code with only Republican donations increased their holdings of equity by 0.52 percent of their portfolio relative to a zip code with only Democratic donations, rising to 0.81 percent by the end of the second three-month period following the election.

This effect remains very similar as we control for a large number of variables that measure possible differences in hedging needs that might be correlated with political affiliation of zip code of residence. In a first set of controls, we capture direct characteristics of the labor income process that are interacted with quarterly dummies: a second-order polynomial in log labor income over 2015, income growth from 2016 to 2017, and an indicator variable for employer industry (3-digit NAICS).[25] The results are in columns (3) and (4).

[23] We force $\theta_0 = 0$ to avoid collinearity with the individual effects.

[24] The Appendix contains tables which also display the three pre-election coefficients on Republican share and which correspond to the tables in the main paper. Table A.3 displays these additional coefficients for Table 3, Table A.4 for Table 4, and so forth.

[25] Results are similar for 2-digit and for 4-digit NAICS controls. We use income growth from 2016 to 2017 to capture ex-post realized income growth. However, since these become available over a wide period in the year after, at the time of data collection (June 2018) not all the data was in yet. We include realized income growth for households with an equal number of members with observable labor income in both years.

Columns (5) through (7) show that we still find that Republicans increase their relative equity share when we control for a broad set of locational characteristics in order to capture differences in local economic conditions and the local effects of various economic policies. Specifically, we control for regional variation with indicators for urban dwelling, house price growth at the zip code level, and state indicator variables. To control for differential hedging needs related to the real effects of trade policy, we include an indicator for county manufacturing share from the Quarterly Census of Employment and Wages (in 2015) and county shipping costs from County Business Patterns (measured in 2015).[26] It is worth emphasizing again that, as in the previous columns, all controls are interacted with quarterly dummies. These controls do not do much to decrease the magnitude of our main finding. Column (6) replaces these characteristics of counties with county indicator variables and again the results are similar.

Ultimately in column (7), we compare people in the same quarter working for the same employer and living in the same county but living in zip codes with different party affiliations by controlling for an indicator for each county interacted with each employer interacted with each three-month period and still find highly significant results. The magnitudes of our main effects are somewhat reduced, but this may occur because these indicator variables may be absorbing some valid variation. Our main measure of the effect of beliefs is a noisy measure of party affiliation at the zip code level.

The results in this last column have interesting implications for the interpretation of our results related to work on differences in media and political beliefs, as discussed in our introduction. By controlling for county, we are largely controlling for access to information since people in the same country likely have access to the same media for example. Thus to the extent that the variation in beliefs across zip codes within county is related to differences in the consumption of media, then, these differences in media represents differences in the demand for certain types of information. That is, we are not measuring the effect of exogenous differences in media consumption, but the expression of individual (or rather zip code level) beliefs.

Our main results are quite similar for our alternative measures of likely political affiliation in 2016 and for the 2012 Republican vote share by county (see Tables A.2.A and A.2.B, respectively). Thus our results are driven by something specific to donations (rather than votes) or by something particular to the candidates in 2016 (although we do not have a way to adjust for differences in turnout). But we do find that changes over time in intensity of county support do matter above and beyond the 2012 vote shares. Counties where there were increases in Republican vote share had larger re-allocations to equity in the first six months following the election and counties where there were decreases in vote share had larger re-allocations out of equity.

[26] Urbanicity is defined by core-based statistical area (CBSA): metropolitan statistical area, micropolitan statistical area, and non-CBSA. As a measure of house prices at the zip code level, we use the Zillow Home Value Index (ZHVI) for all homes. We include house price growth from 2010 to 2015 and house price growth from 2015 to 2017 (end of year) as regression controls. Our county shipping costs are from Feenstra (1996) and Barrot, Loualiche, and Sauvagnat (forthcoming) and proxy for local firms' exposure to import competition.

Not only can we use the 2012 vote share in our analysis of the 2016 election but we can also conduct a sort of Placebo test using rebalancing around the 2012 election. One might for example be concerned that Republicans (Democrats) tend to actively rebalance towards (away from) equity after elections in general or when there the market does well, as it did following the both elections. Our theory however predict the reverse: that following the 2012 election Democrats should buy equity and Republicans should sell. Of course the outcome of the 2012 election was the predicted outcome, so we expect the election to have a much smaller effect in 2012 than in 2016, and thus other factors to potentially play a more important role in the pattern of rebalancing.

We perform an identical analysis on a data sample from our proprietary data using our same procedure but just changing the dates to cover the year before and after the 2012 election. Figure 9 shows that on average, there is a small increase in equity shares of Democrats relative to Republicans, but only when we weight households equally. No difference is observed when the data are value-weighted. Table 4 presents the regression analysis, and is the equivalent of Table 3 but for the 2012 election. The first few columns with few controls show Democrats increasing their equity shares relative to Republicans following the 2012 election with a similar magnitude to the opposite rebalancing that we find in 2016. But the later columns with more controls largely eliminate this effect. The final column suggests no differential effect of party affiliation on rebalancing following the 2012 election. That is, the results in Figure 9 and the first four columns of Table 4 are significantly driven by differences that are correlated with the places investors live and work so may represent the effect of other factors besides the election. We conclude that there is not a general tendency for Republicans to increase their equity shares following elections, and, consistent with the unsurprising nature of the outcome of the 2012 election, Democrats may have become (relatively) more optimistic and (relatively) rebalanced into equity, but that this evidence is limited and only appears in some specifications.

As a final test of our maintained hypothesis that people use different models of the world to interpret public events, we study a different characteristic that determines the models of the world that people use to interpret events, gender (coded as binary and time-invariant in our data). Women tend to affiliate more with the Democratic Party and have more ex ante differences in portfolios and wealth in October 2016 than do Republicans and Democrats. Women tend to hold less equity, consistent with the stylized fact that they are more risk averse than men (Barber and Odean, 2000). Table 5 shows that, controlling for likely political affiliation, women reallocate a smaller fraction of their portfolios to equity following the election (column 2). The size of this effect is about half that of likely political affiliation. When interacting gender with party affiliation, the final two columns show that the effect is symmetric for Democratic and Republican women, which implies that women of both parties updated less positively than men to the 2016 election.[27]

[27] When looking at the 2012 election, we similarly find that women of both parties were less aggressive in putting money into equities (but of course the sign was flipped by party). When looking at reported beliefs, we do not find a measurably different change in reported beliefs between men than women in either party following the election.

In sum, the regression analysis of this subsection confirms that the public signal of the 2016 election caused likely Republicans to increase their portfolio exposure to US growth relative to likely Democrats, and that we find this behavior even when controlling for many measures of differences in the real economic impact of the election, such as only using variation within people living in the same county and working for the same employer.

These changes in portfolio are not quantitatively large. In part this is because we do not observe individual-level political affiliations, so that even quite Republican or Democratic zip codes by our measures contain a mixture of Democratic and Republican investors. However, in part our effects are not large because most of the wealth of retirement investors is retirement wealth, and there is very little (active) trading in retirement accounts. As prior research has shown, retirement savers in the US largely stick to their default portfolio allocations and trade very rarely. We now show in the next subsection that our estimated effects are much larger among households that do re-allocate their wealth.

C. Inaction and large portfolio changes

Having established our main results, we now show that the portfolio reallocation is due to a small share of active investors who make large re-allocations in their portfolios.

First we focus on the effect among active investors. Table 6 performs the same analyses as Table 3 on the subset of the population with active trading during the year prior to the year before the election. As in our graphical analysis, we find much larger differential portfolio movements among active households. The relative increase in equity share among likely Republicans who have made active trades is twice as large as that for the general population of RIs.

We also analyzed several other categorizations of more active or engaged investors, such as those invested less in target date funds and those with greater past access and trading behavior in their accounts. We relegate these results to Appendix Table A.11, but we find greater differences in re-allocation for more active investors for almost all these alternative definitions. Notably, relative re-allocations are much greater – five times the baseline effect – among investors who made active reallocations in each of the three years prior to the election (2.7 percent of RIs). Investors who are less engaged, for example those who have a significant part of their assets in target date funds or managed accounts, respond less than the average investor.

We next turn to measuring the size of the portfolio adjustments made by the investors that actively rebalance. As in our analysis of active rebalancing in Section IV.A, we focus on hypothetical portfolios constructed as if there were no change in valuations of funds or securities. This allows us to cleanly avoid changes in equity share driven by different returns on different investments. Figures 10.a and 10.b show the changes in equity shares as in Figure 8.b, decomposed into small and large portfolio changes. In the upper panel we take the average of (hypothetical) equity share changes relative to October 2016 interacted by an indicator for the change being at least ten percent. In the lower panel we multiply the (hypothetical) equity share change by an indicator for the change being at most ten percent. There is no noticeable differential active

adjustment among the investors making only small adjustments and effectively our entire measured effect comes from investors making adjustments of greater than ten percent. In terms of what share of investors are making these large trades, roughly one percent of investors make a trade of greater than 10 percent in each month following the election.

To further characterize the extent to which our results are driven by large re-allocations, we re-ran our main analysis on the subsample of investors whose cumulative adjustment over the six months following the election exceeds X percent, for different values of X. Strikingly, only about a quarter of the total relative portfolio re-allocation comes from investors who adjust the equity shares of their portfolios by less than 25%. A full half the measured effect comes from the few households that increase or decrease the equity share of their portfolio by 50% or more. We displayed the complete set of results in Appendix Figure A.8.a.

What share of investors are making these large changes? Aggregated across the six months, 6.6% of our RI sample reallocate so that their equity share changes by at least 10%, 2.8% reallocate for a change of at least 25%, and 1.1% make a change of at least 50%.

We further find that rebalancing at the individual level is lumpy. Investors tend to make only one large trade. Examining the cumulative difference in reallocation between the most Republican zip codes and the most Democratic zip codes, we experiment with dropping all adjustments made by investors after their first rebalancing of ten percent or greater. Almost the entire effect comes from the first large adjustment made by each investor (as shown in Appendix Figure A.8.b). In sum, effectively no Republican and Democratic investors actively change their equity shares by only a few percent in response to the election. Instead, a small share of investors make very large changes in their portfolios in response to their different changes in their beliefs.

These results are consistent with previous studies which show that the typical American investor, whose wealth is primarily in retirement funds, trades very rarely (e.g. Choi et al., 2004). The interesting question is why? The majority of wealth in our sample is retirement wealth, which has no fees associated with trading. Thus large monetary costs are an implausible explanation. Instead inaction seems to be due to psychological or informational costs. This interpretation is supported by our finding that investors who are more engaged with their portfolio allocations respond more strongly, and those who have delegated or are less engaged respond less. While one interpretation could be that only very few households update their beliefs in response to the election, this interpretation is inconsistent with the evidence from survey beliefs that we discuss in Section VI.

V. Trading Volume

A main motivation and implication of models with time-varying heterogeneous beliefs is that they generate trade among agents, something that the canonical model is either silent about or, when calibrated, tends to vastly under-predict. In this section we show that trading volume rises significantly following the election for our RI sample, consistent with these models and our

interpretation of the election as a public shock that caused different movements in different households' beliefs.

We measure trades as the absolute value of the dollar amount of every purchase or sale of any security s, and define trading volume for household i in month t as:[28]

$$Trading\ Volume_{i,t} = \frac{\frac{1}{2}\sum_s(|Buy_{i,s,t}| + |Sell_{i,s,t}|)}{Assets_{i,0}}$$

Since this trading includes purchases and sales from inflows and outflows, we also construct a measure of active trades, which, as in the previous section, are trades or exchanges excluding those associated with inflows and outflows.

Figures 11.a plots average trading volume over time and shows that the volume of trade by our sample of retirement investors the amount of trade rises significantly following the election. Their average trading volume is low (relative to turnover in the overall stock market), roughly 2.25% per month prior to the election. Active trades are roughly 1% per month, where we define active trades as in the previous section. Trading increases significantly in the month following the election, reaching more than 3% per month in March 2017. Figure 11.b shows that there is little difference in trading volume across the distribution of political affiliation in zip codes, including those that are most politically balanced. This similarity suggests that the Republicans and Democrats in non-homogeneous zip codes are both trading, just in opposite directions.

In contrast, there is no noticeable increase in trading activity in US equity markets overall, even in the submarket for ETFs. Presumably, this is because the trading of our sample is such a small share of total trade in US equity markets. We confirm this both with total US equity market volume and with the narrower ETF market volume, both from the CBOE (we plot these series in Figures A.9.a and A.9.b).

We conclude that the evidence on trading volume supports our hypothesis that this public event was interpreted differently by people with different models of the world, but we also note that this particular source of different beliefs can generate only a small amount of observed equity trades.

VI. Reported Beliefs

Much existing research relates reported beliefs to economic behaviors (see Manski, 2018) and to portfolio choice in particular (e.g. Vissing Jorgenson, 2003; Ameriks et al., forthcoming; Giglio et al., 2019). Our results contribute to this literature because we use the variation generated by the election and so can control for ways in which the election might cause behaviors to be different other than through its differential effect on beliefs. In this section, we show that reported

[28] Trading volume is winsorized at 100% to remove sensitivity to a small number of extreme outliers. This affects less than 0.5% of the sample.

expectations data are consistent with beliefs driving the rebalancing that we document. This confirmation also lends credence to the informativeness of reported expectations data.

Prior research shows that Republicans and Democrats interpret political events differently, and that this leads to different reported economic expectations.[29] This section builds directly on Curtin (2016, 2017) and shows that in the University of Michigan Survey of Consumer Confidence (SCC), Republicans report much more optimism about the economy following the election while Democrats report more pessimism.[30] Following Curtin (2016, 2017), we use both the usual monthly data on reported economic expectations in the SCC and special questions that the survey added about political affiliation from June to October 2016 and from February to April 2017. The survey does not contain zip code or county of residence, nor can we replicate the sample of RIs in the SCC, so instead we analyze the subsample of households that hold stocks (63% of the sample weighted, 65% of the sample unweighted). The results are nearly identical for the entire SCC sample.

Our first result is that the election appears to have a dramatic effect of expectations of future national economic performance. Figure 12.a shows the average response among people with different party affiliations to the question "Looking ahead, which would you say is more likely – that in the country as a whole we'll have continuous good times during the next 5 years or so, or that we will have periods of widespread unemployment or depression, or what?" and we index the answers as Good times = 5, Good with qualifications = 4, Pro-con = 3, Bad with qualifications = 2, and Bad times = 1. On average, Republicans change from slightly pessimistic before the election, to highly optimistic after and Democrats the reverse. Confirming this difference, Figure 12.b shows the same large changes in expectations of the unemployment rate in a year.

Our second result is that there are no similar large changes in people's reported expectations about their own economic circumstances. Figure 13.a plots by party affiliation the average answer to: "During the next 12 months, do you expect your income to be higher or lower than during the past year?" Democrats are more likely to expect higher income before election, but the advantage is small. Following the election, Republicans on average have higher reported expectations and Democrats lower, but the changes are moderate and the ultimate differences small. In contrast, Figure 13.b shows the changes in expectations of whether business conditions overall will be better or worse in a year and shows a much larger swing.

[29] See Conover, Feldman, and Knight (1986), Bartels (2002), Gaines et al. (2009), and Gillitzer and Prasad (2018).

[30] Das et al. (forthcoming) find that reported beliefs about future macroeconomic outcomes are persistently different by socioeconomic status.

VII. Differences across Households and Accounts

A. Heterogeneity in responses across households

In this subsection, we show which characteristics of investors are associated with the largest differential responses to the election news, that is, we characterize the heterogeneity in the treatment effect. We run triple difference regressions to measure differential effects by prior year active trading, age, wealth, and equity share. We report the coefficients measuring the total response after six months in Table 7.

The interaction of Republican contribution share with active trading in the prior year highlights and confirms our previous results. The response in the equity shares of households with active trading in the prior year is almost four times as strong as those who were not active. Turning to age in column (2), there is significant variation across age groups, with the largest relative increases in equity shares for older pre-retirement investors. The coefficient for investors aged 55-64 is 1.02%, whereas the difference between Republicans and Democrats for investors with age below 35 is only $1.02 - 0.56 = 0.46$ percent of the portfolio. Equity shares move relatively more for wealthier households, with a doubling of wealth implying a 0.2 percent greater relative increase in equity shares by likely Republicans. With wealth and initial equity share, age becomes less important, with the largest responses for investors aged 45-54 and a response for investors above retirement age that is still significantly lower.

B. Heterogeneity in response across accounts

We break down our main findings by different account types to address questions such as do households primarily reallocate funds in retirement accounts or outside of these accounts? Does money in accounts that receive more investment advice reallocate less?[31] We find that there are significant responses across all types of accounts, with slightly larger responses for investors with personal (non-retirement) accounts and slightly lower responses in accounts eligible for significant financial advice.

Table 8 shows how the responses differ across funds or different types of accounts held by RIs at the firm. The first column presents our main results again, which largely represent the response in retirement accounts, since this is the vast majority of wealth held by our RIs. In the second column, we restrict the sample to households that own personally advised accounts. The post-election coefficients on political affiliation are slightly smaller, but still significant. The same is true for the third column, which has results for the subset of households with a single, unmarried household head. Because we may only observe one member of a household, we are more confident that we observe the full portfolio of unmarried investors. A possible explanation for the lower

[31] A common financial adviser line is "keep your politics out of your portfolio."

magnitude in this sample is that these are typically younger investors with lower balances and a higher initial equity allocation (see Section VII.A).

In the final four columns, we zoom in on allocation decisions in different types of retirement and non-retirement accounts. We finds that investors with (non-retirement) brokerage accounts tend to trade more than people without, but they tend to trade more in their retirement accounts, presumably for reasons of both lower transaction costs and no immediate tax ramifications (see Dammon et al., 2001) In column 4, we present results for the subsample of households that have a personal investment account. The effects are slightly larger for these households. In column 5, we calculate portfolio allocations in this subsample exclusively for wealth that is in personal investment accounts, and find slightly smaller relative differences than for all (mostly retirement) wealth. Column 6 shows that we find larger effects for RIs that have a personal non-retirement brokerage account. But, as we found for the larger category of personal wealth, the larger effect is not driven by rebalancing in the specific account. In column 7, analogous to column 5, the divergence in equity shares is significant but smaller when considering only the part of investable wealth that is in non-retirement brokerage accounts.

VIII. Extensions

A. Household saving behavior

Gerber and Huber (2009, 2010) began a literature in political science studying whether local economic activity is affected differently by elections in localities with different political affiliations. These papers and the subsequent literature has primarily focused on consumption spending (McGrath, 2016; Benhabib and Speigel, 2019; Gillitzer and Prasad, 2018; Mian, Sufi, and Khoshkou, 2017). While there is disagreement across the papers, the balance of this evidence suggests little to no differential effect of the election on local consumption levels across areas with different dominant political affiliations. This finding is striking in part because one would expect differential *real* effects of the election outcome through policy on the current, and future economic circumstances of people with different political affiliations. In contrast to this literature, we measure individual-level behavior controlling for the real effects on the local economy and labor income. In this section, we show that there is some weak evidence that the typical Republican retirement investor decreased their saving by a small amount following the election, relative to their Democratic counterparts.

We investigate saving using three measures of inflows into accounts.

First, we investigate a measure that exists for all RIs in our sample, the *net flow rate*, defined as net account inflows less account outflows as a share of total initial balance:

$$Net\ Flow\ Rate_{i,t} = \frac{Deposits_{i,t} - Withdrawals_{i,t}}{Financial\ Wealth_{i,0}}.$$

Figure 14 shows these different saving rates by zip code quantiles, and reveals no difference by likely party affiliation. We also run a similar regression to that in Section IV but using the net

flow rate as the dependent variable. Because net inflows have a large seasonal component, we report quarterly coefficients relative to the same quarter in the year prior to the election. The first column of Table 9 shows little evidence for differences in saving following the election. The coefficients are statistically insignificant and unstable across periods (and specifications), with point estimates ranging from -0.03 to 0.08 percent of investment wealth.

While net flow rate exists for all RIs, it has two disadvantages. First, for a given dollar amount of saving, it over-weights observations with low initial account balances. Consistent with this overweighting, among prime age RIs (age 45-55 in column 2) we find some evidence that Republican households, who became more optimistic, increased their saving relative to Democratic households following the election, although still not statistically significant.

At some loss of sample size however, we can instead measure a saving rate more directly by defining the *net saving rate* as net inflows to income:

$$Net\ Saving\ Rate_{i,t} = \frac{Deposits_{i,t} - Withdrawals_{i,t}}{Income_{i,t}}.$$

This has the obvious advantage of being a more standard measure of the saving rate but limits our sample to RIs for which we observe annual income. We construct quarterly measures by dividing annual income equally over the year. Column 3 of Table 9 shows statistically very weak evidence of the reverse of our first measure: that Republican households saved less relative to Democratic households following the election. While statistically insignificant, the effect is economically small but not trivial, on the order of a third of a percent of income.

The other disadvantage of our first measure of saving, which also applies to this second measure, is that these measures of saving rates have a lot of variation over time and across people because of large withdrawals and large inflows, presumably both significantly due to transfers out of and into the financial institution rather than due to actual saving. A partial solution to this problem is to do the analysis at the account level rather than aggregating at the household level, by only measuring flows into and out of active retirement accounts as a fraction of income registered under those accounts. Column 4 of Table 9 shows the results of this exercise, and we find statistically stronger evidence that Republican households reduced their saving rates relative to Democratic households following the election.

As a better solution to the fact that inflows are noisy measures of actual saving, we measure the *retirement saving rate* as the chosen contribution rate (as percent of income) that we observe investors choosing associated with their active retirement accounts. The advantage of this measure is that it avoids account inflows and outflows that represent transfers from and to other institutions. This measure still does not avoid the possibility of substitution between retirement saving and non-retirement.

Column 5 of Table 9 shows economically small but now statistically strong evidence that the typical Republican retirement investor decreased their retirement saving rate following the

election, relative to their Democratic counterpart.[32] However there are two important caveats to this evidence. First, as noted the effects are economically small, on the order of 0.05 percent of income. But second and more important, there is a similar sized decline in the year prior to the election (see Table A.9).

We take this evidence as suggestive of only very small effects of the election on households saving rates. If this were also true of consumption spending, this would have two implications. First, and less important given our extensive controls, a non-response of consumption further mitigates the concern that differences in the economic effects of the policy changes cause the differences in portfolio responses that we find. Second, only certain utility functions are consistent with differences in beliefs that cause differences in portfolio exposures to risk without causing differences in consumption changes. Specifically, these findings are consistent with a unit elasticity of intertemporal substitution.

The Michigan SCC data also supports this interpretation. As we showed in Figures 13.a and 13.b, in contrast to the large changes in beliefs about the future of the US economy, households report only small changes in their expectations about their own personal economic situations. Here we show that Republicans and Democrats do not report changing their views about whether it is a good time to consume.

Figures 15.a and 15.b show that we only observe small changes in responses to the questions: "Generally speaking, do you think now is a good or a bad time for people to buy major household items / a house?" These figures show that, consistent with the strong economy, most people believe it is a good time to buy a house or major durable item before the election, with an observable difference between Democrats and Republicans only for the purchase of a durable item. This difference goes away after the election, with beliefs about the purchase of a durable item similar by party after the election. For the purchase of a house, Republicans and Democrats hold similar views prior to the election and Republicans become slightly more optimistic following the election.

B. Differences in the ex ante composition of equity holdings

While both the share of equity and the market beta of the portfolios of households with different political affiliations are quite similar prior to the election, the composition of their equity holdings is not. And stock market performance differed substantially across stocks and sectors expected to benefit from the unexpected change in party control (Wagner et al., 2018). These facts do not change our previous results.

We focus on stocks that were associated with industries that rallied immediately following the election and those that did not. We use Global Industry Classification Standard (GICS) codes to measure exposure to different sectors. We use the Morningstar benchmark for sector mutual funds

[32] Unlike in the rest of our analysis of saving rates, we do not measure the effect of contribution rates relative to a year before because there is almost no seasonality in contribution rates.

and Compustat/CRSP for directly-held equity. The sectors are energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication services, utilities, and real estate. We classify an industry as a *winner* or *loser* from its stock market response from the end of October through to the end of 2016. The winning industries are financials, telecommunication services, energy, materials, and industrials, while the losing ones are consumer staples, utilities, information technology, health care, and real estate. Consumer discretionary is in the middle and is considered neither.

Figure 16 shows that households in zip codes with different predominant political affiliations held quite different exposures, with the top quintile of Republican zip codes holding 7.5% of their portfolios in winners relative to only 5% share for the top quintiles of Democratic zip codes (Figure 16.a). For losing industries, the picture is reversed with the most Democratic zip codes holding more than 6% of their portfolio in losing industries and the most Republican holding less than 5% (Figure 16.b). This difference in holdings is significantly due to people overweighting their employer's stock and employer's industry in their portfolio. For investors for whom we can construct the industry of their employer, 66% of the difference in allocation to winners and 14% of the difference in allocation to losers can be attributed to own industry allocations.

This heterogeneity however does not alter our main funding. First note that the shares shown in Figure 16.a and 16.b move nearly in parallel following the election. A formal test, as reported in columns 5-8 of Table 10, reveals that Republican households slightly tilt their exposure towards winning sectors and reduce their exposure to losing sectors, relative to Democrats. The latter finding goes in the opposite direction of what follows from purely passive behavior, since Democrats start with higher initial exposure to losing sectors. This also suggests that investors of different political affiliations do not disagree on the extent to which the election differentially impacted the different sectors of the economy.

Second, recall that Figure 7 shows that the market beta of the portfolios of Republicans rises relative to Democrats after the election. Could this be due to differences in the market beta of the equity portfolio of people with different political affiliations? Figure 17.a shows both minimal differences in market beta of equities by party affiliation and only small relative changes in beta of equity following the election. Columns 3 and 4 in Table 10 quantify these differences. Within equity we still see an increase in market exposure of Republicans relative to Democrats, controlling for ex-ante differences. But the magnitude only explains a modest part of the overall relative difference in market exposure. This is consistent with our main set of results that focus on the rise in equity share of Republicans relative to Democrats.

C. The response of international share of portfolio

We find that differences in beliefs about the future state of the US economy do not translate into differential shifts into and out of international equity investments.[33]

Figure 17.b shows the share of international equity across households sorted into quintiles by party affiliation of their zip code, relative to the end of October 2016. Prior to the election there is a small relative decrease in the international share held by the most Democratic zip codes, and a similar small relative decrease following the election. The overall rise in the portfolio shares of international equity is driven primarily by the fall in the international value of the dollar following the election. That is, there is a very small trend through the election towards Republican areas increasing their exposure to international equity relative to Democratic areas. Columns 9 and 10 of Table 10 show that regression analysis confirms this conclusion.

D. The impact of different changes in beliefs on asset demand

The public signal of the election changed beliefs and caused trade and portfolio allocation across households. Did this change in disagreement change the net demand for equity of the retirement investor sample that we observe? Did the heterogeneous changes in beliefs and the resulting trade contribute to the high returns on the stock market following the election?

We can provide only a very rough answer to these questions. We begin by defining the baseline relative to which we measure the effect of differences in the updating of beliefs. We assume that there would have been no change in the demand for equity from the election had the Democratic candidate won the election, that is, had the much more likely outcome occurred. Further, we base our calculation on our regressions using county vote share as the measure of political affiliation (see Table A.2) and assume there was no net change in the demand for equity in a county in which investible wealth is evenly split between Democrats and Republicans. Finally, we assume that wealth is uncorrelated with party affiliation within counties.

Under these three significant assumptions, the change in net demand for equity from each county is our regression coefficient times county wealth times the difference between county vote share and 0.5. Summing across counties leads to a decrease of $800 million in the demand for equity by the investors that we observe over the six-month period following the election.[34]

What about the aggregate demand for equity? We only observe a fraction of the retirement investors and wealth in each county. To scale our estimate to a measure for all retirement investors, we scale up the demand in each county by multiplying by the share of the population that we observe in that county (based on US Census data) times the national share of households that are retirement investors (from the 2016 SCF). Again, summing across counties, this crude

[33] Individual equity is classified as international if it is traded on an international exchange or if the company is incorporated outside the US. Equity funds are classified as domestic or international based on their product description.

[34] We find a nearly identical number in an alternative calculation that allows a relationship between wealth and party affiliation. We estimate the linear relationship between wealth and party affiliation based on country-level data and assume the same relationship at the individual level.

estimate implies that the demand for equity declined by $1.36 billion among retirement investors in the US. Finally, while we do not know much about the political affiliations of very wealthy households, if we simply scale this number up by the inverse of the share of the investable wealth in the US held by retirement investors in the 2016 SCF, this back-of-the-envelope calculation implies that the election cause a decrease in the net demand for equity of $3.33 billion dollars in six months following the election. This is obviously a very rough estimate.

IX. Concluding Discussion

We study the unexpected outcome of the 2016 US election as a public signal that is widely-observed, well-measured, and for which we have ex ante measures of how different investors should interpret this signal given their identities, or models that they use to interpret the world. We find that people with different political affiliations update their beliefs and rebalance their portfolios differentially in response to a common public signal. A correlation between differences in beliefs and differences in behavior may not be causal, and an important contribution of our analysis comes from our controls for an extensive array of other factors that affect rebalancing differentially such as through the real effects of changes in economic policies on incomes or local risk exposures. Consistent with dynamic models of heterogeneous beliefs, we show that the heterogeneity in updating across households lead to an increase in trading volume.

Reported beliefs data also suggest that Democrats indeed became more pessimistic about the US economy following the election and that Republicans became more optimistic. In contrast, people do not report the same polarized expectations about their own personal situations. Relatedly, our retirement savings data also do not show differences in saving rates across households with different affiliations.

Finally, while we find small average differences in rebalancing between Democrats and Republicans following the election, these small averages are driven by very large rebalancing by a small share of investors. Across both investors and accounts, the trading responses we find are consistent with the inertia generally found for typical American retirement investors. We also find that differences in rebalancing persist over many months after the election, which is consistent with investors being aware that there is disagreement and that prices do not rapidly incorporate their own views.

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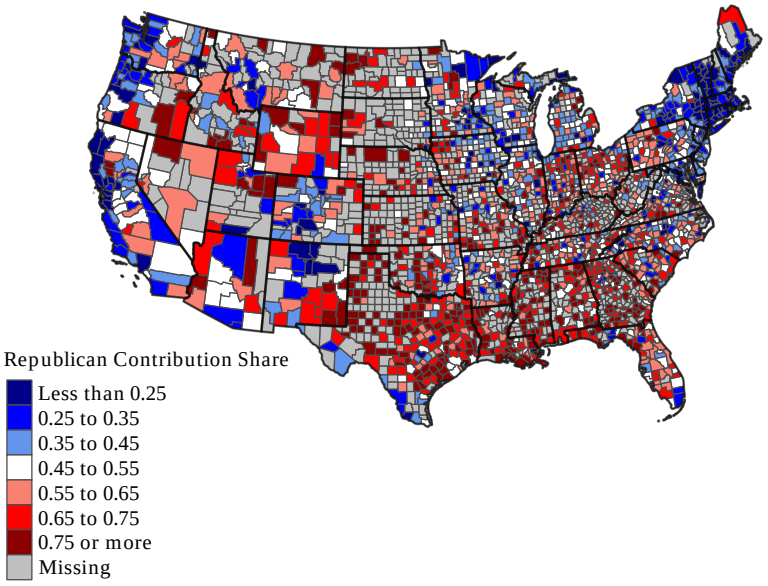
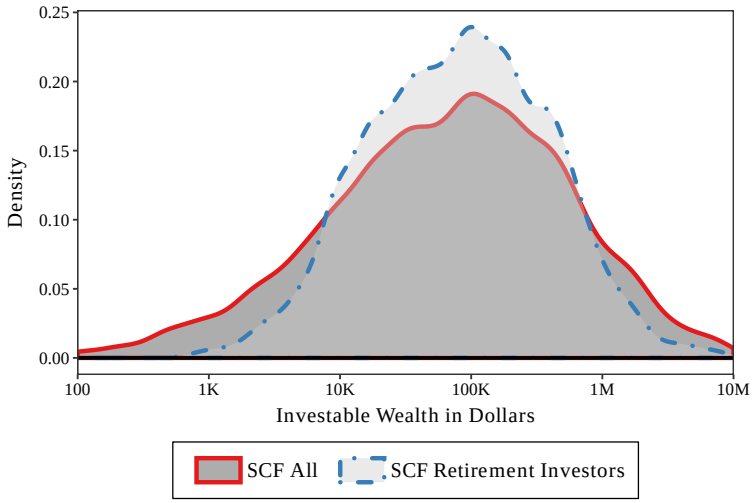
Figure 1: Map of Republican Contribution Share



Notes: This figure shows the geographical distribution of the Republican contribution share over the 2015-2016 election cycle. The Republican contribution share is defined as the number of individuals with campaign donations to the main Republican party and candidate committees as a fraction of the total number of individuals with campaign donations to the main committees of either party. We include zip codes with at least 10 donors and aggregate to the county level for geographical illustration.

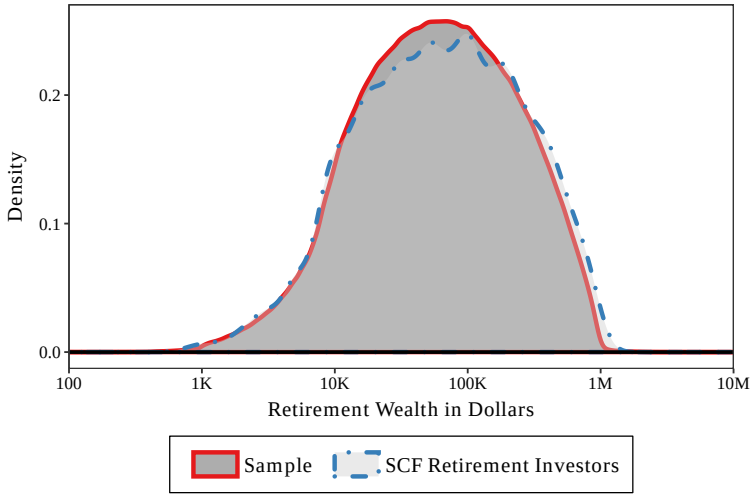
Figure 2: SCF Wealth Distribution in Population and RI Subsample



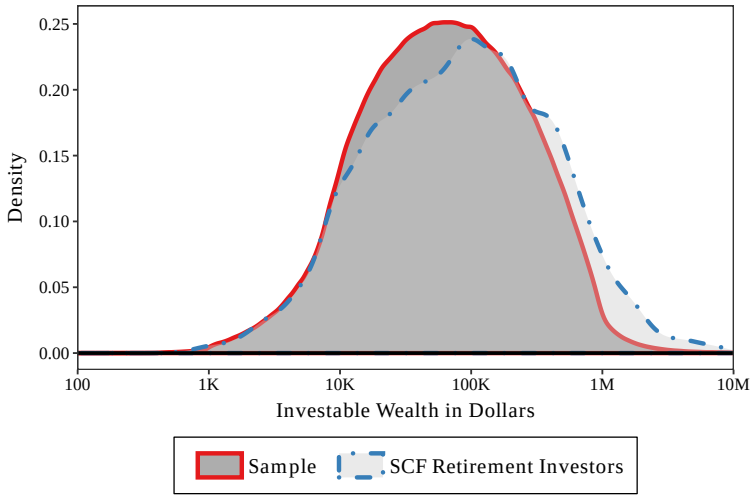
Notes: This figure plots the distribution of investable wealth (conditional on positive) in the full population and in the subsample of retirement investors (RIs) in the public version of the 2016 Survey of Consumer Finances (SCF). Investable wealth is defined as the sum of money market funds, certificate of deposits, stocks, bonds, pooled investment funds, retirement accounts, and other managed assets. To construct the RI subsample, we select households with age of the head between 25 and 85 and with quasi-liquid retirement wealth, and run quantile regressions of log retirement wealth on a third order polynomial in age. We use the fitted 10th and 90th percentiles by age as retirement wealth cutoffs.

Figure 3: Wealth Distribution in Comparison to SCF

(a) Retirement Wealth



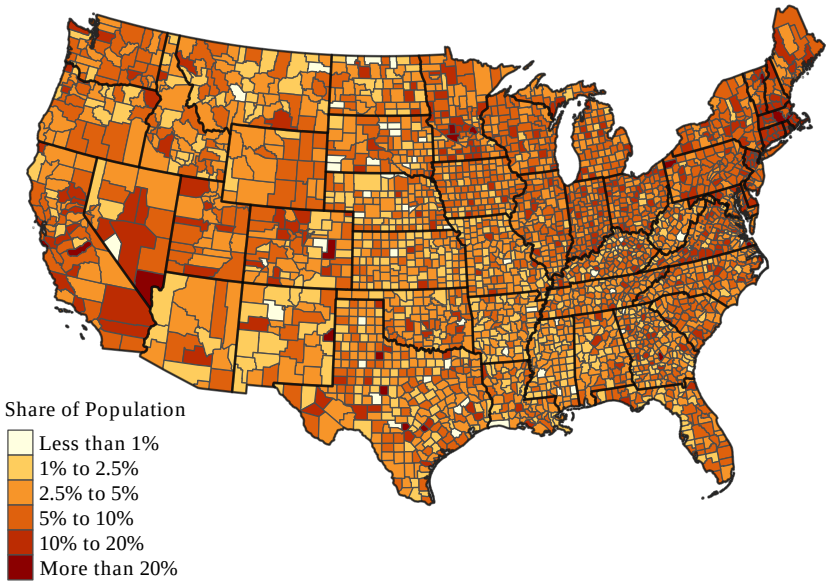
(b) Total Investable Wealth



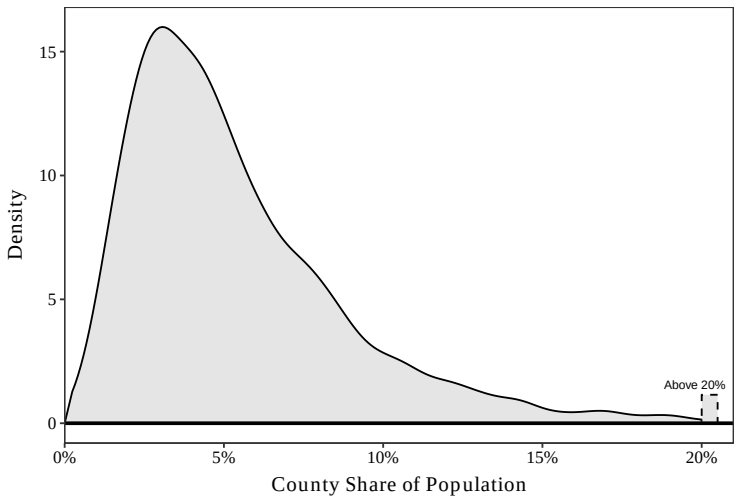
Notes: These figures plot the distributions of retirement wealth and total investable wealth, respectively, in our sample compared to the equivalent sample of RIs in the public version of the 2016 Survey of Consumer Finances (SCF). We select households with quasi-liquid retirement wealth and run quantile regressions of log retirement wealth on a third order polynomial in age for households in the 2016 SCF. We use the fitted 10th and 90th percentiles by age as retirement wealth cutoffs in both datasets. We include households with age of the head between 25 and 85 and filter our sample on households that have portfolio holdings between 20% and 500% of initial assets in every month in the sample.

Figure 4: Household Coverage in Sample

(a) Map of Household Coverage in Sample (Scrambled)



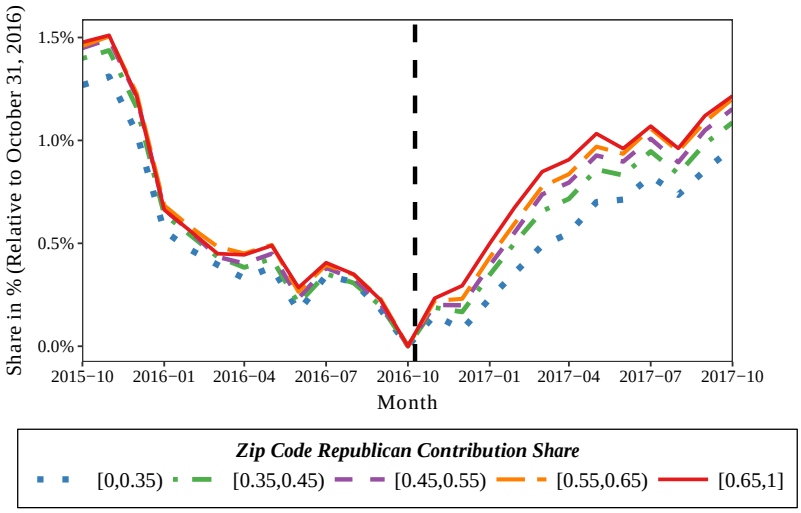
(b) Distribution of Household Coverage by County



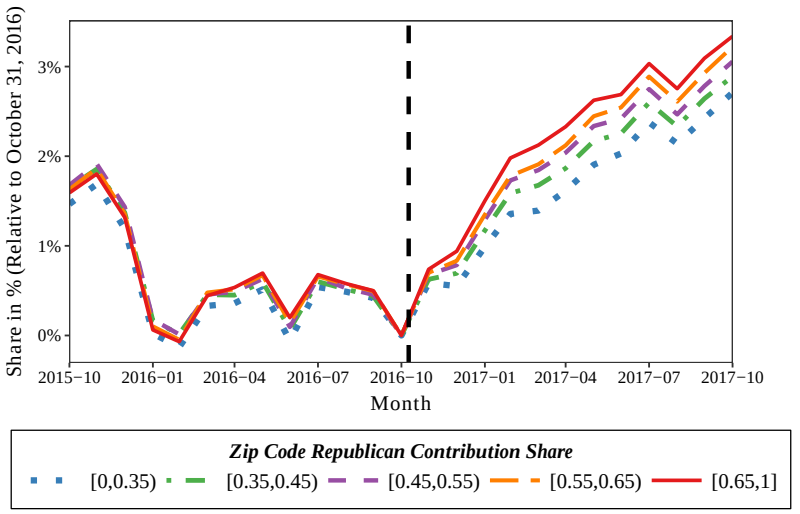
Notes: Panel (a) shows the geographical distribution of household coverage in our sample of RIs relative to the population total number of households by county from the 2010 US Census (HSD01). We calculate the share for every county in the US and then randomly reallocate the shares across counties in each state for confidentiality reasons. Panel (b) plots the density of household coverage by county in our sample of RIs as a fraction of the population total number of households by county.

Figure 5: Portfolio Equity Share by Zip Code Party Affiliation

(a) Equity Share, Equally Weighted Across Households



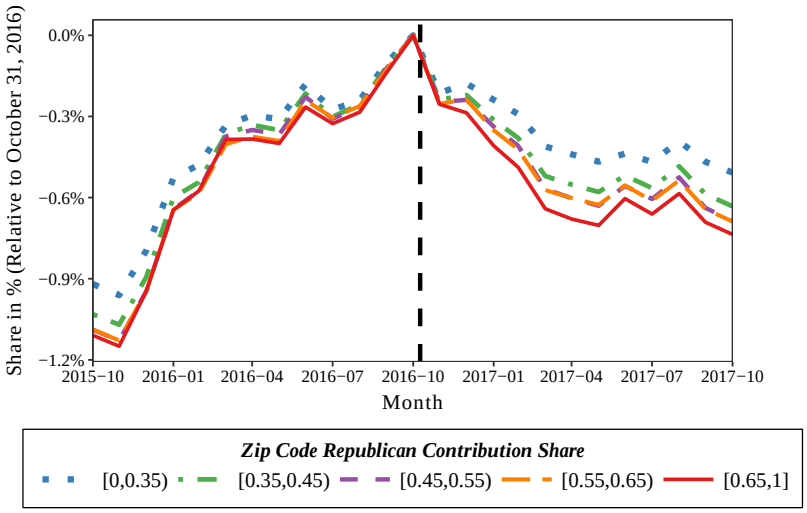
(b) Equity Share, Value Weighted Across Households



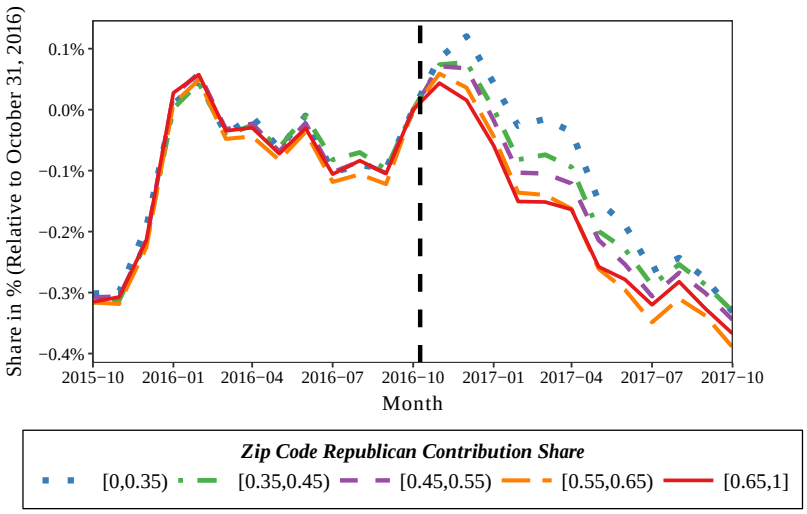
Notes: These graphs plot the average equity share of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. The sample is our full set of RI households. Average shares by group are equally weighted and asset weighted across households, respectively.

Figure 6: Portfolio Bond Shares by Zip Code Party Affiliation

(a) Long-Term Bond Share (Equally Weighted Across Households)



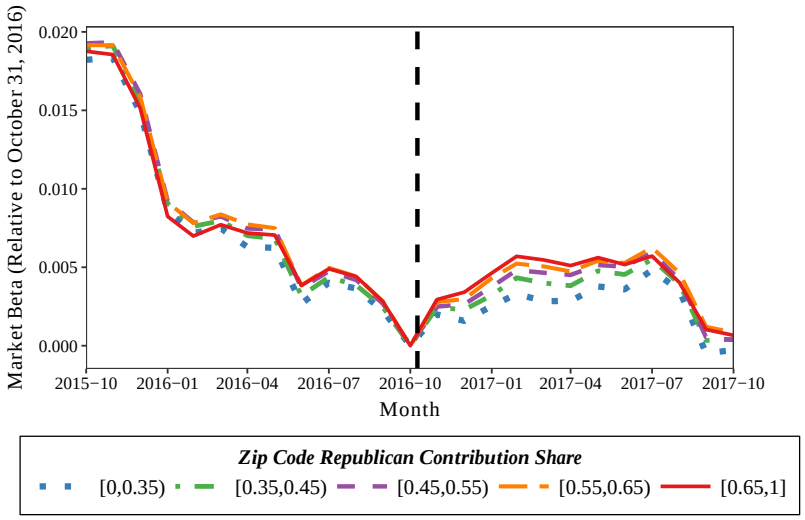
(b) Short-Term Bond Share (Equally Weighted Across Households)



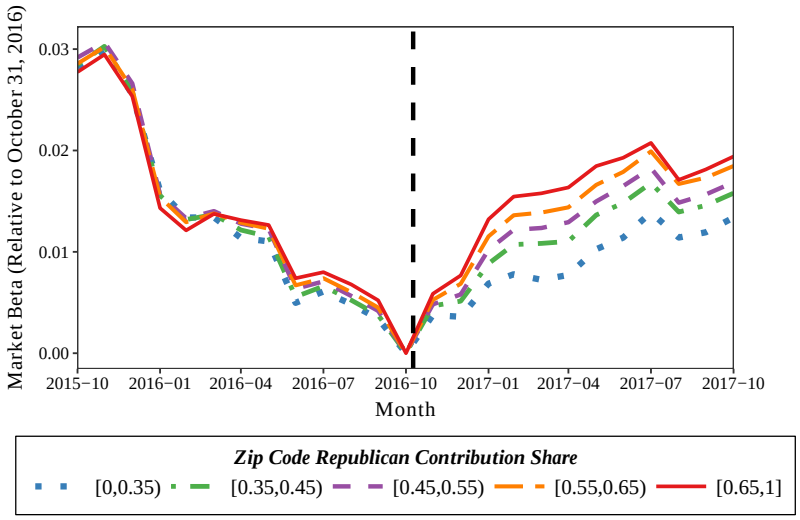
Notes: These graphs plot the average long-term bond share and short-term bond share, respectively, of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The portfolio long-term bond share is defined as the sum of individual long-term bonds, pure bond funds, and the bond portion of hybrid funds, relative to total portfolio assets. The portfolio short-term bond share is defined as the sum of money market funds, individual short-term bonds, and CDs, relative to total portfolio assets. The sample is our full set of RI households. Average shares by group are equally weighted across households.

Figure 7: Portfolio Market Beta by Zip Code Party Affiliation

(a) Market Beta for Full Sample



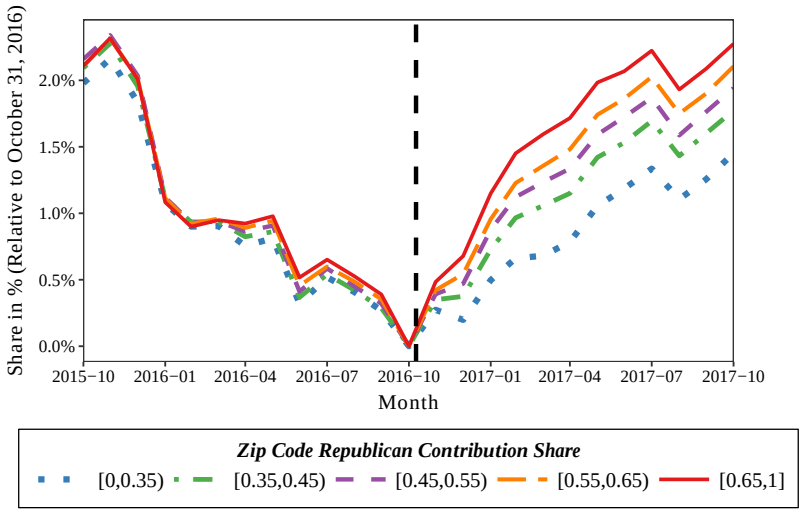
(b) Market Beta for Previously Active Sample



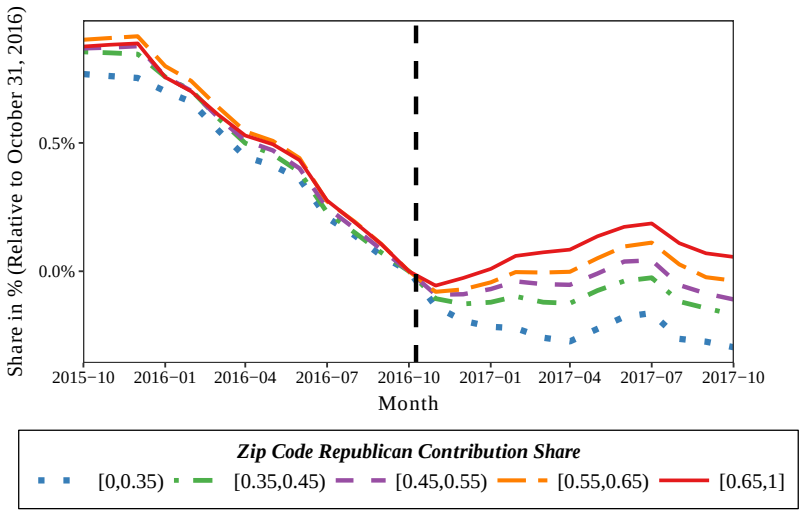
Notes: These graphs plot the average market beta of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the beta by the end of October 2016. Market betas are obtained by regressing monthly fund or security excess returns on the value-weighted CRSP market excess return over the period 2007–2017 with at least 24 observations. We calculate portfolio betas for households that have at least 75% of risky assets in assets with observed betas. The samples are our full set of RI households and the subset of RI households with active trades in the prior year, respectively. Portfolio betas are equally weighted across households.

Figure 8: Active Equity Rebalancing by Zip Code Political Affiliation

(a) Equity Share for Previously Active Sample



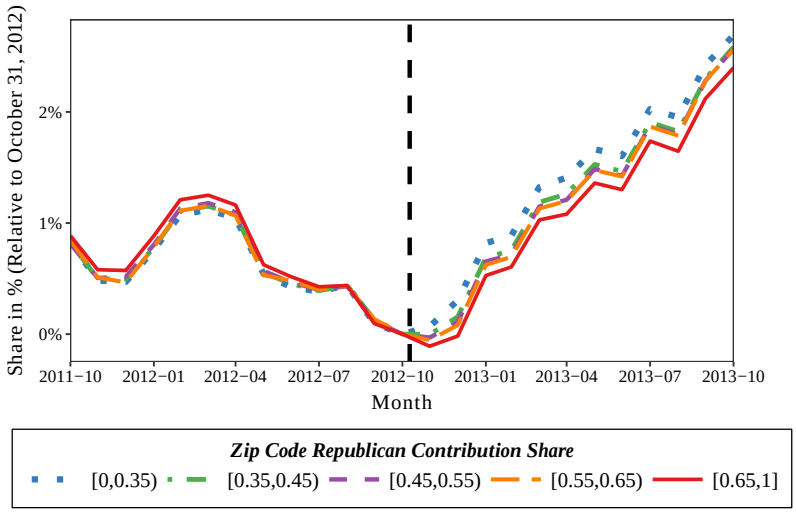
(b) Equity Share of Price-Constant Portfolios



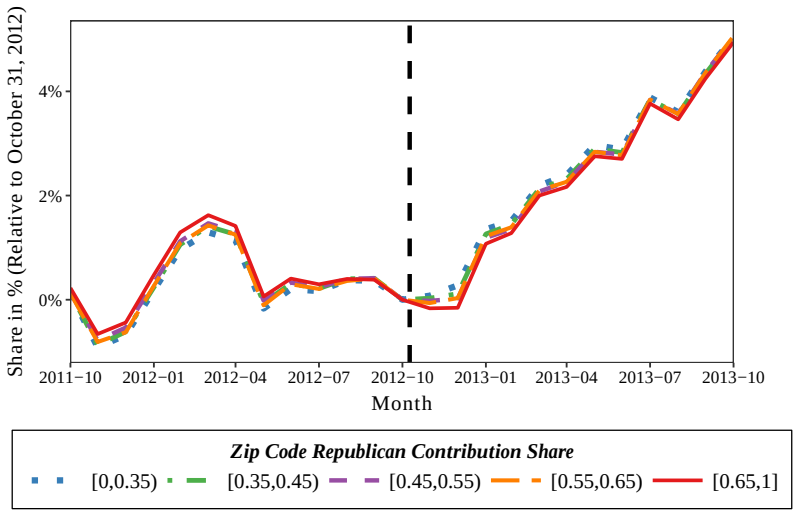
Notes: In the upper panel, we plot the average equity share of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. The sample is the subset of RI households with active trades or exchanges in the prior year. In the lower panel, we plot the average equity share of hypothetical price-constant household portfolios in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The equity share is calculated for a hypothetical portfolio that is insensitive to passive appreciations. In particular, we start with initial household holdings as of October 2015, assume there are no price changes, and keep track of cumulative monthly dollar inflows and outflows at the asset level. For each month we then calculate the equity share from this hypothetical portfolio. Average shares by group are equally weighted across households.

Figure 9: Portfolio Equity Share by Zip Code Party Affiliation (2012 Election)

(a) Equity Share, Equally Weighted Across Households



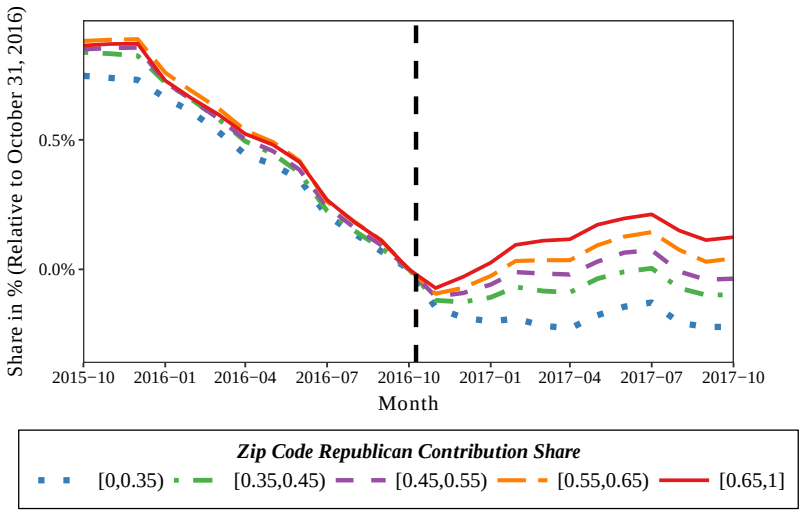
(b) Equity Share, Value Weighted Across Households



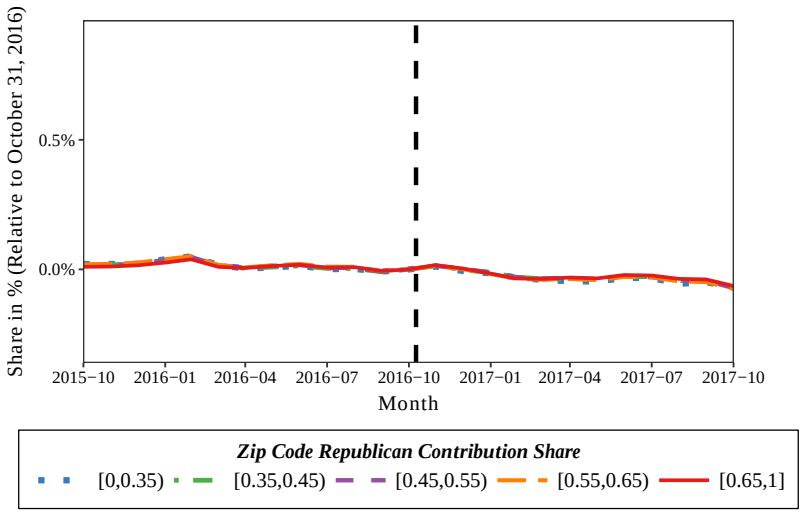
Notes: These graphs plot the average equity share of household portfolio assets in five groups by zip code party affiliation measured from political contributions for the 2012 presidential election, relative to the share by the end of October 2012. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. The sample is the full set of RI households using our same procedure applied to the 2012 election. Average shares by group are equally weighted and asset weighted across households, respectively.

Figure 10: Equity Share of Price-Constant Portfolios by Zip Code Party Affiliation, Small Versus Large Changes

(a) Restricting to Cumulative Changes of at Least 10%



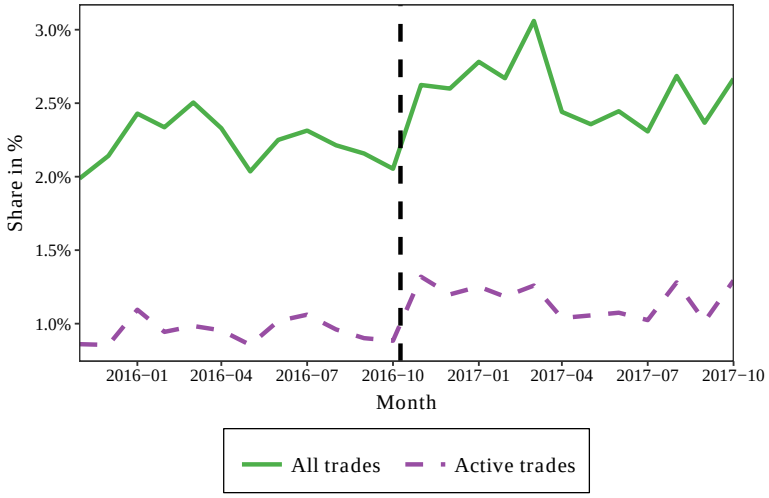
(b) Restricting to Cumulative Changes of at Most 10%



Notes: These graphs plot the average equity share of hypothetical price-constant household portfolios in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The equity share is calculated for a hypothetical portfolio that is insensitive to passive appreciations. In particular, we start with initial household holdings as of October 2015, assume there are no price changes, and keep track of cumulative monthly dollar inflows and outflows at the asset level. For each month we then calculate the equity share from this hypothetical portfolio. Average shares by group are equally weighted across households. In panel (a), we only include cumulative changes relative to October 2016 of at least 10%, and set portfolio changes to zero otherwise. In panel (b), we only include cumulative changes of at most 10%. Average shares by group are equally weighted across households.

Figure 11: Trading Volume Relative to Initial Balance

(a) All and Active Trading Volume for Aggregate Sample



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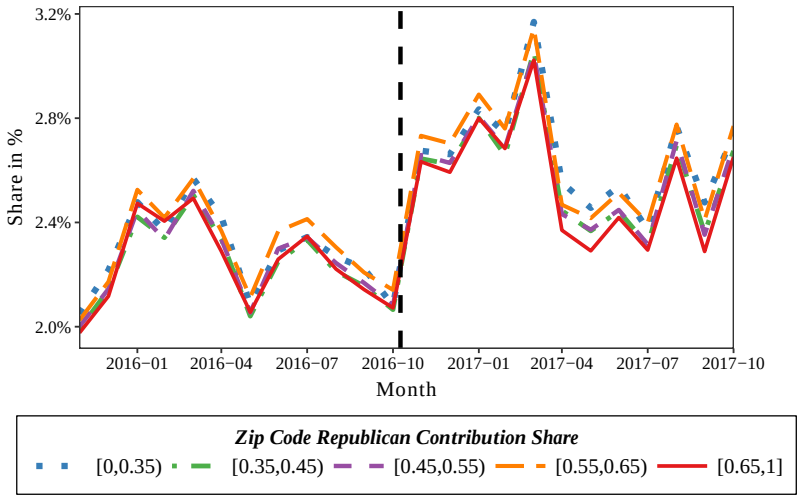
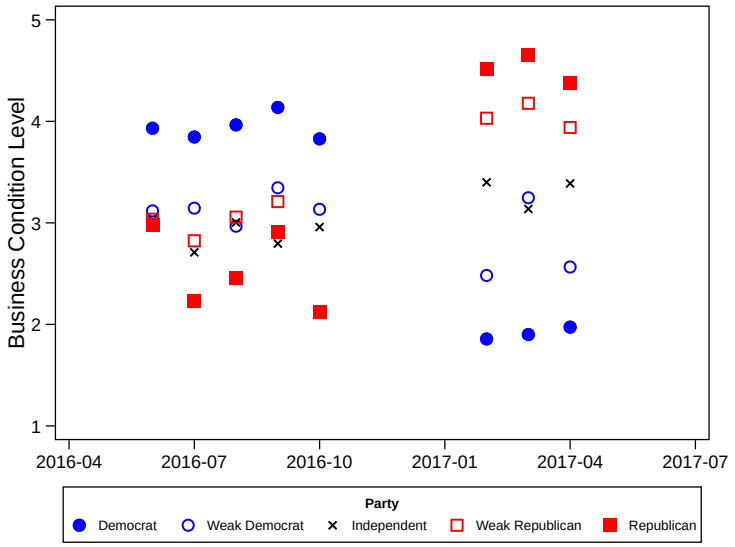
(b) Trading Volume by Zip Code Political Affiliation



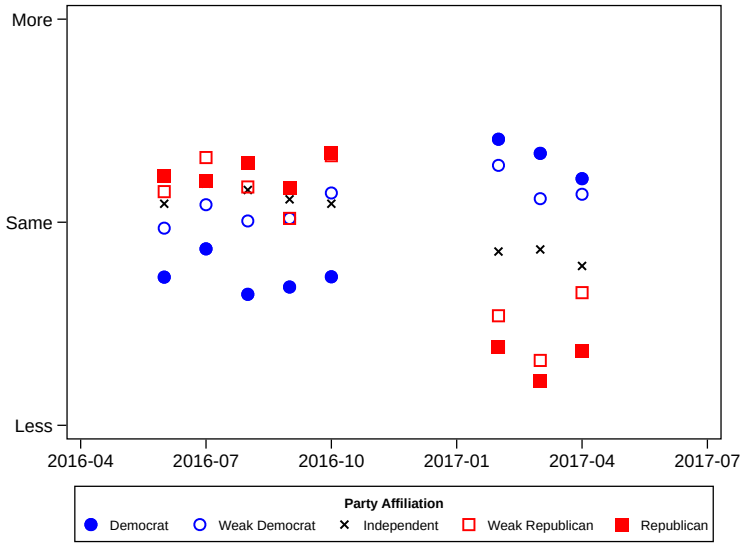
Notes: This figure plots average trading volume as a fraction of initial balance, where volume is defined as one half times the sum of the absolute values of buy and sell transactions. The upper panel plots the volume of all trades and of active trades or exchanges. The lower panel plots the volume of all trades in five groups by zip code party affiliation measured from political contributions.

Figure 12: Survey Expectations on Future State of the Economy

(a) Expected Business Conditions in 5 Years



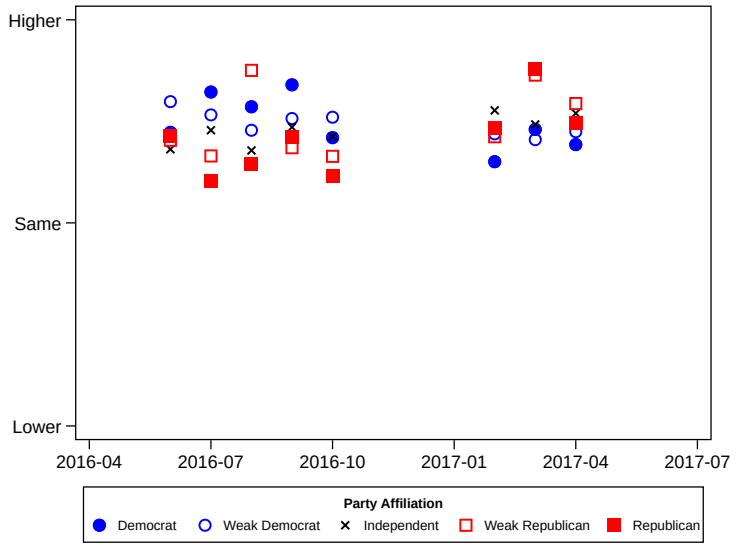
(b) Expectations on Unemployment



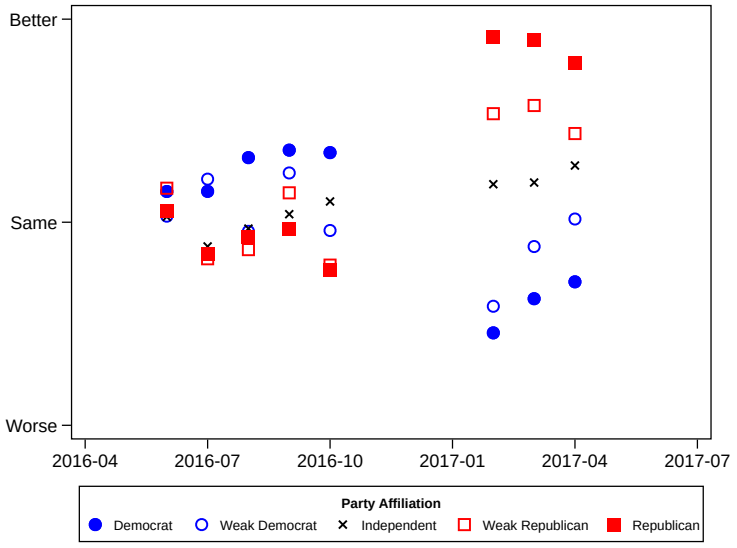
Notes: These graphs plot survey expectations on the future state of the economy by political affiliation. The data is from the University of Michigan Survey of Consumer Confidence (SCC). The upper panel shows the average response to the question "Looking ahead, which would you say is more likely – that in the country as a whole we'll have continuous good times during the next 5 years or so, or that we will have periods of widespread unempoyment or depression, or what?" Responses range from 1 (worst) to 5 (best). The lower panel shows expectations on unemployment in a year relative to the current unemployment rate.

Figure 13: Survey Expectations on Own Economic Circumstances Versus Overall Conditions

(a) Expected Own Income in 1 Year

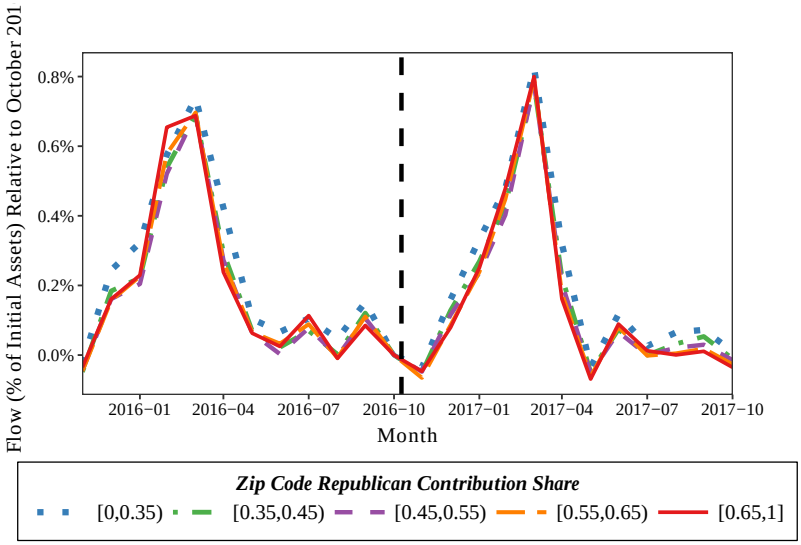


(b) Expected Business Conditions in 1 Year



Notes: These graphs plot survey expectations on the future state of own economic circumstances and the overall economy by political affiliation. The data is from the University of Michigan Survey of Consumer Confidence (SCC). The upper panel shows the average response to the question "During the next 12 months, do you expect your income to be higher or lower than during the past year?" The lower panel shows expectations on whether business conditions overall will be better or worse in a year.

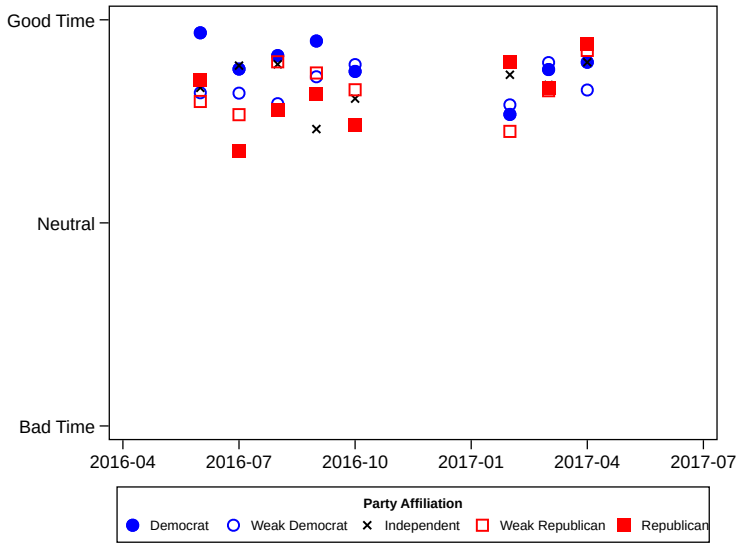
Figure 14: Household Net Flow Rates by Zip Code Party Affiliation



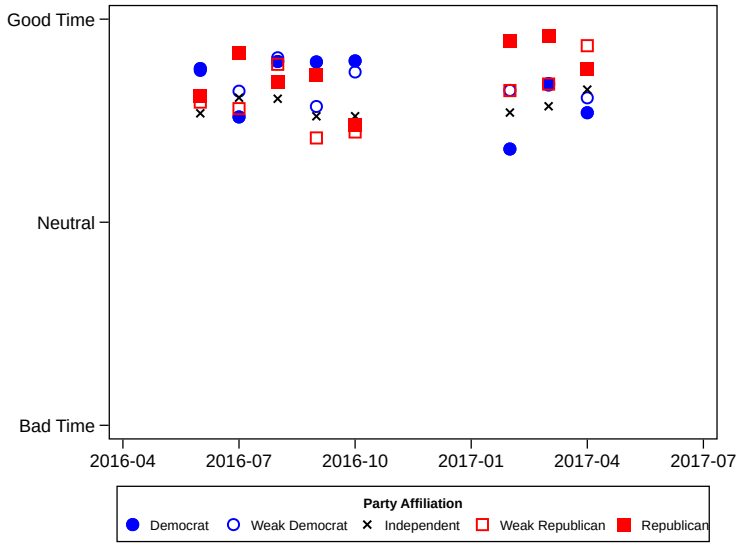
Notes: This graph plots average net flows as a fraction of initial financial wealth in five groups by zip code party affiliation measured from political contributions, relative to the savings rate in October 2016. Net flows are defined as total deposits minus withdrawals. The sample is our full set of RI households. Average flow rates by group are equally weighted across households.

Figure 15: Survey Evidence on Expenditures

(a) Conditions for Buying Major Household Items



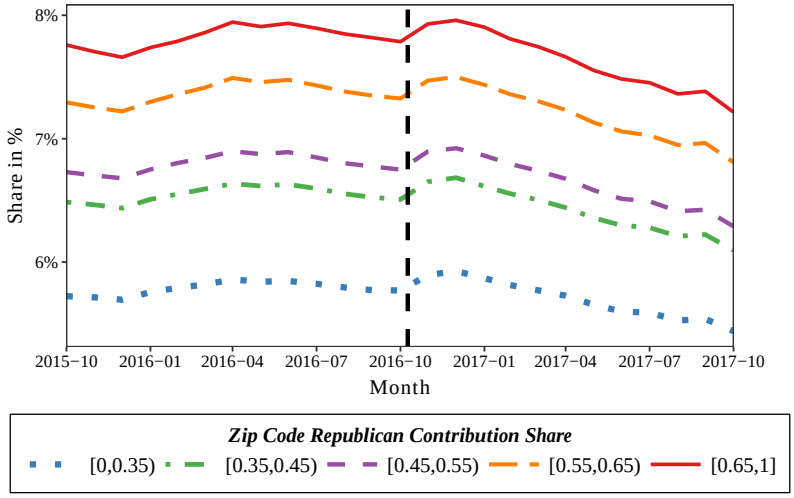
(b) Conditions for Buying a House



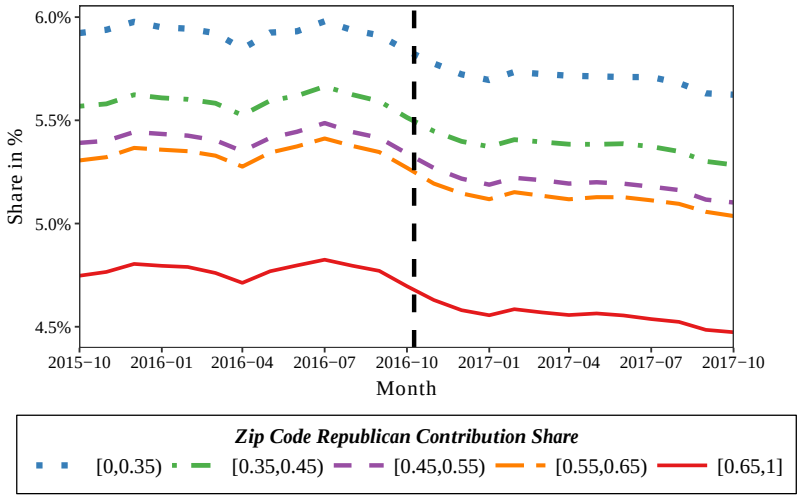
Notes: These graphs plot survey evidence on spending behavior by political affiliation. The data is from the University of Michigan Survey of Consumer Confidence (SCC). The upper panel shows the average response to the question "Generally speaking, do you think now is a good or a bad time for people to buy major household items?" The lower panel shows the response to the same question on buying a house.

Figure 16: Portfolio Share of Equity in Winning and Losing Sectors by Zip Code Party Affiliation

(a) Share of Equity in Winning Sectors



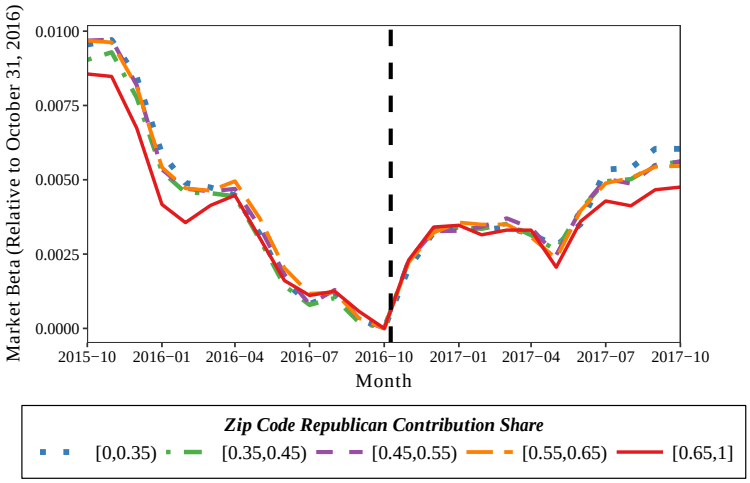
(b) Share of Equity in Losing Sectors



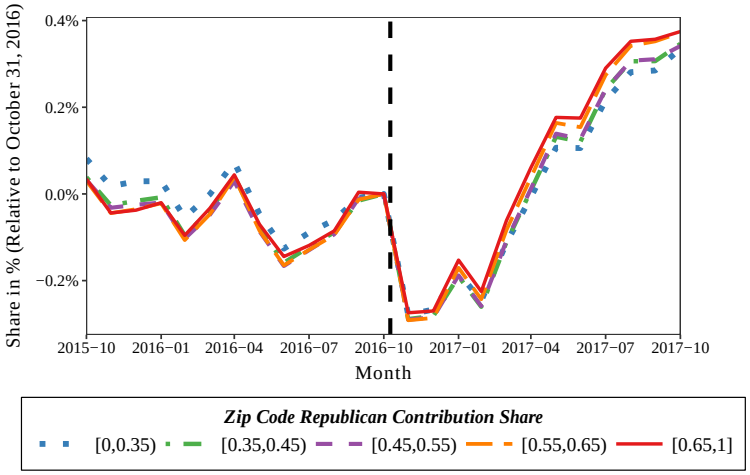
Notes: These graphs plot plots the average share of household equity and alternative products in winning and losing sectors, respectively, in five groups by zip code party affiliation measured from political contributions. Winning sectors are defined as the top five sectors based on stock market returns from the election date until the end of 2016: financials, telecommunication services, energy, materials, and industrials. Losing sectors are defined as the bottom five sectors based on stock market returns from the election date until the end of 2016: consumer staples, utilities, information technology, health care, and real estate. Consumer discretionary is in the middle and is considered neither. The sample is our full set of RI households. Average shares by group are equally weighted across households.

Figure 17: Portfolio Equity Composition by Zip Code Party Affiliation

(a) Market Beta of Equity by Zip Code Party Affiliation



(b) Portfolio International Share of Equity by Zip Code Party Affiliation



Notes: These graphs plot the average market beta of household equity assets and the average international share of household equity products, respectively, in five groups by zip code party affiliation measured from political contributions, relative to the end of October 2016. Market betas are obtained by regressing monthly fund or security excess returns on the value-weighted CRSP market excess return over the period 2007–2017 with at least 24 observations. We calculate equity betas for households that have equity securities or funds and that have at least 75% of equity products in assets with observed betas. The portfolio international share of equity is defined as the sum of international equity securities and funds relative to total equity products. The sample is our full set of households. Averages by group are equally weighted across households.

Table 1: Summary Statistics on Portfolios of Retirement Investors Sample

			Republican contribution share				
	All	SCF	[0,0.35)	[0.35,0.45)	[0.45,0.55)	[0.55,0.65)	[0.65,1]
Share of sample	100.0%		40.8%	16.4%	13.5%	11.3%	8.9%
Average wealth (in 1,000 USD)							
Total investable wealth	156.5	300.5	166.8	156.6	154.9	159.8	148.2
Retirement wealth	126.8	140.8	128.9	129.8	128.9	131.9	124.8
Median wealth (in 1,000 USD)							
Total investable wealth	63.2	87.0	64.7	65.1	64.7	66.9	61.5
Retirement wealth	59.3	64.0	59.7	61.2	61.2	63.2	58.8
Average product shares							
Risky funds and securities	90.0%	93.2%	89.1%	90.2%	90.4%	90.4%	90.7%
Risky securities only	7.3%		7.0%	7.3%	7.4%	7.8%	7.7%
Riskless products	9.3%	4.3%	10.1%	9.1%	8.9%	8.9%	8.6%
Other assets	0.7%	2.6%	0.7%	0.7%	0.7%	0.7%	0.7%
Average allocation							
Equity share	69.3%	51.2%	69.7%	69.4%	69.2%	69.2%	68.7%
Long-term bond share	20.6%	44.3%	19.4%	20.7%	21.1%	21.2%	21.9%
Short-term bond share	9.4%	4.5%	10.2%	9.2%	9.0%	9.0%	8.7%
Market beta	0.751		0.752	0.751	0.751	0.752	0.751
Average allocation (weighted)							
Equity share	66.3%	58.4%	66.8%	66.4%	66.0%	65.6%	65.2%
Long-term bond share	21.9%	35.0%	20.7%	22.2%	22.5%	22.5%	23.5%
Short-term bond share	10.7%	6.5%	11.4%	10.3%	10.5%	10.8%	10.3%
Market beta	0.716		0.719	0.717	0.714	0.710	0.709

Notes: This table presents summary statistics on wealth and portfolio allocations of our retirement investors (RI) sample as of October 31, 2016, for the full sample and for five groups by zip code party affiliation measured from political contributions. We select households with quasi-liquid retirement wealth and run quantile regressions of log retirement wealth on a third order polynomial in age for households in the 2016 Survey of Consumer Finances (SCF). We use the fitted 10th and 90th percentiles by age as retirement wealth cutoffs at the initial date. We include households with age of the head between 25 and 85 years and create a balanced panel by filtering on households that have portfolio holdings between 20% and 500% of initial assets over the sample period from October 31, 2015 to October 31, 2017. All funds and individual securities are characterized as equity, long-term bonds, short-term bonds, or alternative assets. Mixed funds are subdivided into equity and long-term bonds. Market betas are obtained by regressing monthly fund or security excess returns on the value-weighted CRSP market excess return over the period 2007–2017 with at least 24 observations. We calculate portfolio betas for households that have at least 75% of risky assets in assets with observed betas.

Table 2: Summary Statistics on Demographics of Retirement Investors Sample

			Republican contribution share				
	All	SCF	[0,0.35)	[0.35,0.45)	[0.45,0.55)	[0.55,0.65)	[0.65,1]
Percentage of RI sample with observed							
Gender	94.4%		94.6%	94.8%	94.7%	94.8%	94.3%
Marital status	86.9%		85.4%	87.3%	87.9%	87.9%	88.8%
Personal assets	39.3%		42.4%	39.5%	38.7%	39.0%	36.1%
Brokerage assets	16.4%		18.7%	16.4%	15.0%	16.1%	14.2%
Employer industry	62.1%		59.8%	62.4%	62.8%	62.7%	64.2%
Labor income in 2015	48.7%		44.9%	50.0%	50.4%	51.0%	52.8%
Income growth over 2016-17	33.3%		29.8%	34.2%	34.4%	35.5%	37.5%
Active trade in prior year	29.5%		30.4%	30.3%	29.8%	30.5%	28.6%
Average age in years	49.8	51.9	48.9	50.1	50.5	50.7	50.7
% Female	43.3%	20.5%	46.2%	44.0%	42.6%	40.6%	37.6%
% Married	74.8%	68.5%	71.6%	75.5%	76.6%	78.3%	79.4%
Labor income in 2016 (in 1,000 USD)							
Average	101.6	100.2	113.9	100.0	97.2	99.9	93.2
Median	78.0	75.9	83.5	79.0	77.2	79.0	75.7
10th percentile	32.4	29.4	32.4	32.6	32.3	33.3	33.4
90th percentile	180.0	177.2	204.1	178.3	171.3	176.1	161.4

Notes: This table presents summary statistics on demographics and composition of our retirement investors (RI) sample as of October 31, 2016, for the full sample and for five groups by zip code party affiliation measured from political contributions. We select households with quasi-liquid retirement wealth and run quantile regressions of log retirement wealth on a third order polynomial in age for households in the 2016 Survey of Consumer Finances (SCF). We use the fitted 10th and 90th percentiles by age as retirement wealth cutoffs at the initial date. We include households with age of the head between 25 and 85 years and create a balanced panel by filtering on households that have portfolio holdings between 20% and 500% of initial assets over the sample period from October 31, 2015 to October 31, 2017.

Table 3: Regressions of Equity Share on Likely Political Affiliation

	Portfolio equity share (in %), all households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Post 1 quarter	0.510	0.521	0.516	0.357	0.385	0.351	0.274
	(0.019)	(0.019)	(0.024)	(0.028)	(0.025)	(0.025)	(0.029)
Zip code Republican contribution share × Post 2 quarters	0.727	0.811	0.749	0.623	0.654	0.589	0.440
	(0.025)	(0.024)	(0.031)	(0.035)	(0.030)	(0.032)	(0.036)
Zip code Republican contribution share × Post 3 quarters	0.540	0.679	0.671	0.657	0.604	0.655	0.502
	(0.035)	(0.029)	(0.035)	(0.041)	(0.037)	(0.038)	(0.040)
Zip code Republican contribution share × Post 4 quarters	0.561	0.810	0.980	0.730	0.656	0.688	0.571
	(0.036)	(0.032)	(0.040)	(0.044)	(0.041)	(0.043)	(0.045)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2015 (2nd order)				Y			
Labor income growth (2016-17)				Y			
Urbanicity					Y		
Zip code house price growth (2010-15, 2015-17)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	90.9%	90.9%	55.8%	25.3%	83.9%	90.6%	56.7%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2015, income growth over 2016–2017 (for the subset available as of June 2018), urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2010–2015 and 2015–2017 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table 4: Regressions of Equity Share on Likely Political Affiliation for 2012 Election Cycle

	Portfolio equity share (in %), all households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Post 1 quarter	-0.515 (0.025)	-0.413 (0.024)	-0.435 (0.031)	-0.488 (0.033)	-0.183 (0.022)	-0.050 (0.025)	-0.032 (0.027)
Zip code Republican contribution share × Post 2 quarters	-0.588 (0.030)	-0.414 (0.027)	-0.387 (0.035)	-0.422 (0.040)	-0.161 (0.027)	-0.019 (0.031)	-0.008 (0.034)
Zip code Republican contribution share × Post 3 quarters	-0.529 (0.036)	-0.335 (0.033)	-0.200 (0.040)	-0.230 (0.048)	-0.063 (0.033)	0.122 (0.036)	0.132 (0.039)
Zip code Republican contribution share × Post 4 quarters	-0.531 (0.041)	-0.272 (0.037)	-0.152 (0.044)	-0.173 (0.052)	0.032 (0.038)	0.233 (0.041)	0.227 (0.045)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2011 (2nd order)				Y			
Labor income growth (2012-13)				Y			
Urbanicity					Y		
Zip code house price growth (2006-11, 2011-13)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	83.3%	83.3%	54.3%	31.8%	77.2%	83.0%	54.5%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The sample covers the 2012 presidential election. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2011. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2011, income growth over 2012–2013, urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2006–2011 and 2011–2013 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is the full set of RI households constructed using our same procedure four years earlier. Standard errors are clustered at the zip code level.

Table 5: Regressions of Equity Share on Likely Political Affiliation and Gender

	Portfolio equity share (in %)			
	(1)	(2)	(3)	(4)
Zip code Republican contribution share × Post 1 quarter	0.519	0.551	0.644	0.678
	(0.019)	(0.019)	(0.023)	(0.025)
Zip code Republican contribution share × Post 2 quarters	0.826	0.835	1.000	1.042
	(0.024)	(0.025)	(0.030)	(0.033)
Zip code Republican contribution share × Post 3 quarters	0.695	0.682	0.831	0.879
	(0.029)	(0.030)	(0.035)	(0.039)
Zip code Republican contribution share × Post 4 quarters	0.826	0.821	0.929	1.002
	(0.032)	(0.033)	(0.039)	(0.042)
Female × Post 1 quarter		-0.080	0.000	-0.011
		(0.006)	(0.012)	(0.012)
Female × Post 2 quarters		-0.194	-0.049	-0.067
		(0.008)	(0.015)	(0.015)
Female × Post 3 quarters		-0.275	-0.144	-0.162
		(0.008)	(0.017)	(0.017)
Female × Post 4 quarters		-0.248	-0.154	-0.169
		(0.009)	(0.020)	(0.019)
Female × Zip code Republican contribution share × Post 1 quarter			-0.213	-0.179
			(0.031)	(0.031)
Female × Zip code Republican contribution share × Post 2 quarters			-0.383	-0.332
			(0.037)	(0.037)
Female × Zip code Republican contribution share × Post 3 quarters			-0.345	-0.296
			(0.042)	(0.042)
Female × Zip code Republican contribution share × Post 4 quarters			-0.250	-0.208
			(0.047)	(0.047)
Quarterly controls				
Initial equity share (2nd order)	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y
Controls × Republican share				Y
Percentage of RI sample	90.9%	86.1%	86.1%	86.1%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, gender, and the interaction between gender and the zip code Republican contribution share, all interacted by quarterly dummies. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table 6: Regressions of Equity Share on Likely Political Affiliation for Active Investors

	Portfolio equity share (in %), active households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Post 1 quarter	1.189	1.069	0.968	1.007	0.786	0.681	0.624
	(0.036)	(0.036)	(0.053)	(0.078)	(0.048)	(0.055)	(0.089)
Zip code Republican contribution share × Post 2 quarters	1.791	1.655	1.494	1.556	1.315	1.171	1.037
	(0.045)	(0.044)	(0.065)	(0.095)	(0.057)	(0.068)	(0.106)
Zip code Republican contribution share × Post 3 quarters	1.769	1.588	1.404	1.624	1.275	1.294	1.080
	(0.055)	(0.050)	(0.074)	(0.105)	(0.066)	(0.078)	(0.118)
Zip code Republican contribution share × Post 4 quarters	1.680	1.555	1.562	1.646	1.297	1.379	1.187
	(0.062)	(0.056)	(0.080)	(0.112)	(0.072)	(0.083)	(0.128)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2015 (2nd order)				Y			
Labor income growth (2016-17)				Y			
Urbanicity					Y		
Zip code house price growth (2010-15, 2015-17)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	27.5%	27.5%	12.8%	5.8%	25.6%	27.5%	13.0%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2015, income growth over 2016–2017 (for the subset available as of June 2018), urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2010–2015 and 2015–2017 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is the subset of households with active trades or exchanges in the prior year. Standard errors are clustered at the zip code level.

Table 7: Regressions of Equity Share on Likely Political Affiliation, Heterogeneous Treatment Effects

	Portfolio equity share (in %), all households				
	(1)	(2)	(3)	(4)	(5)
Zip code Republican contribution share	0.381	1.020	0.808	0.812	0.426
× Post 2 quarters	(0.024)	(0.045)	(0.024)	(0.045)	(0.045)
Zip code Republican contribution share	1.453				1.457
× Post 2 quarters × Active before	(0.025)				(0.025)
Zip code Republican contribution share		-0.557		0.065	-0.030
× Post 2 quarters × Age $<$ 35		(0.064)		(0.068)	(0.068)
Zip code Republican contribution share		-0.353		0.019	0.014
× Post 2 quarters × Age 35-44		(0.053)		(0.057)	(0.057)
Zip code Republican contribution share		-0.039		0.135	0.168
× Post 2 quarters × Age 45-54		(0.050)		(0.052)	(0.052)
Zip code Republican contribution share		-0.277		-0.423	-0.676
× Post 2 quarters × Age $>$ 64		(0.063)		(0.065)	(0.065)
Zip code Republican contribution share			0.191	0.218	0.067
× Post 2 quarters × Log initial wealth			(0.014)	(0.015)	(0.015)
Zip code Republican contribution share			-0.760	-0.884	-0.929
× Post 2 quarters × Initial equity share (pct)			(0.095)	(0.103)	(0.102)
Quarterly controls					
Initial equity share (2nd order)	Y	Y	Y	Y	Y
Age bucket	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y
Percentage of RI sample	90.9%	90.9%	90.9%	90.9%	90.9%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies and demographic variables. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. To estimate heterogeneous treatment effects, we interact the zip code Republican contribution share each quarter by a dummy for active trading in the preceding year, 10-year age bins, log initial wealth (demeaned), and initial equity share (demeaned). We report the results for six months after the election, relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, 10-year age bins, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table 8: Equity Share Regressions on Subsamples

	Portfolio equity share (in %)						
	All (1)	Advised account (2)	Single (3)	Personal account (4)	Personal wealth only (5)	Brokerage account (6)	Brokerage wealth only (7)
Zip code Republican contribution share × Post 1 quarter	0.521 (0.019)	0.317 (0.057)	0.379 (0.032)	0.605 (0.026)	0.432 (0.033)	0.763 (0.041)	0.567 (0.061)
Zip code Republican contribution share × Post 2 quarters	0.811 (0.024)	0.592 (0.071)	0.598 (0.042)	0.956 (0.032)	0.653 (0.040)	1.155 (0.051)	0.612 (0.078)
Zip code Republican contribution share × Post 3 quarters	0.679 (0.029)	0.663 (0.080)	0.547 (0.050)	0.811 (0.037)	0.459 (0.045)	1.020 (0.058)	0.224 (0.092)
Zip code Republican contribution share × Post 4 quarters	0.810 (0.032)	0.688 (0.089)	0.674 (0.054)	0.777 (0.042)	0.411 (0.053)	0.921 (0.065)	0.567 (0.110)
Quarterly controls							
Initial equity share (2nd order)	Y	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y	Y
Percentage of RI sample	90.9%	3.6%	20.0%	36.8%	34.2%	15.6%	12.5%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, in various subsamples of the population: households with advised accounts (column 2), households with a single (not married) head of household (column 3), households with a personal brokerage or retirement account (column 4), wealth in personal accounts only (column 5), households with a personal non-retirement brokerage account (column 6), and wealth in personal brokerage accounts only (column 7). The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table 9: Regressions of Saving Behavior on Likely Political Affiliation

	Net flow rate (in %)		Net saving rate (in %)		Contribution
	All	Age 45-54	Household	Account	rate (in %)
	(1)	(2)	(3)	(4)	(5)
Zip code Republican contribution share × Post 1 quarter	0.080	0.070	-0.398	-0.335	-0.041
	(0.027)	(0.040)	(0.345)	(0.119)	(0.008)
Zip code Republican contribution share × Post 2 quarters	-0.028	0.068	-0.297	-0.238	-0.028
	(0.039)	(0.044)	(0.346)	(0.162)	(0.009)
Zip code Republican contribution share × Post 3 quarters	0.023	0.071	-0.571	-0.029	-0.056
	(0.027)	(0.041)	(0.377)	(0.115)	(0.010)
Zip code Republican contribution share × Post 4 quarters	-0.030	0.027	1.310	0.091	-0.178
	(0.031)	(0.042)	(0.275)	(0.136)	(0.014)
Quarterly controls					
Initial equity share (2nd order)	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y
Log labor income in 2015 (2nd order)			Y	Y	
Initial contribution rate (2nd order)					Y
Default annual increase of rate					Y
Percentage of RI sample	90.9%	23.8%	22.8%	22.8%	45.4%

Notes: This table presents regression coefficients of quarterly household saving measures on the zip code Republican contribution share, interacted by quarterly dummies. The net flow rate is constructed as deposits minus withdrawals as a fraction of initial balances. The net saving rate is defined as deposits minus withdrawals as a fraction of quarterly income (derived from dividing annual income evenly over the year). The contribution rate applies only to households actively contributing to a retirement account. To account for seasonality, we report coefficients in columns (1)–(4) relative to the same quarter in the year prior to the election. The coefficients in column (5) are relative to the contribution rate just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. We additionally control for a second-order polynomial in log 2015 labor income when estimating the effects on saving rates, and we control for the initial elected contribution rate and personalized default annual increases of contribution rates in column (5). The sample is our full set of households. Standard errors are clustered at the zip code level.

Table 10: Regressions of Portfolio Characteristics on Likely Political Affiliation

A. Market betas	Beta of portfolio		Beta of equity	
	All	Active	All	Active
	(1)	(2)	(3)	(4)
Zip code Republican contribution share × Post 1 quarter	0.414	1.017	0.131	0.256
	(0.024)	(0.051)	(0.025)	(0.050)
Zip code Republican contribution share × Post 2 quarters	0.575	1.511	0.146	0.331
	(0.031)	(0.060)	(0.029)	(0.056)
Zip code Republican contribution share × Post 3 quarters	0.538	1.306	0.083	0.161
	(0.037)	(0.068)	(0.039)	(0.064)
Zip code Republican contribution share × Post 4 quarters	0.568	1.180	0.031	0.036
	(0.044)	(0.078)	(0.043)	(0.071)
Quarterly controls				
Initial allocation (2nd order)	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y
Percentage of RI sample	71.2%	21.8%	44.2%	19.3%

B. Sector and global allocations	Winning sectors share of equity		Losing sectors share of equity		International share of equity	
	All	Active	All	Active	All	Active
	(5)	(6)	(7)	(8)	(9)	(10)
Zip code Republican contribution share × Post 1 quarter	0.025	0.049	-0.078	-0.181	0.055	0.048
	(0.008)	(0.021)	(0.008)	(0.022)	(0.012)	(0.021)
Zip code Republican contribution share × Post 2 quarters	0.020	-0.034	-0.153	-0.307	0.115	0.125
	(0.011)	(0.025)	(0.011)	(0.028)	(0.013)	(0.026)
Zip code Republican contribution share × Post 3 quarters	-0.004	-0.050	-0.196	-0.374	0.157	0.228
	(0.015)	(0.028)	(0.013)	(0.033)	(0.017)	(0.032)
Zip code Republican contribution share × Post 4 quarters	-0.040	-0.139	-0.204	-0.396	0.080	0.203
	(0.019)	(0.033)	(0.018)	(0.042)	(0.020)	(0.035)
Quarterly controls						
Initial allocation (2nd order)	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y
Percentage of RI sample	84.4%	26.2%	84.4%	26.2%	84.3%	26.2%

Notes: This table presents regression coefficients of various quarterly household portfolio measures on the zip code Republican contribution share, interacted by quarterly dummies, for the full sample and for the subsample of households with active trading in the prior year. Market betas are obtained by regressing monthly fund or security excess returns on the value-weighted CRSP market excess return over the period 2007–2017 with at least 24 observations. We calculate portfolio betas for households that have at least 75% of risky assets in assets with observed betas. Winning sectors are defined as the top five sectors based on stock market returns from the election date until the end of 2016: financials, telecommunication services, energy, materials, and industrials. Losing sectors are defined as the bottom five sectors based on stock market returns from the election date until the end of 2016: consumer staples, utilities, information technology, health care, and real estate. Consumer discretionary is in the middle and is considered neither. The portfolio international share of equity is defined as the sum of international equity securities and funds relative to total equity products. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. Standard errors are clustered at the zip code level.

Appendix for

"Belief Disagreement and Portfolio Choice"

by Meeuwis, Parker, Schoar, and Simester

August 2019

A.1. Political Contributions Data

We construct a measure of likely political party affiliation using publicly available campaign finance data from the Federal Election Commission. We consider individual contributions to party committees, campaign committees, and political action committees during the 2015-2016 election cycle and aggregate to the zip code level to calculate the zip code Republican share of donations.

Individual contributions. We use donations from the FEC individual contributions file and limit the sample to contributions of individuals with a valid zip code on record. We impose a standard filter to select actual contribution transactions (transaction types 10, 11, 15, 15E, 21Y, and 22Y) and impose transaction amounts for refunds (types 21Y and 22Y) to be negative.

Party committees. We consider individual contributions to the main party and candidate committees by selecting committees with at least $20 million in contributions, supporting a party or presidential nominee. The restriction to more than $20 million in contributions yields a set of 32 committees for a total of $2.3 billion in individual contributions from 7.8 million transactions. Further restricting the list of committees to those not related to a senator or losing presidential primary candidate leaves 21 committees. Table A.1 provides an overview of the selected and discarded committees with more than $20 million in contributions by individuals. The resulting individual contributions sample includes 1.0 million distinct donors with a total of $1.8 billion in contributions. Of those donors, 672 thousand contribute to the Democratic party or candidate, 340 thousand contribute to the Republican party or candidate, and two thousand to both.

Republican contribution share. We select zip codes with at least 10 donors and construct the zip code Republican contribution share as the number of donors to the Republican party or candidate divided by the number of donors to either party. For robustness checks, we consider two alternative measures of likely party affiliations. First, we also construct the dollar-weighted version of the zip code Republican contribution share. Second, we calculate the county-level Republican vote share as the number of votes for the Republican candidate Donald J. Trump divided by the number of votes for either Trump or the Democratic candidate Hillary Clinton. Aggregating donations from zip codes to counties, the correlation between the Republican contribution share and the Republican vote share across counties is 0.69. For the dollar-weighted contribution share aggregated to the county level, the correlation with the Republican vote share is 0.53.

Likely party affiliations in sample. Figure A.3.a plots the distribution of likely political affiliations measured by the zip code Republican contribution share in our sample of RIs. Figure A.3.b plots the distribution of county vote shares in the sample and population. Republican shares

measured by donations are typically lower than Republican shares measured by votes. Relative to the population, our sample is tilted towards Democrats.

A.2. Household Portfolios Data

Asset classes. Investor portfolios consist of positions in funds, individual securities, and annuities. For some holdings (e.g. some annuities), we do not observe sufficient detail to categorize holdings. Average holdings in these assets are less than 1.5% of total (investable) assets. For 87% of all remaining assets in investor portfolios we observe the CUSIP, and for the other 13% we observe basic characteristics of the fund the wealth is invested in. We assign holdings to four different asset classes based on product descriptions: equity, long-term bonds, short-term bonds, and alternative assets. Equity holdings consist of pure equity funds, directly held equity, and the equity portion of funds that invest across asset classes. The long-term bond category includes bond funds, long-term government and corporate bonds, and the portion of funds that invest across asset classes that is not allocated to equity. The short-term bond category is composed of money market funds, short-term treasury bonds, and CDs. Alternative assets include real estate (REITs), precious metals, and royalty funds.

We split mixed-assets funds, such as lifecycle funds, into equity and long-term bond holdings based on fund equity shares. We use quarterly data on fund asset compositions from the CRSP Survivor-Bias Free US Mutual Fund database if available, and complement this with internally available quarterly target equity shares on other mixed-asset funds.

International exposure. To characterize international equity exposures in investor portfolios, we divide equity holdings into a domestic and an international component. Pure equity funds are characterized as either domestic or international based on internal product descriptions. We consider the equity portion of mixed-asset funds to be a domestic equity investment. For individual securities, we set the location to international if it is a foreign security (i.e., has a foreign ISIN) or if the company is incorporated outside of the US according to Compustat, and to domestic otherwise. We define the international share of equity as the ratio of international equity to total portfolio equity holdings.

Sector exposures. Investors can explicitly load on industries by investing in sector funds or by holding individual equities. We identify sector funds as funds that have a sector index as Morningstar benchmark. These sector indices are defined based on 11 Global Industry Classification Standard (GICS) sectors: energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication services, utilities, and real estate. For individual securities, we assign GICS industry codes to stocks by linking them to Compustat and CRSP data. If a stock can be linked to a Compustat record, we use the Compustat GICS sector code. If no Compustat record is available, we use the North

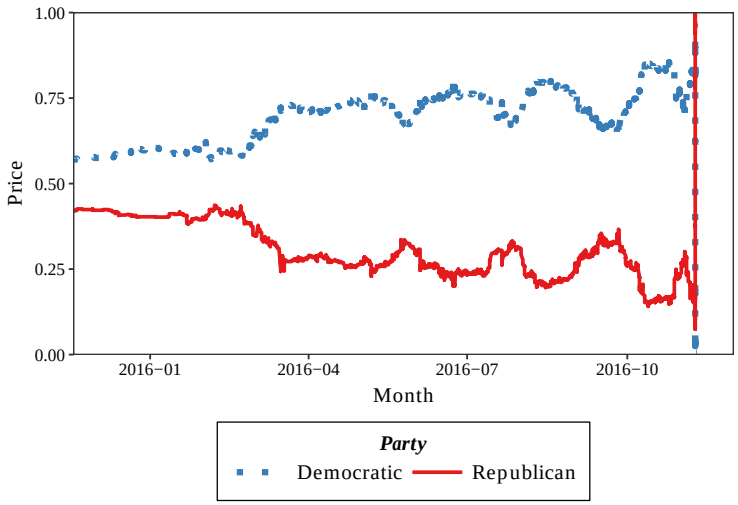
American Industry Classification System (NAICS) code from CRSP and get the corresponding GICS code from a crosswalk table.[35]

Returns. We link observed portfolio holdings at the CUSIP level to external data on realized returns from CRSP stock, treasury, and mutual fund return files, as well as WRDS corporate bond returns. We complement these returns with internal return data on other products. We treat assets in the short-term bonds category as risk-free assets and assign the risk-free rate (one-month Treasury bill rate) as return. Not available are returns on limited partnerships, options, warrants and rights, TIPS, agency bonds, precious metals, and royalty funds. Together, these form a very small part of total holdings.

Market betas. To calculate CAPM market betas, we use all available return data from 2007 to 2017. We estimate betas from monthly regressions of excess asset returns on excess market returns. We assign a market beta to funds and securities that have at least 24 monthly return observations. We set the market beta of short-term bonds to zero. To deal with missing returns for certain asset types, we use the estimated beta on a corresponding ETF as a proxy for individual betas on agency bonds (ticker: AGZ), municipal bonds (MUB), TIPS (TIP), gold (IAU), silver (SLV), and platinum (PPLT). For mixed-asset funds, we account for time variation in betas due to a changing equity share of the portfolio (especially for lifecycle funds). In particular, we estimate the market beta of a mixed-asset fund with a time-varying equity share by assuming that the fund market beta is affine in the fund equity share with a fund-specific intercept and a common slope. We estimate the common slope in a pooled regression that includes all mixed-asset funds in investor portfolios.

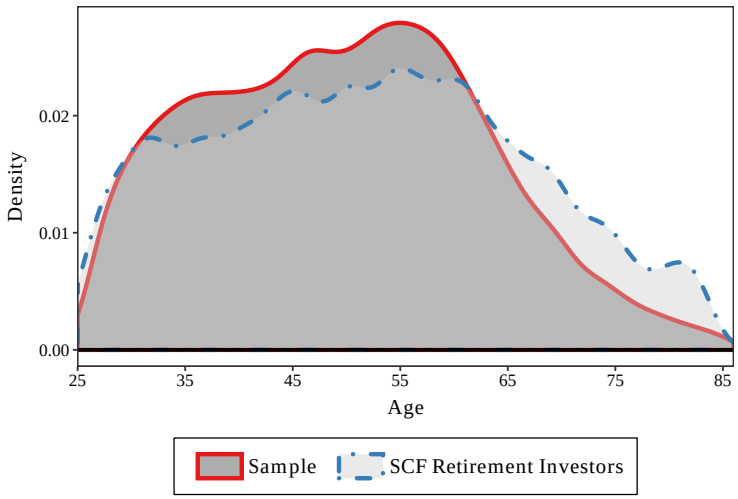
[35] We use the concordance from NAICS to GICS provided by Alison Weingarden available (July 2018) at sites.google.com/site/alisonweingarden/links/industries.

Figure A.1: Probability of Party Winning the 2016 Presidential Election



Notes: This figure plots the betting market-implied probabilities of a Democratic versus a Republican win over time. It shows the prices of two contracts traded on UK-based betting exchange Betfair, obtained through PredictWise, that pay $1 conditional on the respective party winning the election.

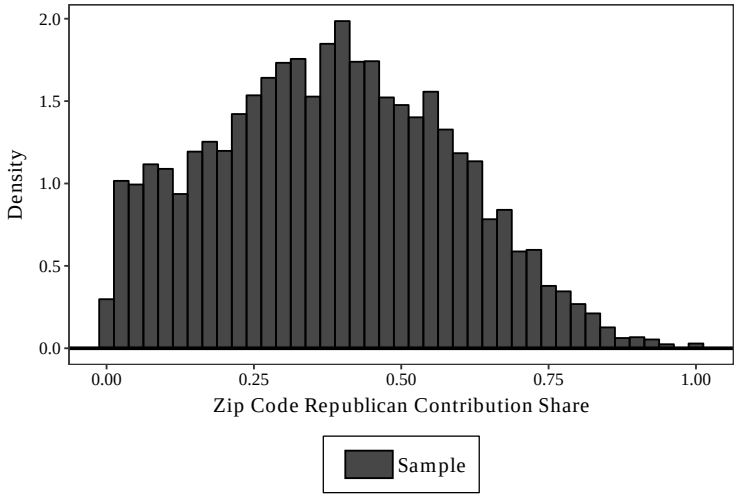
Figure A.2: Age Distribution in Comparison to SCF



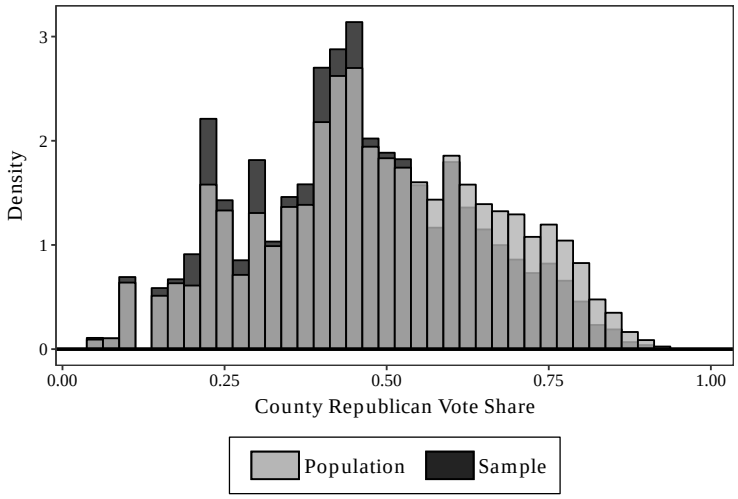
Notes: This figure plots the age distribution in our sample compared to the equivalent sample of RIs in the public version of the 2016 Survey of Consumer Finances (SCF). We select households with quasi-liquid retirement wealth and run quantile regressions of log retirement wealth on a third order polynomial in age for households in the 2016 SCF. We use the fitted 10th and 90th percentiles by age as retirement wealth cutoffs in both datasets. We include households with age of the head between 25 and 85 and filter our sample on households that have portfolio holdings between 20% and 500% of initial assets in every month in the sample.

Figure A.3: Distribution of Likely Political Affiliation Measures

(a) Republican Contribution Share



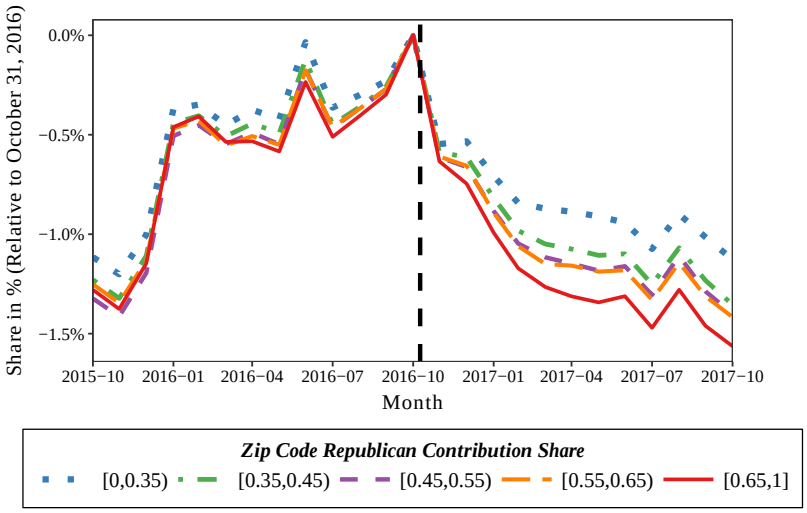
(b) Republican Vote Share



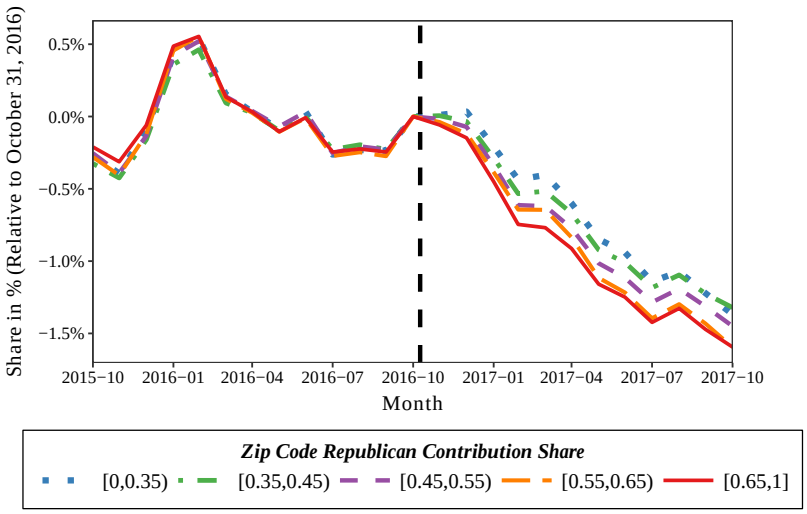
Notes: These graphs plot the distribution of the zip code Republican contribution share and the county Republican vote share, respectively. Panel (a) plots the distribution of the zip code Republican contribution share, defined as the number of individuals with campaign donations to the main Republican party and candidate committees as a fraction of the total number of individuals with campaign donations to the main committees of either party, in our RI sample. We include zip codes with at least 10 donors. Panel (b) plots the county Republican vote share, defined as the number of votes for Republican candidate Donald J. Trump divided by the total number of votes for Trump and for the Democratic candidate Hillary Clinton, in the population (2010 US Census) and in our RI sample.

Figure A.4: Portfolio Bond Shares by Zip Code Party Affiliation (VW)

(a) Long-Term Bond Share (Value Weighted Across Households)



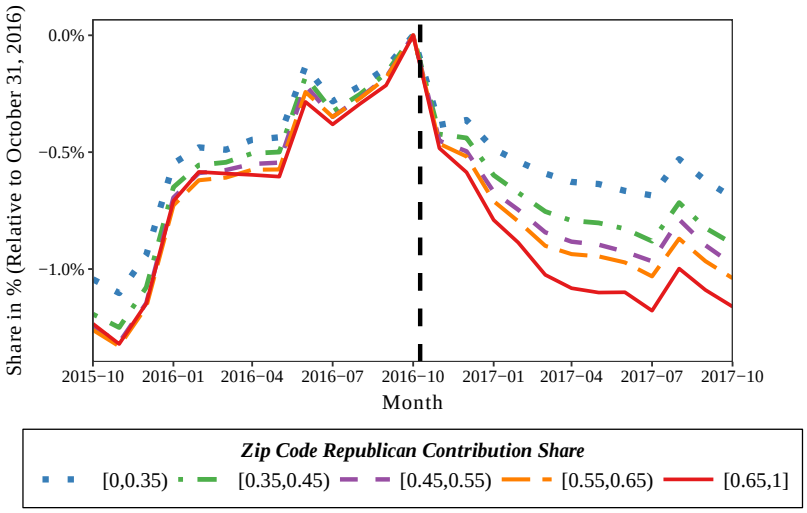
(b) Short-Term Bond Share (Value Weighted Across Households)



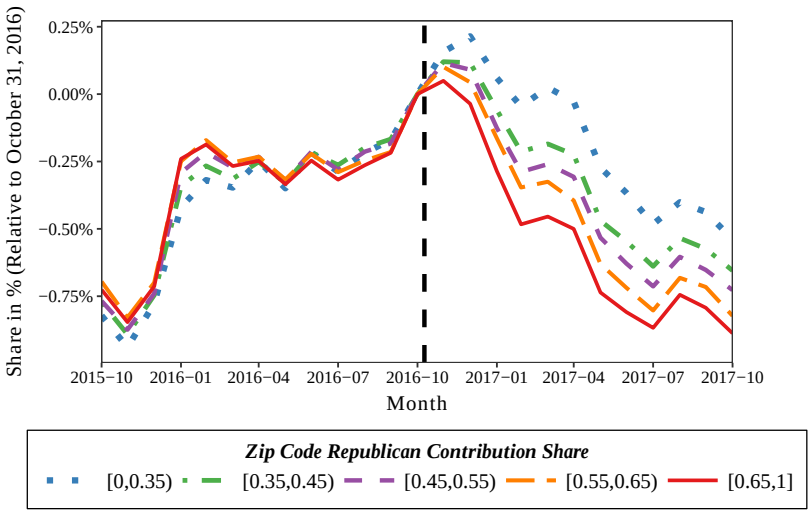
Notes: These graphs plot the average long-term bond share and short-term bond share, respectively, of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The portfolio long-term bond share is defined as the sum of individual long-term bonds, pure bond funds, and the bond portion of hybrid funds, relative to total portfolio assets. The portfolio short-term bond share is defined as the sum of money market funds, individual short-term bonds, and CDs, relative to total portfolio assets. The sample is our full set of RI households. Average shares by group are asset weighted across households.

Figure A.5: Portfolio Bond Shares by Zip Code Party Affiliation for Active Sample

(a) Long-Term Bond Share (Equally Weighted Across Households)

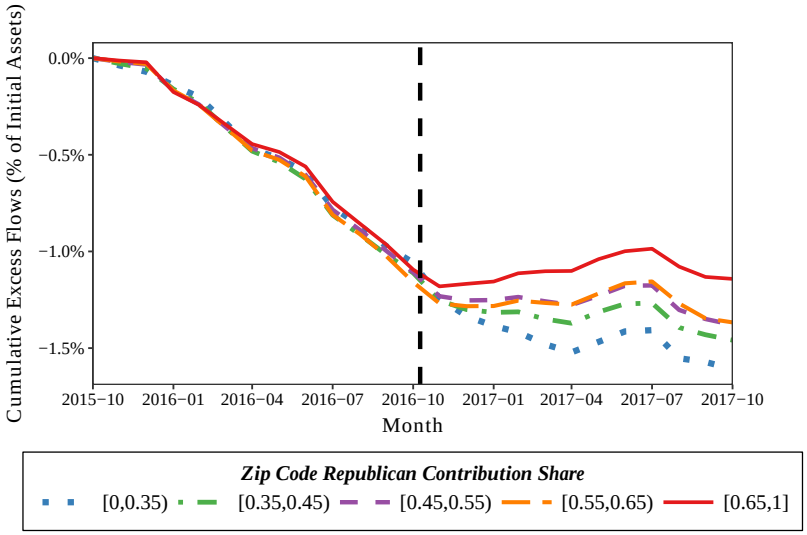


(b) Short-Term Bond Share (Equally Weighted Across Households)



Notes: These graphs plot the average long-term bond share and short-term bond share, respectively, of household portfolio assets in five groups by zip code party affiliation measured from political contributions, relative to the share by the end of October 2016. The portfolio long-term bond share is defined as the sum of individual long-term bonds, pure bond funds, and the bond portion of hybrid funds, relative to total portfolio assets. The portfolio short-term bond share is defined as the sum of money market funds, individual short-term bonds, and CDs, relative to total portfolio assets. The sample is the subset of RI households with active trades or exchanges in the prior year. Average shares by group are equally weighted across households.

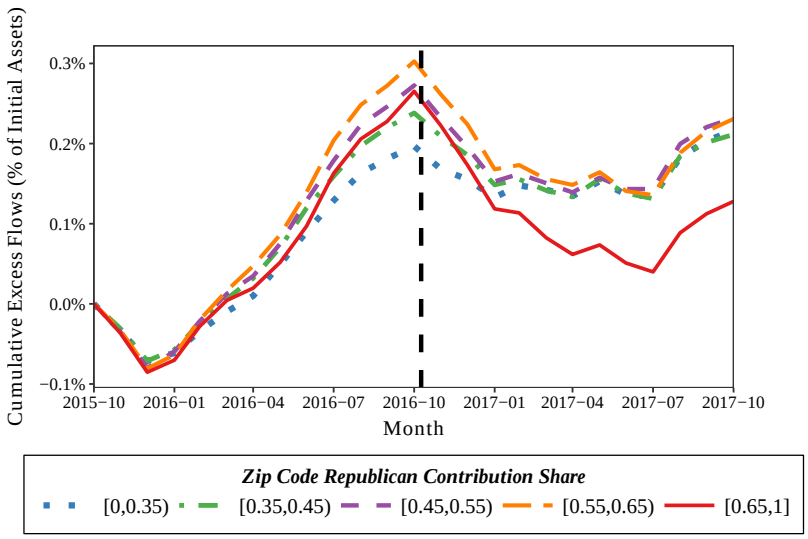
Figure A.6: Cumulative Excess Flows into Equity by Zip Code Party Affiliation



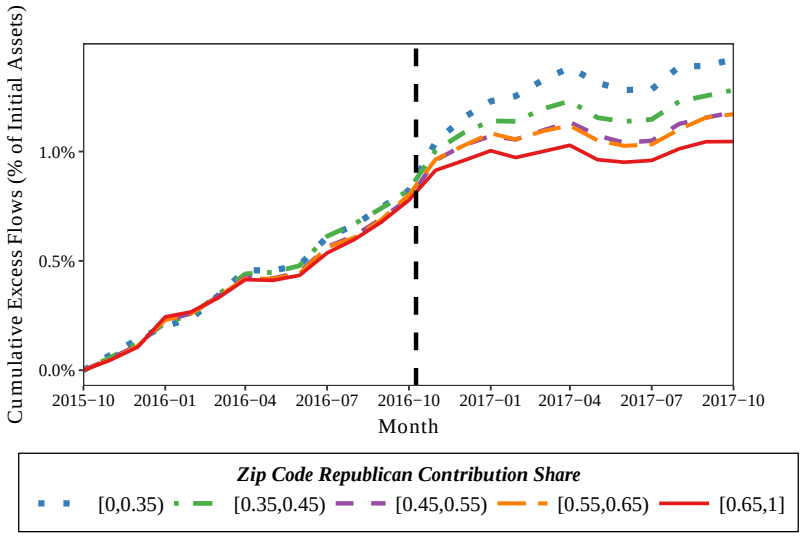
Notes: This figure plots cumulative excess flows into equity in five groups by zip code party affiliation measured from political contributions, starting from October 31, 2015. Excess flows are scaled by initial assets, and are defined as net equity flows minus the equity share from the previous month multiplied by total portfolio net flows. This is a measure of rebalancing into equity, where equity assets are defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds. The sample is our full set of RI households. Average flow rates by group are equally weighted across households.

Figure A.7: Cumulative Excess Flows into Bonds by Zip Code Party Affiliation

(a) Excess Long-Term Bond Trades



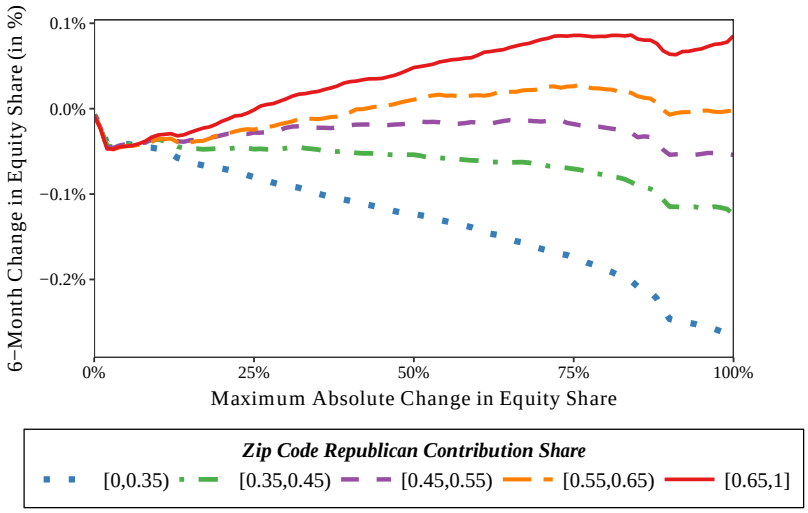
(b) Excess Short-Term Bond Trades



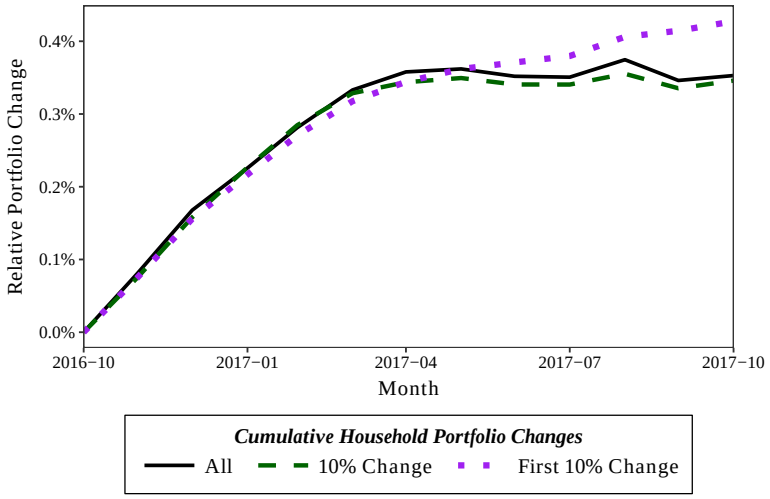
Notes: These graphs plot cumulative excess flows into long-term bonds and short-term bonds, respectively, in five groups by zip code party affiliation measured from political contributions, starting from October 31, 2015. Excess flows are scaled by initial assets, and are defined as net bond flows minus the bond share from the previous month multiplied by total portfolio net flows. This is a measure of rebalancing into long-term bonds and short-term bonds, where long-term bond assets are defined as the sum of individual long-term bonds, pure bond funds, and the bond portion of hybrid funds, and short-term bond assets are defined as the sum of money market funds, individual short-term bonds, and CDs. The sample is our full set of RI households. Average flow rates by group are equally weighted across households.

Figure A.8: Decomposition of Price-Constant Equity Share Changes by Zip Code Party Affiliation

(a) Average Six-Month Change in Equity Share by Maximum Size of Change



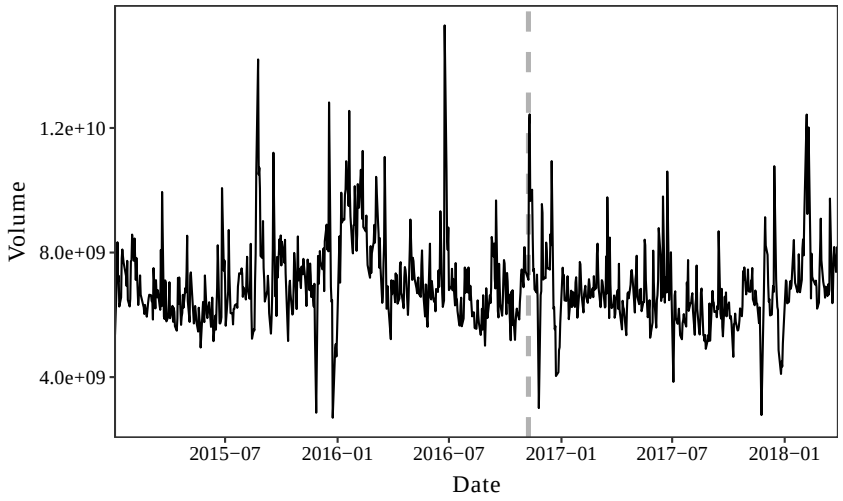
(b) Cumulative Difference in Equity Share of Republicans Versus Democrats by Type of Adjustment



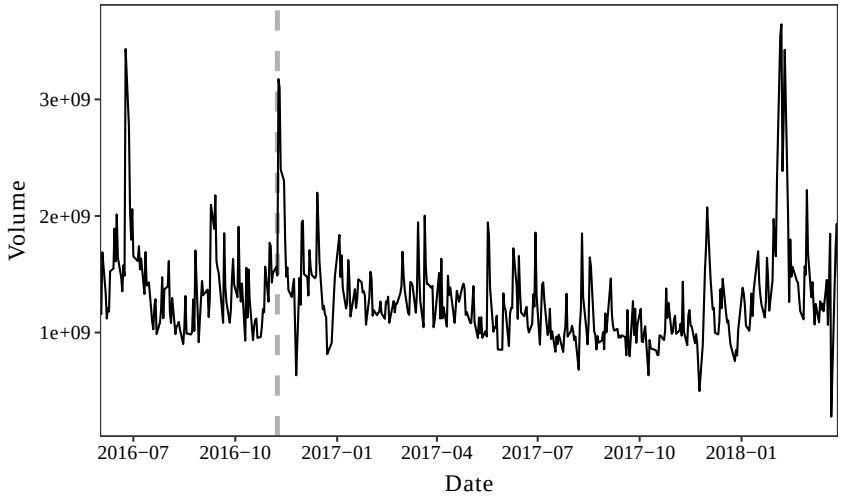
Notes: The graph in panel (a) breaks down changes in the equity share of hypothetical price-constant household portfolios over the six months post election, for five groups by zip code party affiliation measured from political contributions. We plot average changes in equity shares, only including changes that are smaller than $k\%$, as a function of k. Changes bigger than $k\%$ are set to zero. In panel (b) we plot the average cumulative change in the equity share of price-constant portfolios after the election for households in zip codes with a Republican contribution share of at least 65% relative to the average cumulative change for households in zip codes with a Republican contribution share of at most 35%. The solid line includes all changes in portfolio equity shares, the dashed line includes only changes that are at least 10% relative to the share at the end of October 2016 (and sets the change to zero otherwise), and the dashed line includes only the first change of at least 10% since October 2016.

Figure A.9: Trading Activity in US Markets

(a) US Equity Market Volume



(b) US ETF Market Volume



Notes: This figure plots total trading volume on US markets. The upper panel plots total US equity market volume. The lower panel plots the narrower ETF market volume. The data is sourced from the CBOE.

Table A.1: Party Committees

A. Included committees	
Name	Amount (in USD)
HILLARY VICTORY FUND	418,127,519
HILLARY FOR AMERICA	281,412,789
PRIORITIES USA ACTION	151,702,351
TRUMP VICTORY	106,907,122
NEXTGEN CLIMATE ACTION COMMITTEE	90,834,927
REPUBLICAN NATIONAL COMMITTEE	89,493,374
DSCC	74,197,205
SENATE LEADERSHIP FUND	74,165,450
DCCC	73,561,758
TRUMP MAKE AMERICA GREAT AGAIN COMMITTEE	68,604,341
SENATE MAJORITY PAC	58,688,399
HILLARY ACTION FUND	45,522,557
NRSC	44,563,979
CONGRESSIONAL LEADERSHIP FUND	44,138,600
DONALD J. TRUMP FOR PRESIDENT, INC.	43,918,500
DNC SERVICES CORP./DEM. NAT'L COMMITTEE	41,855,861
HOUSE MAJORITY PAC	36,078,425
FUTURE45	24,555,649
REBUILDING AMERICA NOW	23,071,271
NRCC	22,773,247
MAKE AMERICA NUMBER 1	20,126,000
B. Excluded committees	
Name	Amount (in USD)
RIGHT TO RISE USA	91,047,726
BERNIE 2016	73,961,700
TEAM RYAN	53,432,005
CRUZ FOR PRESIDENT	47,481,222
CONSERVATIVE SOLUTIONS PAC	46,066,194
JEB 2016, INC.	31,080,894
MARCO RUBIO FOR PRESIDENT	30,833,321
VAN HOLLEN FOR SENATE	25,652,235
CARSON AMERICA	24,901,494
INDEPENDENCE USA PAC	21,665,124
UNINTIMIDATED PAC INC	20,717,593

Notes: This table lists all 32 campaign committees with at least $20 million in contributions during the 2015–2016 election cycle from individuals with a valid zip code on record. To construct our Republican contribution share measure for the 2016 presidential election at the zip code level, we include the subset of 21 committees that support a party or presidential nominee and exclude committees that are related to a senator or losing presidential primary candidate.

Table A.2: Equity Share Regressions with Alternative Political Affiliation Measures

A. 2016 Measures	Portfolio equity share (in %), all households				
	Zip donations (nbr)	Zip donations (amt)	County votes	County donations (nbr)	County donations (amt)
	(1)	(2)	(3)	(4)	(5)
Republican share × Pre 3 quarters	0.107 (0.026)	0.086 (0.022)	-0.004 (0.031)	0.082 (0.029)	0.089 (0.024)
Republican share × Pre 2 quarters	0.195 (0.019)	0.125 (0.016)	0.140 (0.022)	0.204 (0.021)	0.137 (0.017)
Republican share × Pre 1 quarter	0.103 (0.014)	0.070 (0.011)	0.113 (0.015)	0.095 (0.014)	0.074 (0.012)
Republican share × Post 1 quarter	0.521 (0.019)	0.327 (0.016)	0.532 (0.021)	0.539 (0.019)	0.389 (0.017)
Republican share × Post 2 quarters	0.811 (0.024)	0.509 (0.020)	0.782 (0.027)	0.827 (0.025)	0.612 (0.022)
Republican share × Post 3 quarters	0.679 (0.029)	0.410 (0.024)	0.516 (0.034)	0.591 (0.031)	0.438 (0.026)
Republican share × Post 4 quarters	0.810 (0.032)	0.511 (0.027)	0.676 (0.038)	0.735 (0.035)	0.563 (0.029)
Quarterly controls					
Initial equity share (2nd order)	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y
Percentage of RI sample	90.9%	90.9%	99.2%	99.0%	99.0%

Table continues on next page.

Table A.2 (continued): Equity Share Regressions with Alternative Political Affiliation Measures

B. Adding 2012 Measures	Portfolio equity share (in %), all households		
	(1)	(2)	(3)
County Republican vote share 2016 × Post 1 quarter	0.531		
	(0.021)		
County Republican vote share 2016 × Post 2 quarters	0.802		
	(0.027)		
County Republican vote share 2016 × Post 3 quarters	0.529		
	(0.033)		
County Republican vote share 2016 × Post 4 quarters	0.688		
	(0.037)		
County Republican vote share 2012 × Post 1 quarter		0.581	0.535
		(0.024)	(0.026)
County Republican vote share 2012 × Post 2 quarters		0.898	0.846
		(0.031)	(0.033)
County Republican vote share 2012 × Post 3 quarters		0.644	0.656
		(0.039)	(0.041)
County Republican vote share 2012 × Post 4 quarters		0.806	0.793
		(0.043)	(0.045)
County Republican vote share 2016-2012 × Post 1 quarter			0.507
			(0.080)
County Republican vote share 2016-2012 × Post 2 quarters			0.577
			(0.099)
County Republican vote share 2016-2012 × Post 3 quarters			-0.125
			(0.114)
County Republican vote share 2016-2012 × Post 4 quarters			0.145
			(0.133)
Quarterly controls			
Initial equity share (2nd order)	Y	Y	Y
Age (2nd order)	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y
Percentage of RI sample	99.2%	99.2%	99.2%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code or county Republican share, interacted by quarterly dummies, for various sets of party affiliation measures: zip code share of contributions in numbers and in dollars, county share of votes in 2016 or 2012, and county share of contributions in numbers and in dollars. In column (3) of panel B we report quarterly coefficients on the county Republican vote share in 2012, as well as the difference in county vote share between 2016 and 2012. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report results relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table A.3: Regressions of Equity Share on Likely Political Affiliation

	Portfolio equity share (in %), all households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Pre 3 quarters	0.308	0.107	0.027	0.071	0.186	0.197	0.163
	(0.029)	(0.026)	(0.032)	(0.037)	(0.035)	(0.036)	(0.040)
Zip code Republican contribution share × Pre 2 quarters	0.287	0.195	0.087	0.245	0.136	0.151	0.124
	(0.021)	(0.019)	(0.023)	(0.030)	(0.027)	(0.028)	(0.033)
Zip code Republican contribution share × Pre 1 quarter	0.126	0.103	0.024	0.070	0.104	0.091	0.058
	(0.014)	(0.014)	(0.017)	(0.022)	(0.018)	(0.020)	(0.040)
Zip code Republican contribution share × Post 1 quarter	0.510	0.521	0.516	0.357	0.385	0.351	0.274
	(0.019)	(0.019)	(0.024)	(0.028)	(0.025)	(0.025)	(0.029)
Zip code Republican contribution share × Post 2 quarters	0.727	0.811	0.749	0.623	0.654	0.589	0.440
	(0.025)	(0.024)	(0.031)	(0.035)	(0.030)	(0.032)	(0.036)
Zip code Republican contribution share × Post 3 quarters	0.540	0.679	0.671	0.657	0.604	0.655	0.502
	(0.035)	(0.029)	(0.035)	(0.041)	(0.037)	(0.038)	(0.040)
Zip code Republican contribution share × Post 4 quarters	0.561	0.810	0.980	0.730	0.656	0.688	0.571
	(0.036)	(0.032)	(0.040)	(0.044)	(0.041)	(0.043)	(0.045)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2015 (2nd order)				Y			
Labor income growth (2016-17)				Y			
Urbanicity					Y		
Zip code house price growth (2010-15, 2015-17)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	90.9%	90.9%	55.8%	25.3%	83.9%	90.6%	56.7%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the full set of results for the three quarters prior to the election and the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2015, income growth over 2016–2017 (for the subset available as of June 2018), urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2010–2015 and 2015–2017 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table A.4: Regressions of Equity Share on Likely Political Affiliation for 2012 Election Cycle

	Portfolio equity share (in %), all households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Pre 3 quarters	0.216	0.009	-0.128	-0.273	-0.061	-0.066	-0.050
	(0.030)	(0.029)	(0.038)	(0.047)	(0.032)	(0.032)	(0.036)
Zip code Republican contribution share × Pre 2 quarters	0.194	0.062	-0.072	-0.206	0.027	0.045	0.032
	(0.026)	(0.026)	(0.034)	(0.044)	(0.028)	(0.027)	(0.028)
Zip code Republican contribution share × Pre 1 quarter	0.078	0.016	-0.092	-0.180	0.041	0.062	0.036
	(0.020)	(0.020)	(0.027)	(0.033)	(0.022)	(0.021)	(0.023)
Zip code Republican contribution share × Post 1 quarter	-0.515	-0.413	-0.435	-0.488	-0.183	-0.050	-0.032
	(0.025)	(0.024)	(0.031)	(0.033)	(0.022)	(0.025)	(0.027)
Zip code Republican contribution share × Post 2 quarters	-0.588	-0.414	-0.387	-0.422	-0.161	-0.019	-0.008
	(0.030)	(0.027)	(0.035)	(0.040)	(0.027)	(0.031)	(0.034)
Zip code Republican contribution share × Post 3 quarters	-0.529	-0.335	-0.200	-0.230	-0.063	0.122	0.132
	(0.036)	(0.033)	(0.040)	(0.048)	(0.033)	(0.036)	(0.039)
Zip code Republican contribution share × Post 4 quarters	-0.531	-0.272	-0.152	-0.173	0.032	0.233	0.227
	(0.041)	(0.037)	(0.044)	(0.052)	(0.038)	(0.041)	(0.045)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2011 (2nd order)				Y			
Labor income growth (2012-13)				Y			
Urbanicity					Y		
Zip code house price growth (2006-11, 2011-13)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	83.3%	83.3%	54.3%	31.8%	77.2%	83.0%	54.5%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The sample covers the 2012 presidential election. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the full set of results for the three quarters prior to the election and the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2011. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2011, income growth over 2012–2013, urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2006–2011 and 2011–2013 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is the full set of RI households constructed using our same procedure four years earlier. Standard errors are clustered at the zip code level.

Table A.6: Regressions of Equity Share on Likely Political Affiliation for Active Investors

	Portfolio equity share (in %), active households						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Zip code Republican contribution share × Pre 3 quarters	0.142	0.162	-0.058	-0.098	0.315	0.581	0.554
	(0.055)	(0.055)	(0.080)	(0.106)	(0.070)	(0.080)	(0.122)
Zip code Republican contribution share × Pre 2 quarters	0.401	0.398	0.138	0.291	0.329	0.422	0.398
	(0.041)	(0.040)	(0.059)	(0.084)	(0.053)	(0.062)	(0.100)
Zip code Republican contribution share × Pre 1 quarter	0.224	0.226	0.149	0.204	0.210	0.214	0.232
	(0.030)	(0.030)	(0.045)	(0.064)	(0.041)	(0.047)	(0.076)
Zip code Republican contribution share × Post 1 quarter	1.189	1.069	0.968	1.007	0.786	0.681	0.624
	(0.036)	(0.036)	(0.053)	(0.078)	(0.048)	(0.055)	(0.089)
Zip code Republican contribution share × Post 2 quarters	1.791	1.655	1.494	1.556	1.315	1.171	1.037
	(0.045)	(0.044)	(0.065)	(0.095)	(0.057)	(0.068)	(0.106)
Zip code Republican contribution share × Post 3 quarters	1.769	1.588	1.404	1.624	1.275	1.294	1.080
	(0.055)	(0.050)	(0.074)	(0.105)	(0.066)	(0.078)	(0.118)
Zip code Republican contribution share × Post 4 quarters	1.680	1.555	1.562	1.646	1.297	1.379	1.187
	(0.062)	(0.056)	(0.080)	(0.112)	(0.072)	(0.083)	(0.128)
Quarterly controls							
Initial equity share (2nd order)		Y	Y	Y	Y	Y	Y
Age (2nd order)		Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)		Y	Y	Y	Y	Y	Y
Employer industry (3-digit NAICS)			Y	Y			
Log labor income in 2015 (2nd order)				Y			
Labor income growth (2016-17)				Y			
Urbanicity					Y		
Zip code house price growth (2010-15, 2015-17)					Y		
State					Y		
County manufacturing share					Y		
County shipping costs					Y		
County						Y	
Employer × county							Y
Percentage of RI sample	27.5%	27.5%	12.8%	5.8%	25.6%	27.5%	13.0%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, for various sets of controls. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the full set of results for the three quarters prior to the election and the four quarters following the election, relative to allocations just before the election. In the baseline specification (2), we control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. In specifications (3)-(8) we consider alternative sets of controls (interacted by a full set of quarterly dummies) that include employer industry dummies (3-digit NAICS), a second-order polynomial in log labor income over 2015, income growth over 2016–2017 (for the subset available as of June 2018), urbanicity (metropolitan, micropolitan, or non-CBSA), zip code house price growth from 2010–2015 and 2015–2017 (Zillow), state dummies, county manufacturing share (QCEW), county shipping costs (CBP), and county dummies. The sample is the subset of households with active trades or exchanges in the prior year. Standard errors are clustered at the zip code level.

Table A.8: Equity Share Regressions on Subsamples

	Portfolio equity share (in %)						
	All (1)	Advised account (2)	Single (3)	Personal account (4)	Personal wealth only (5)	Brokerage account (6)	Brokerage wealth only (7)
Zip code Republican contribution share × Pre 3 quarters	0.107	-0.082	-0.012	0.132	0.310	0.145	-0.209
	(0.026)	(0.084)	(0.044)	(0.044)	(0.047)	(0.059)	(0.089)
Zip code Republican contribution share × Pre 2 quarters	0.195	0.093	0.097	0.350	0.392	0.380	-0.021
	(0.019)	(0.069)	(0.035)	(0.030)	(0.035)	(0.048)	(0.072)
Zip code Republican contribution share × Pre 1 quarter	0.103	0.040	0.074	0.204	0.285	0.224	0.111
	(0.014)	(0.051)	(0.026)	(0.022)	(0.026)	(0.036)	(0.057)
Zip code Republican contribution share × Post 1 quarter	0.521	0.317	0.379	0.605	0.432	0.763	0.567
	(0.019)	(0.057)	(0.032)	(0.026)	(0.033)	(0.041)	(0.061)
Zip code Republican contribution share × Post 2 quarters	0.811	0.592	0.598	0.956	0.653	1.155	0.612
	(0.024)	(0.071)	(0.042)	(0.032)	(0.040)	(0.051)	(0.078)
Zip code Republican contribution share × Post 3 quarters	0.679	0.663	0.547	0.811	0.459	1.020	0.224
	(0.029)	(0.080)	(0.050)	(0.037)	(0.045)	(0.058)	(0.092)
Zip code Republican contribution share × Post 4 quarters	0.810	0.688	0.674	0.777	0.411	0.921	0.567
	(0.032)	(0.089)	(0.054)	(0.042)	(0.053)	(0.065)	(0.110)
Quarterly controls							
Initial equity share (2nd order)	Y	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y	Y
Percentage of RI sample	90.9%	3.6%	20.0%	36.8%	34.2%	15.6%	12.5%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, in various subsamples of the population: households with advised accounts (column 2), households with a single (not married) head of household (column 3), households with a personal brokerage or retirement account (column 4), wealth in personal accounts only (column 5), households with a personal non-retirement brokerage account (column 6), and wealth in personal brokerage accounts only (column 7). The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the full set of results for the three quarters prior to the election and the four quarters following the election, relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. The sample is our full set of RI households. Standard errors are clustered at the zip code level.

Table A.9: Regressions of Saving Behavior on Likely Political Affiliation

	Net flow rate (in %)		Net saving rate (in %)		Contribution
	All	Age 45-54	Household	Account	rate (in %)
	(1)	(2)	(3)	(4)	(5)
Zip code Republican contribution share × Pre 3 quarters					0.169 (0.012)
Zip code Republican contribution share × Pre 2 quarters					0.151 (0.010)
Zip code Republican contribution share × Pre 1 quarter					0.109 (0.008)
Zip code Republican contribution share × Post 1 quarter	0.080 (0.027)	0.070 (0.040)	-0.398 (0.345)	-0.335 (0.119)	-0.041 (0.008)
Zip code Republican contribution share × Post 2 quarters	-0.028 (0.039)	0.068 (0.044)	-0.297 (0.346)	-0.238 (0.162)	-0.028 (0.009)
Zip code Republican contribution share × Post 3 quarters	0.023 (0.027)	0.071 (0.041)	-0.571 (0.377)	-0.029 (0.115)	-0.056 (0.010)
Zip code Republican contribution share × Post 4 quarters	-0.030 (0.031)	0.027 (0.042)	1.310 (0.275)	0.091 (0.136)	-0.178 (0.014)
Quarterly controls					
Initial equity share (2nd order)	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y
Log labor income in 2015 (2nd order)			Y	Y	
Initial contribution rate (2nd order)					Y
Default annual increase of rate					Y
Percentage of RI sample	90.9%	23.8%	22.8%	22.8%	45.4%

Notes: This table presents regression coefficients of quarterly household saving measures on the zip code Republican contribution share, interacted by quarterly dummies. The net flow rate is constructed as deposits minus withdrawals as a fraction of initial balances. The net saving rate is defined as deposits minus withdrawals as a fraction of quarterly income (derived from dividing annual income evenly over the year). The contribution rate applies only to households actively contributing to a retirement account. To account for seasonality, we report coefficients in columns (1)–(4) relative to the same quarter in the year prior to the election. The coefficients in column (5) are relative to the contribution rate just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. We additionally control for a second-order polynomial in log 2015 labor income when estimating the effects on saving rates, and we control for the initial elected contribution rate and personalized default annual increases of contribution rates in column (5). The sample is our full set of households. Standard errors are clustered at the zip code level.

Table A.10: Regressions of Portfolio Characteristics on Likely Political Affiliation

A. Market betas	Beta of portfolio		Beta of equity	
	All	Active	All	Active
	(1)	(2)	(3)	(4)
Zip code Republican contribution share × Pre 3 quarters	-0.181	-0.160	-0.258	-0.300
	(0.036)	(0.073)	(0.036)	(0.068)
Zip code Republican contribution share × Pre 2 quarters	0.074	0.305	-0.032	-0.039
	(0.027)	(0.056)	(0.029)	(0.056)
Zip code Republican contribution share × Pre 1 quarter	0.054	0.208	0.001	-0.004
	(0.017)	(0.041)	(0.022)	(0.042)
Zip code Republican contribution share × Post 1 quarter	0.414	1.017	0.131	0.256
	(0.024)	(0.051)	(0.025)	(0.050)
Zip code Republican contribution share × Post 2 quarters	0.575	1.511	0.146	0.331
	(0.031)	(0.060)	(0.029)	(0.056)
Zip code Republican contribution share × Post 3 quarters	0.538	1.306	0.083	0.161
	(0.037)	(0.068)	(0.039)	(0.064)
Zip code Republican contribution share × Post 4 quarters	0.568	1.180	0.031	0.036
	(0.044)	(0.078)	(0.043)	(0.071)
Quarterly controls				
Initial allocation (2nd order)	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y
Percentage of RI sample	71.2%	21.8%	44.2%	19.3%

Table continues on next page.

Table A.10 (continued): Regressions of Portfolio Characteristics on Likely Political Affiliation

B. Sector and global allocations	Winning sectors share of equity		Losing sectors share of equity		International share of equity	
	All	Active	All	Active	All	Active
	(5)	(6)	(7)	(8)	(9)	(10)
Zip code Republican contribution share × Pre 3 quarters	-0.241 (0.014)	-0.411 (0.031)	0.108 (0.013)	0.211 (0.031)	-0.122 (0.014)	-0.167 (0.029)
Zip code Republican contribution share × Pre 2 quarters	-0.039 (0.011)	-0.141 (0.023)	0.084 (0.011)	0.144 (0.028)	-0.084 (0.011)	-0.104 (0.023)
Zip code Republican contribution share × Pre 1 quarter	0.011 (0.008)	-0.004 (0.017)	0.070 (0.010)	0.145 (0.024)	-0.083 (0.009)	-0.118 (0.018)
Zip code Republican contribution share × Post 1 quarter	0.025 (0.008)	0.049 (0.021)	-0.078 (0.008)	-0.181 (0.022)	0.055 (0.012)	0.048 (0.021)
Zip code Republican contribution share × Post 2 quarters	0.020 (0.011)	-0.034 (0.025)	-0.153 (0.011)	-0.307 (0.028)	0.115 (0.013)	0.125 (0.026)
Zip code Republican contribution share × Post 3 quarters	-0.004 (0.015)	-0.050 (0.028)	-0.196 (0.013)	-0.374 (0.033)	0.157 (0.017)	0.228 (0.032)
Zip code Republican contribution share × Post 4 quarters	-0.040 (0.019)	-0.139 (0.033)	-0.204 (0.018)	-0.396 (0.042)	0.080 (0.020)	0.203 (0.035)
Quarterly controls						
Initial allocation (2nd order)	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y
Percentage of RI sample	84.4%	26.2%	84.4%	26.2%	84.3%	26.2%

Notes: This table presents regression coefficients of various quarterly household portfolio measures on the zip code Republican contribution share, interacted by quarterly dummies, for the full sample and for the subsample of households with active trading in the prior year. Market betas are obtained by regressing monthly fund or security excess returns on the value-weighted CRSP market excess return over the period 2007–2017 with at least 24 observations. We calculate portfolio betas for households that have at least 75% of risky assets in assets with observed betas. Winning sectors are defined as the top five sectors based on stock market returns from the election date until the end of 2016: financials, telecommunication services, energy, materials, and industrials. Losing sectors are defined as the bottom five sectors based on stock market returns from the election date until the end of 2016: consumer staples, utilities, information technology, health care, and real estate. Consumer discretionary is in the middle and is considered neither. The portfolio international share of equity is defined as the sum of international equity securities and funds relative to total equity products. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. Standard errors are clustered at the zip code level.

Table A.11: Regressions of Equity Share on Likely Political Affiliation for Active Investors (Alternative Definitions)

	Portfolio equity share (in %)					
	All	TDF share $< 50\%$	Contribution not default	Trade any past 5 years	Trade past year	Trade all past 3 years
	(1)	(2)	(3)	(4)	(5)	(6)
Zip code Republican contribution share × Post 1 quarter	0.518	0.593	0.559	0.880	1.063	1.220
	(0.019)	(0.023)	(0.031)	(0.028)	(0.036)	(0.049)
Zip code Republican contribution share × Post 2 quarters	0.826	0.961	0.876	1.402	1.657	1.772
	(0.024)	(0.028)	(0.040)	(0.035)	(0.044)	(0.060)
Zip code Republican contribution share × Post 3 quarters	0.690	0.917	0.883	1.327	1.588	1.763
	(0.029)	(0.032)	(0.046)	(0.041)	(0.051)	(0.068)
Zip code Republican contribution share × Post 4 quarters	0.820	0.968	1.029	1.374	1.556	1.654
	(0.032)	(0.038)	(0.052)	(0.046)	(0.056)	(0.074)
Quarterly controls						
Initial equity share (2nd order)	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y
Percentage of RI sample	90.9%	57.2%	32.7%	40.7%	27.4%	15.1%

	Trade in empl. acc. any past 5 years	Trade in empl. acc. past year	Trade in empl. acc. all past 3 years	Portfolio change any past 5 years	Portfolio change past year	Portfolio change all past 3 years
	(7)	(8)	(9)	(10)	(11)	(12)
Zip code Republican contribution share × Post 1 quarter	1.081	1.281	1.715	1.141	1.728	2.965
	(0.044)	(0.069)	(0.140)	(0.038)	(0.072)	(0.193)
Zip code Republican contribution share × Post 2 quarters	1.633	1.963	2.582	1.800	2.646	4.245
	(0.054)	(0.085)	(0.168)	(0.047)	(0.085)	(0.223)
Zip code Republican contribution share × Post 3 quarters	1.606	1.966	2.803	1.740	2.564	4.086
	(0.062)	(0.095)	(0.186)	(0.053)	(0.095)	(0.240)
Zip code Republican contribution share × Post 4 quarters	1.730	2.017	2.688	1.745	2.444	3.532
	(0.068)	(0.102)	(0.200)	(0.059)	(0.103)	(0.254)
Quarterly controls						
Initial equity share (2nd order)	Y	Y	Y	Y	Y	Y
Age (2nd order)	Y	Y	Y	Y	Y	Y
Log initial wealth (2nd order)	Y	Y	Y	Y	Y	Y
Percentage of RI sample	19.2%	9.3%	3.1%	26.7%	10.9%	2.7%

Notes: This table presents regression coefficients of quarterly household portfolio equity shares on the zip code Republican contribution share, interacted by quarterly dummies, in various subsamples of the population: households with less than 50% of assets in target date funds (TDFs, column 2), households with prior-year contributions that are not invested fully in either a TDF or a fixed-income fund (column 3), households with active trades in preceding years (columns 4–6), households with active trades in employer-linked accounts in preceding years (columns 7–9), and households with active portfolio equity share changes in preceding years (columns 10–12). An active portfolio equity share change is defined as a change of at least 5% caused by active trading. The portfolio equity share is defined as the sum of equity securities, pure equity funds, and the equity portion of hybrid funds, relative to total portfolio assets. We report the results for the four quarters following the election, relative to allocations just before the election. We control for quarterly second-order polynomials in initial share and log financial wealth, a second-order polynomial in age below 65, a dummy for age above 65, as well as individual and time fixed effects. Financial wealth is defined as the total amount of household financial assets in retirement and non-retirement accounts. Wealth and the initial equity share are measured as of October 31, 2015. Standard errors are clustered at the zip code level.