The Wealth of Democratic Participation: Measuring Within-Individual Political-Economic Engagement*

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This paper explores the inherent connection between political engagement and wealth accumulation among ordinary homeowners. We document a robust, positive, and monotonic relationship between individual housing returns and the number of times an individual democratically participates. We first rule out that this relationship is driven by location or neighborhood effects, individual-level income, individual-level wealth, or individual-level demographic characteristics including gender, race, age, or partisan affiliation. We then show that the political-economic engagement relationship is driven by behavior that requires active participation: purchasing undervalued properties within a neighborhood or timing the housing market. The politically engaged have higher levels of education but, paradoxically, education does not explain their housing market performance. Instead, we present suggestive evidence that factors typically correlated with education – such as financial literacy, large-stakes risk aversion/tolerance, and behavioral traits – might play a role in explaining this relationship. Overall, we quantify that the politically-economically engaged subset of the population represents around 30% of eligible voters, and their behavior accounts for 53% of all voter registrations and 63% of the annual growth in aggregate housing wealth (around $1.15 trillion or 5% of GDP in 2020). Our findings contribute to the literature on determinants of political engagement by emphasizing the fundamental interconnection between economic and political behaviors at the individual level, moving beyond traditional resource-based or demographic explanations. Furthermore, our analysis extends research on democracy and national wealth (Acemoglu, Naidu, Restrepo, and Robinson 2019; Barro 1996) by suggesting individual-level motivations or beliefs as potential microfoundations for the broader, country-level association between democratic participation and economic growth.

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1 Introduction

The relationship between economic and political power has long been central to debates on democracy and growth. Economic prosperity can expand political influence, and democratic institutions can shape economic trajectories. But beyond the broad institutional level, how do these forces interact at the level of ordinary citizens? While wealth and income have well-documented correlations with voter turnout (Avery 2015; Schafer, Cantoni, Bellettini, and Berti Ceroni 2022; Leighley and Nagler 2013; Franko, Kelly, and Witko 2016; Akee, Copeland, Costello, Holbein, and Simeonova 2018), this literature often assumes economic resources as a precursor to civic participation, leaving aside the possibility that political and economic engagement may be interwoven within the individual at a fundamental level, and that it is the politically-economically engaged that are driving both democratic participation and wealth accumulation.

This paper examines the inherent link between political engagement and wealth accumulation. We show that this relationship is not merely a reflection of income, wealth, or demographic factors such as age, race, gender, or partisan affiliation. However, gender (but not race) does seem to be correlated with factors driving this relationship. We also rule out explanations pertaining to location, and show that neighborhood effects, across several measures of neighborhood, are unable to explain the political-economic engagement relationship, suggesting that the connection between economic and political engagement operates beyond local economic conditions or social reinforcement mechanisms. Finally, we show that human capital factors appear to be important and that the politically-economically engaged tend to purchase undervalued properties within a neighborhood and time the housing market. However, both individual- and neighborhood-level education, contrary to expectation play little role suggesting that deeper behavioral or psychological mechanisms are at play.

To test this relationship empirically, we construct a unique voter-level dataset integrating multiple administrative records across the whole U.S., including property transaction deeds, tax assessments, credit histories (for one large U.S. state), and detailed voter registration and participation records. Our final integrated dataset consists of four key components: voter registration and participation records; property-level information on price, assessments, structural characteristics, and location; individual income, individual measures of wealth, and balance sheet information

for a subset of voters; and tract-level socioeconomic characteristics. Using this integrated dataset, we are able to measure the relationship between electoral participation and housing returns more precisely than what is possible with other available data, and we are able to provide evidence in support or against the role of many ex-ante expected mechanisms.

Our main empirical analysis of the relationship between electoral participation and housing returns reveals a monotonic pattern: Voters who have participated in more elections tend to experience higher housing returns, with each additional election attended correlating with an increase in property value appreciation. Specifically, in the baseline specification, individuals participating in two of the past seven elections earn 18 basis points more than those participating in only one; meanwhile, those participating in seven elections earn a premium of 1.62%.

We explore several channels that drive the relationship between electoral participation and housing returns. The first channel we explore is spatial, concerning how political engagement interacts with neighborhood characteristics. More engaged voters may reside in areas where local governments are more attuned to constituent demands, resulting in policies that enhance property values, such as better public services, zoning regulations, or infrastructure investments. Thus, joint democratic participation may not be reflecting individual agency but instead broader spatial conditions that can also influence housing markets. However, our estimates indicate that these factors do not explain our documented pattern. Instead, the monotonic relationship between electoral participation and housing returns remains virtually unchanged even after neighborhood fixed effects, and broader market trends.

Because spatial factors fail to account for the relationship between political engagement and housing returns, we then delve into evaluating the role of individual demographic factors. After controlling for birth year, race, and political affiliation, the magnitudes of the premia remains virtually identical. The relationship and its monotonic pattern persists after controlling for gender, but it is stronger for men than it is for women. This would be consistent with the findings of a gender gap in returns documented by Goldsmith-Pinkham and Shue (2023) if the drivers of the gender gap in housing returns and the political-economic engagement relationship are similar – and we will document they are.

The third set of analyses we provide is evaluating the role of individual resources (individual income, individual wealth, credit history) in explaining our empirical pattern. Our estimates

indicate that neither income nor wealth alone account for our findings. While previous research has documented correlations between these economic factors and political participation, our analysis suggests that the mechanisms driving engagement operate beyond financial resources. Even after controlling for income and wealth, the association between actions fostering wealth accumulation and democratic participation remains robust and identical. This implies that the motivation to engage civically is not solely a byproduct of financial status but may stem from deeper behavioral or psychological factors that simultaneously drive both economic agency and political involvement.

We next explore how individual decision-making relates to the relationship between electoral participation and housing returns. More engaged voters tend to purchase smaller, undervalued homes, a pattern that suggests they may be more adept at identifying properties with higher appreciation potential. This aligns with broader research on financial literacy and market participation, where individuals with greater political engagement often exhibit more strategic economic behavior. Additionally, we find that these voters time the housing market more effectively, purchasing homes during periods of relatively lower prices and selling when market conditions are more favorable. Instead of individual income and wealth, our evidence indicates that human capital factors and the decisions that follow from them – selecting underappreciated properties and optimizing transaction timing – play a critical role in explaining the observed monotonic relationship between electoral participation and housing returns. These findings not only suggest that political engagement and economic engagement are interconnected at the individual level rather than neighborhood level, but that even at the individual level the forces at play are less structural than for many other economic relationships.

Lastly, we quantify that the politically-economically engaged subset of the population represents around 30% of eligible voters, and that their political footprint accounts for 53% of all voter registrations. They also account for 63% of the annual growth in aggregate housing wealth, which for 2020, would have represented around $1.15 trillion or 5% of GDP.

Contributions. Our findings contribute to the expansive literature exploring the determinants of voting by demonstrating a previously underappreciated dimension: political engagement's intrinsic relationship with individual-level economic engagement, independent of traditional socioeconomic predictors of participation such as income, wealth, demographic traits, or neighborhood

contexts (Avery 2015; Leighley and Nagler 2013; Schafer et al. 2022). While existing studies often focus on resources, logistical barriers, or social networks as key determinants of electoral participation, our analysis highlights behavioral and decision-making characteristics – such as skill in economic timing, market awareness, and strategic engagement – that independently connect political participation and wealth accumulation. Thus, we shift the emphasis from external resource constraints to internal motivations and behaviors, reframing political engagement as potentially part of a broader set of individual attributes that concurrently shape both economic and political behaviors.

With respect to the literature linking democracy and national wealth, this paper complements and extends prior research by shifting focus from country-level analyses (e.g., Acemoglu et al. 2019; Acemoglu, Johnson, Robinson, and Yared 2008; Barro 1996) to individual-level mechanisms underlying the relationship between political engagement and economic outcomes. Earlier literature generally examines macro-level associations, investigating how democratic transitions influence economic prosperity or how economic conditions influence democratic transitions. Our contribution instead reveals a consistent, individual-level linkage between civic participation and wealth accumulation, suggesting a parallel, micro-level dynamic that mirrors macro-level processes. By documenting that civic participation is robustly correlated with wealth outcomes independently of conventional explanatory factors, we illustrate how individual motivations or beliefs might jointly shape both democratic engagement and economic decision-making, potentially providing microfoundations for the observed correlations between democracy and prosperity at the national scale.

2 Potential Explanations for the Relationship Between Political Engagement and Accumulation of Housing Wealth

2.1 Spatial Factors

Spatial factors, such as neighborhood characteristics and proximity to political institutions, significantly influence electoral participation, housing returns, and economic engagement. In terms of electoral participation, individuals living in areas with strong political networks, greater political mobilization, or higher levels of civic infrastructure (like polling stations and local political organizations) are more likely to vote. The social dynamics of these neighborhoods can create a culture

of political engagement, where voting is normalized and supported by the collective behavior of the community. Additionally, living in close proximity to political institutions or being part of politically active areas can make it easier for individuals to participate, thereby increasing voter turnout.

Spatial factors also affect housing returns and economic engagement. Areas with higher demand for housing, often due to desirable amenities, access to employment, or good schools, typically experience higher housing returns. Proximity to economic hubs, transportation networks, or educational institutions can drive property value appreciation and increase opportunities for economic mobility. The relationship between electoral participation and housing returns is intertwined, as individuals in politically engaged neighborhoods may also experience better housing outcomes. This connection can be due to greater political advocacy for local infrastructure, zoning changes, or policies that increase property values.

2.2 Individual Demographics

Individual demographic characteristics, such as gender, race, and age, play a crucial role in shaping electoral participation, housing returns, and economic engagement. In terms of voting behavior, age is one of the strongest predictors of participation, with older individuals more likely to vote. Gender differences also emerge, as women have historically voted at higher rates than men in many elections, often driven by policy preferences related to social welfare and education. Race, meanwhile, is deeply intertwined with structural barriers to participation, with historically marginalized groups facing obstacles such as voter suppression, districting policies, and socioeconomic disparities that can lower turnout.

These same demographic characteristics also influence housing returns and economic engagement. Age affects homeownership rates and investment strategies, with older individuals typically having higher home equity and benefiting more from long-term property appreciation. Racial disparities in housing returns persist due to historical redlining, lending discrimination, and differences in access to high-opportunity neighborhoods, leading to lower appreciation rates in predominantly minority communities. Gender can also play a role, as women – especially single women – often purchase homes in different locations and at different price points than men, which can influence long-term returns (Goldsmith-Pinkham and Shue 2023). The link between these fac-

tors and electoral participation is significant, as individuals who are more economically engaged – through homeownership or business investment – tend to have stronger incentives to vote and influence policies that protect their financial interests. However, disparities in housing markets can also reinforce political inequalities, as those with lower returns on investment may have fewer resources or incentives to engage in the political process.

2.3 Individual Socioeconomic Resources

Wealth and income may influence both electoral participation and economic engagement, particularly through resource availability, financial stability/access to credit, and policy interests. Higher-income individuals and those with greater wealth are more likely to vote if they face fewer logistical barriers, such as inflexible work schedules or transportation issues, and may be more likely to see political engagement as a means of protecting their economic interests. Wealth can also facilitate homeownership, business investments, and access to high-appreciation housing markets, all of which may contribute to greater economic returns. In contrast, lower-income individuals often face economic precarity, which may make immediate financial concerns – such as job security or rent payments – a higher priority than voting or long-term investment strategies. This disparity may create a reinforcing cycle: those with higher wealth not only have greater opportunities to accumulate economic gains through housing and investment returns but also may wield greater political influence to shape policies that sustain their financial advantages, potentially widening the economic and political gap between income groups.

2.4 Individual Education and Beliefs

Education and beliefs may influence both electoral participation and economic engagement, particularly through knowledge access, cognitive skills, and ideological motivations. Individuals with higher levels of education are more likely to vote, as they may possess greater awareness of political processes, a stronger sense of civic duty, and the skills needed to navigate voter registration and policy debates. Education can also increase information about economic opportunities, for example, by providing access to financial literacy, which may facilitate wealth accumulation through homeownership and investments. Beliefs, including trust in institutions, political efficacy, and cultural attitudes toward markets, may further shape both political and economic behavior.

Those who believe their participation matters may be more likely to engage in elections and make long-term financial decisions, while those with greater skepticism toward government or economic systems may disengage from both. These dynamics may contribute to a reinforcing cycle in which education and belief systems shape not only individual socioeconomic outcomes but also collective political and economic structures, potentially deepening disparities over time.

3 Data and Empirical Specification

3.1 Data

Our main data set comprises three components: voter records data, property-level transaction deeds data, and tract-level characteristics. The voter records are retrieved from L2, a non-partisan data vendor widely used in political campaigns and academic research. The L2 data provides information on all registered voters' birth year, gender, and ethnicity while each voter is assigned a unique ID for identification. It also contains year-by-year observation of registered voter's marital status and house ownership status. We pool the observations from 2014 to 2020, aggregating the frequency of voter registration and actual voting eventually identifying the levels of democratic participation.

L2 data additionally contains information on voters' year-by-year partisanship. For 34 states (and DC), such information is collected by voters' self report while for the rest of the states, the partisanship is inferred by multiple sources including primary elections, demographics,exit polls etc. By aggregating voter's partisanship history, we addtionally identify voter's party affiliations.

The core data set for our analysis is property-level transaction deeds data gathered by CoreLogic. Each observation of the data set reflects details of one housing transaction, including the date of transaction, the sale amount, the type of property, the buyer's name, and the seller's name. It also contains indicators of whether the transaction is a foreclosure sale, interfamily related sale, new construction, investor purchase, or a corporate purchase. With these indicators, we are able to limit our observations to arms-length nonforeclosure secondary residential property transactions. In addition to the transaction details, we also have property-specific static information including property code, fipscode, zipcode and the year of built to better identify each property.

With the history of consecutive arms-length nonforeclosure transactions for each property, we

can compute the realized return earned during the holding period by first matching the buyer's name and seller's name for each property i, identifying time of purchase t_b, time of sale t_s, purchase amount P_b and sale amount P_s. The realized annual return for the property i during the holding period can be defined by: $r_i = (\frac{P_s}{P_b})^{\frac{1}{t_s - t_b}} - 1$. The buyer's name and subsequent seller's name are limited to be an exact match to avoid potential errors of identifying property return. Moreover, we require the holding length to be at least 6 months to rule out speculative investment behavior and avoid extreme return due to compounding it to annual return. The outliers of return are winsorized at the 1st and 99th percentiles. Finally, with the longitude and latitude merged from property-level assessment records, we are able to identify the tracts of these properties and further match the property return with tract-level features from tract-level American Consumer Survey 5-Year estimates to accomodate potential hedonic pricing effect.

By merging voter records data, which includes the voters' voting propensity and partisanship with property-level return data, we are able to associate property-level return with voters' level of political engagement and assess how democratic participation affects aggregation of wealth through affecting housing returns. We dropped the erratic observations with voters purchasing houses before turning 18 to finalize the construction of our data set, and the table of summary statistics is presented in Table 1.

3.2 Empirical Specification

To assess how democratic participation affects the aggregation of wealth through housing return, we first identify the level of democratic participation by aggregating the panel of L2 data. Noting that a voter will appear in the L2 data when the voter registers to vote in a specific year, by aggregating the number of times appearing in the long panel, we can obtain the number of times $part_i$ that a voter registers to vote, which proxies the democratic participation during the observation period. Noting that if a person never registers to vote, then we would not observe that person in the L2 data or merge with CoreLogic deeds data, the baseline level or the lowest level of democratic participation identified is 1.

Our central estimating equation is:

$$r_{i,j,k,t_1,t_2} = \beta_1 + \beta^r part_i + \pi^{age} + \pi_{t_2 - t_1} + \pi_{j,t_2} + \varepsilon_k$$

for property k owned by agent i in geography j, purchased at time t_1 and sold at time t_2. π^{age}

captures age fixed effects as life-cycle considerations are an important predictor an agent's investment and political decisions. $\pi_{t_2-t_1}$ captures the effect of holding period and π_{j,t_2} captures how the geographic and time fixed effect when the return is realized. In our baseline result, the geography is at county-level while the transaction timing is identified monthly. $part_i$ is a vector of indicator variables for different levels of democratic participation and the vector of coefficients β^r captures how housing return varies across investors at different levels of democratic participation. By observing whether the coefficients are significant and the monotonicity of these coefficients, we can infer how democratic participation affects housing return and whether the magnitude of effect increases or decreases with the magnitude of participation. We measure participation as an individual that either registers to vote (excluding automatic registration), votes, or makes a donation. We validate this form of participation measurement against voting percentage and donor intensity in Table 25.

4 Results

4.1 Baseline Findings: The Political-Economic Engagement Linkage

Table 2 shows a positive and monotonic relationship between electoral participation and housing returns, with higher electoral participation associated with greater property value appreciation. Individuals who voted only twice exhibit the smallest estimated returns, while those who voted seven times experience the highest returns across all political affiliations. This pattern holds for all voter groups, though the magnitude of the effect varies. The relationship is strongest among voters who do not identify as either Republican or Democrat, followed closely by Democratic voters, while Republican voters show relatively lower – but still positive – returns. These findings suggest that political engagement is linked to economic decision-making.

Buying vs. Selling. Table 4 Columns (1) and (2) present results linking electoral participation to the purchase and selling price of properties. The results indicate a negative relationship between electoral engagement and both purchase and sell prices, suggesting that individuals who vote more frequently tend to engage in transactions at lower prices. Column (1) shows that higher electoral participation is associated with lower purchase prices, while column (2) shows a similar trend for sell prices. However, the difference between the two columns – representing the gains from these transactions – becomes larger as political engagement increases. For example, those who voted

twice experienced a small difference between purchase and sell prices, whereas those who voted seven times saw a much larger gap. That the effects are stronger on the purchase price than the selling price is consistent with the returns from politically engaged individuals arising from the choice of real estate transactions, or negotiation skills (e.g., Goldsmith-Pinkham and Shue (2023)).

4.2 Is there Economic Engagement?

Are they making different decisions? We establish that the type of homes purchased by the electorally engaged is different. Table 5 shows the relationship between electoral participation and property characteristics. The results suggest that individuals who vote more often tend to purchase smaller and less valuable homes. The estimates show a negative association between electoral participation and key structural features such as living square feet, number of rooms and bathrooms, and assessed value, with more frequent electoral participants owning homes with fewer amenities. Specifically, participating in two elections is associated with a small reduction in living space, while electorally participating seven times corresponds to a substantially larger decrease. Other features such as fireplaces and pools do not show consistent increases. Despite some variation across characteristics, the overall trend shows that higher electoral engagement is linked to the purchase of smaller homes.

5 Spatial, Demographic, and Economic Factors can't Explain the Link

5.1 The Political-Economic Engagement Linkage is Not Spatial

A large portion of housing returns is often attributed to location, but our analysis finds no evidence that neighborhood effects drive the relationship between electoral participation and housing returns. In Table 3, we establish this by conditioning on progressively smaller geographic units, and the estimates remain stable, indicating that differences in property appreciation are not primarily driven by neighborhood characteristics such as local economic growth, school quality, or infrastructure investment. Instead, the observed relationship appears to be shaped by individual behaviors, such as selecting undervalued properties and timing the market effectively, rather than external spatial factors.

Similarly, while voter turnout is frequently linked to neighborhood characteristics, our results indicate that location does not explain the relationship between electoral participation and hous-

ing returns. Controlling for increasingly granular geographic units, we find that the connection between electoral participation and housing returns remains unchanged, suggesting that social reinforcement mechanisms or differences in local election administration do not drive the observed pattern. Instead, individual-level factors, such as financial decision-making skills and engagement in civic and economic life, appear to be the primary determinants of both higher electoral participation and greater housing returns.

5.2 Individual Socioeconomic and Demographic Factors do not Explain the Political-Economic Engagement Link

Demographic Traits. We don't find that partisan affiliation affects the political-economic engagement relationship either (Table 6). Similarly, the comparison between Table 2 and Table 7 shows that the estimates of housing returns associated with political participation are remarkably similar, even after accounting for race. Across both tables, greater electoral participation consistently correlates with higher housing returns, and, despite the well documented relationship between housing returns and race (e.g., Kermani and Wong 2024) the addition of race controls in Table 7 does little to change these core estimates. This suggests that race does not explain the relationship between political-economic engagement and housing returns. However, Table 7 does reveal that race plays a role at lower levels of participation as Black voters see increased returns when participating in two or three elections.

Table 8 shows that accounting for gender still preserves the core relationship between political and economic engagement. However, accounting for gender does mitigates this relationship. Male homeowners overall earn significantly higher annual returns than females, averaging 0.43%, with particularly strong gains for Democratic males (0.38%) and males affiliated with other parties (0.52%). Republican males, however, see much smaller and statistically insignificant returns of just 0.08. Male voters benefit significantly more from increased participation, with male-specific gains especially apparent in higher participation levels. In Section 6, we will show that the politically engaged take significantly different housing decisions with respect to purchase price of the property and market timing, factors that were documented to affect the gender gap in housing returns by Goldsmith-Pinkham and Shue (2023).

Economic Traits of the Politically Engaged. In Tables 11 and 12, we show results exploring the relationship between electoral participation, income, and wealth. The relationship between electoral participation and income, as presented in columns (1) to (4) of 11, suggests that voting more often is associated with lower income, though the magnitude of the effect diminishes when controls are added. In the first two columns, which do not account for the year the home was sold, tract, or holding period, the estimates show a negative association between participation times and income, with individuals who participate more frequently having lower incomes. Specifically, participating on two elections is associated with a small reduction in income, while participating seven times shows a significantly larger reduction. Expectedly, when year of transaction by tract, county seasonality, holding period fixed effects are introduced in columns (3) and (4), the negative relationship persists but becomes slightly less pronounced. Columns (2) and (4) additionally control for gender and race, and the introduction of these controls further seems to moderate the strength of the negative association, indicating that other factors, such as demographic characteristics and housing market conditions, play a role in this relationship. Despite this moderation, the pattern remains consistent: more frequent electoral participants tend to have lower incomes, though the strength of this relationship is somewhat attenuated when additional controls are applied. Table 12 presents a similar story.

Income and the Political-Economic Engagement Relationship. Housing returns and electoral participation could be explained by differences in individual income (Electoral Participation: Schafer et al. 2022; Aneja and Avenancio-Leon 2019; Housing Returns: e.g. Gupta, Hansman, and Mabille 2024). In Table 11, within the sample of voters with information about individual income, columns (5) and (6) present estimates of the relationship between electoral participation and housing returns and column (6) controls for income. A comparison of columns (5) and (6) finds no evidence that income levels drive the relationship between electoral participation and housing returns. By controlling for income at the individual level, we show that the estimates remain stable, suggesting that differences in property appreciation are not primarily influenced by household earnings or broader economic status. While higher-income individuals typically have greater access to financial resources and investment opportunities, our findings indicate that the observed relationship cannot be explained solely as a byproduct of income.

Wealth and the Political-Economic Engagement Relationship. Likewise, although wealth is often considered a key factor in housing returns, our analysis finds no evidence that wealth levels are driving the relationship between electoral participation and property appreciation. In Table 12, after controlling for wealth at the individual level, the results remain unchanged, indicating that variations in housing returns are not primarily attributable to household wealth or financial standing. While wealthier individuals generally have more access to investment opportunities and financial resources, our findings suggest that the connection between electoral participation and housing returns is not simply a consequence of wealth.

Credit. In Table 15, we show individuals with higher levels of political engagement have better credit outcomes. Specifically, more frequent electoral participants experience fewer bankruptcies and foreclosures and have significantly higher credit scores. Those who voted seven times have an average credit score increase of over 22 points. However, in columns (7) and (8) we observe that including individual-level credit scores as a control does not affect the political-economic engagement relationship. While credit score don't seem to play a role in this relationship, we explore the role of financial literacy and skills in the next section.

6 Human Capital, Behavior, and Political-Economic Engagement

6.1 Education

Given the results in the previous subsection, it is natural to wonder whether individual levels of education contribute to this relationship or if, instead, other individual traits are the ones that are consistent with skillful decisions. As we did before with other factors, we look first at the relationship between political engagement and education, and then we look at the relationship between political engagement and housing returns controlling for education. Table 13 presents our results. Columns (1) to (4) explore how education levels, measured in years of schooling, differ across individuals with varying levels of voting intensity. The results show a clear positive relationship: individuals who vote more frequently tend to have higher levels of education. As electoral participation increases from two times to seven times, the years of education also increase steadily and significantly. For example, participating seven times is associated with approximately 0.60 additional years of education compared to the baseline. These findings remain robust across

different model specifications that control for factors such as birth year, race, gender, geographic location, and time effects. Overall, the results suggest that frequent electoral participants are systematically more educated, highlighting a strong connection between political engagement and educational attainment. Interestingly, this contrasts with our analysis of income and wealth, where higher political engagement was associated with lower income levels and less wealth, after controlling for neighborhood and housing market controls.

To see the role of education on the political-economic engagement relationships, in columns (5) and (6), we examine the relationship between voting intensity and annual returns on property investments, with column (5) as the benchmark and column (6) controlling for education. The results show that accounting for education does not affect this relationship. Individuals who vote more frequently tend to earn higher returns on their property, regardless of education levels. For example, in both specifications, participating seven times is associated with an increase of approximately 1.5 percentage points in annual returns. Interestingly, once education is controlled for, the direct effect of education on property returns is slightly negative and statistically significant, though economically small. This suggests that the positive association between voting and property returns is not simply driven by education levels. Instead, frequent electoral participation may capture other factors such as civic engagement, social capital, or local knowledge that contribute to better investment outcomes, while education alone does not guarantee higher property returns.

6.2 Variance Decomposition of Factors

Why doesn't level of education explain the political-economic engagement relationship? One potential reason is that they never explained housing decisions to begin with. Using Understanding America Study (UAS) survey data, we perform a variance decomposition to understand how much education contributes to housing decisions and how much of that contribution is explained by other personality traits. UAS survey data contains information on personality traits (openness, conscientiousness, extraversion, agreeableness, neuroticism), financial literacy, numeracy, and risk aversion measures (small and large stakes), in addition to homeownership, education, wealth, income, and demographic characteristics (age, gender, race/ethnicity). We use lasso to choose which variables explain homeownership after accounting for state of residence and demographic characteristics and find financial literacy, large stakes risk aversion, openness, conscientiousness,

and neuroticism retain predictive value in addition to education, income, and wealth. Extraversion, agreeableness, small stakes risk aversion, and numeracy have little predictive value and are dropped by the lasso procedure. This pattern aligns with the idea that becoming a homeowner often reflects long-term planning, risk tolerance in large financial decisions, and a willingness to navigate complex processes – all traits linked to financial literacy, risk preferences, and certain personality dimensions.

In Figure 1, we present variance decomposition results. The variance decomposition results across the three figures highlight the shifting importance of education, wealth, income, and behavioral traits in explaining homeownership decisions. When behavioral factors are excluded (Panel A), education explains 23.6% of the explained variation, while wealth and income account for a larger share at 51.2%. However, once behavioral traits are included (Panel B), the explanatory power of education drops sharply to just 2.2%, while behavioral traits themselves explain 42.8% of the variation – nearly double the contribution of wealth and income, which accounts for 16.6%. This shift suggests that many of the effects we might attribute to education are actually captured by underlying behavioral traits such as risk preferences or personality factors. Finally, when decomposing the variation remaining after controlling for wealth and income (Panel C), education explains only 3.9% of the variation, while behavioral traits dominate, accounting for 76%. These results underscore the substantial role behavioral characteristics play in shaping homeownership outcomes, far exceeding the explanatory power of education alone.

6.3 Interpreting the Residual Variation

Financial Literacy. The variance decomposition results identify financial literacy as a key factor in predicting homeownership, which would be consistent with better financial decision-making.

Behavioral Traits. Beyond financial literacy, other personal characteristics such as risk aversion and personality traits play a critical role in decision making. In the context of shaping housing decisions, we showed above that their ability to predict homeownership is not captured by education, wealth, income, or demographic traits. In particular, large-stakes risk aversion influences a buyer's willingness to purchase undervalued properties or to enter the market during periods of heightened uncertainty – behavior we previously documented in the timing and selection of home

purchases. Individuals with lower risk aversion are more likely to take advantage of these opportunities, capturing higher returns by purchasing when prices are depressed or when uncertainty deters more cautious buyers. Meanwhile, personal traits like openness, as defined in psychology, can contribute to understanding the complexity behind taking such decisions successfully. To quantify the importance of these factors relative to financial literacy, we conduct an additional variance decomposition. The results show that risk preferences and personality traits contribute substantially to explaining differences in housing outcomes, underscoring that these behavioral characteristics – beyond financial literacy – drive key investment decisions in the housing market.

Beliefs. Beyond personality traits, individual beliefs also play an important role in shaping the political-economic engagement relationship. Beliefs such as trust in institutions can influence the extent to which individuals engage politically and how they approach economic decisions that affect housing returns. For example, individuals with higher institutional trust may feel more confident making investments that expose them to housing market risks, contributing to better returns. Similarly, beliefs shaped by anticipatory utility – where individuals derive emotional value from the expectation of future outcomes – may lead politically engaged individuals to take positions based on optimistic views of future market conditions or personal financial prospects, ultimately affecting their realized housing returns. At a broader level, shared subjective beliefs linking economic and political outcomes could also reinforce the endogeneity of the relationship between democratic participation and economic liberalism.

6.4 Better Decision Making

In Table 10, we assess whether electorally engaged voters tend to buy undervalued properties and sell their homes above their assessed value. To do so, we compare market values to assessment values. While assessment values may not be a perfect proxy for a home's location value, they are reliable within a neighborhood, as assessments typically reflect the value of structural characteristics with reasonable accuracy. To ensure our analysis provides a meaningful benchmark, we restrict our comparison to the within-tract-year level. In addition, to mitigate any distortions arising from infrequent assessments, we conduct a separate analysis on homes assessed annually, finding no change in results.

Panel A presents the relationship between frequency of electoral participation and the market-assessment value gap. The findings suggest that individuals who vote more frequently tend to purchase homes below their assessed value and sell them at a premium. The first column shows that the gap between market value and assessment value at the time of purchase becomes increasingly negative as electoral participation increases, indicating that more engaged voters acquire properties at a relative discount. For instance, those who voted twice experience a small negative gap, while those who voted seven times see a significantly larger one, reinforcing the idea that they secure better deals at the time of purchase. In contrast, the second column, which captures the gap at the time of sale, reveals the opposite pattern – more engaged voters tend to sell their homes at prices above their assessed value, with the positive gap increasing alongside electoral participation.

This pattern may suggest that politically engaged individuals possess stronger market awareness, negotiation skills, or strategic decision-making abilities, allowing them to optimize financial gains in real estate transactions. Alternatively, they may be making physical improvements to their properties that increase their market value. While we cannot directly assess cosmetic changes or renovations, we do examine whether substantial structural modifications have occurred by analyzing changes in assessment values. In Panel B, we conduct this analysis and find no increase in assessment values between the time of purchase and sale.

Market timing. The results presented in Table 4 suggest that electoral engagement is associated with favorable market timing in real estate transactions, both at the time of purchase and sale. In the first column, which measures the deviation from area returns at the time of purchase, more frequent electoral participants tend to buy properties at relatively lower prices compared to market trends in the area. For instance, those who vote 2 times experience a modest negative deviation, while those who vote 7 times experience a significantly larger negative gap, indicating that they tend to purchase homes at a relative discount. In contrast, the second column, which measures the deviation from area returns at the time of sale, shows that more engaged voters tend to sell their properties at higher-than-market returns. The positive deviations increase with electoral participation, with individuals who participate seven times seeing the highest positive return relative to the area. This suggests that one reason why politically engaged individuals perform better in their home purchases may be better timing the market.

7 Back-of-the-Envelop Impact

In this section, we briefly discuss the contribution of the politically-economically engaged to the electorate at large and wealth aggregation.

Contribution to Aggregate Housing Wealth. To estimate the aggregate economic impact of political engagement, we use the estimates of incremental annual housing returns associated with different levels of electoral participation from our primary regression results. Specifically, we translated these incremental returns into monetary values by multiplying them by average property prices and the number of individuals at each political engagement level in our dataset. Subsequently, recognizing that our analysis relied on subset of all U.S. homeowners, we extrapolated these monetary estimates to the broader U.S. economy by proportionally scaling them using national housing market statistics, including total homeownership and average home values. Politically engaged individuals contribute 63% of the annual growth in aggregate housing wealth which, for a stock of housing of approximately $24.2 trillion, represents an annual increase in wealth of around $1.15 trillion.

Contribution to Registered Voters. To obtain the number of high democratic participants who are homeowners, we multiply the joint probability of being a high participation voter and appearing in the dataset by the ratio of total homeowners to the total number of adults of eligible voting age in the population:

$$P(\text{High-Participation Homeowners}) \times P(\text{Merged}) = P(\text{High} \cap \text{Merged}) \times \frac{\text{Total Homeowners}}{\text{Total Voting-Age Adults}}$$

The joint probability $P(\text{High} \cap \text{Merged})$ is expressed as the total probability of being merged into the dataset multiplied by the conditional probability of being a high participation voter given that the individual is observed in the dataset:

$$P(\text{High} \cap \text{Merged}) = P(\text{Merged}) \times P(\text{High}|\text{Merged})$$

This formulation reflects that the probability of being both highly engaged and in the dataset depends on the overall chance of inclusion in the sample and the composition of that sample in terms of political engagement. Im 2020, there were 239 million eligible voters. Making use the information in Table 1 and these two relationships above, we obtain:

$$P(\text{High-Participation Homeowners}) = P(\text{High}|\text{Merged}) \times \frac{\text{Total Homeowners}}{\text{Total Voting-Age Adults}}$$
$$= 0.63 \times \frac{114}{239} = 30\%$$

That is, 30% of the voting-age population are high-participation homeowners. They account for 77% of registrations from homeowners. Since they are more likely to be homeowners to begin with, using the statistics in Table 1, this represents 53% of all total registrations.

8 Conclusion

This paper documented a robust and intrinsic link between political engagement and wealth accumulation. We demonstrated that political and economic participation are fundamentally interconnected at the individual level, independent of traditional explanations such as income, wealth, demographic characteristics including gender, race, age, partisan affiliation, and neighborhood effects. Furthermore, we showed that education, although influential, explained less than XX of this correlation, highlighting deeper, individual-level behavioral or psychological mechanisms.

Our findings contribute significantly to the literature on determinants of political engagement by emphasizing the fundamental relationship between civic and economic behaviors beyond conventional resource-based or demographic explanations. Specifically, our results suggest that shared motivations, beliefs, or decision-making traits – such as strategic market awareness, financial literacy, and long-term planning – might underpin both civic and economic engagement simultaneously, but further research is needed to more precisely determine the nature of these traits. An important implication of this relationship is that the building blocks of the democratic process can be eroded or strengthened at the individual level. Recognizing this individual-level link provides valuable insights into how economic and democratic institutions might mutually reinforce one another, highlighting the importance of considering these intrinsic behavioral connections in policy and institutional design.

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9 Tables

Table 1. Summary Statistics

	(1)	(2)	(3)	(4)
	Low $\in \{1,2\}$	Medium$\in \{3,4,5\}$	High $\in \{6,7\}$	Overall
	Mean	Mean	Mean	Mean
Panel A: Chracteristics of Voters				
Age of Buyers	43.762	42.403	41.443	41.951
Male	0.688	0.682	0.704	0.696
White	0.632	0.642	0.650	0.646
Black	0.027	0.027	0.029	0.028
Hispanic	0.055	0.059	0.057	0.057
Democrat	0.264	0.233	0.261	0.254
Republican	0.312	0.284	0.316	0.307
Panel B: Chracteristics of Transaction Records				
Log(Sale Price)	12.358	12.392	12.337	12.353
Log(Purchase Price)	12.075	12.091	11.980	12.019
Winsorized Annual Return	0.076	0.079	0.085	0.082
Holding Years	6.798	6.871	8.120	7.651
N	452,177	1,026,934	2,524,362	4,003,473

Note: This table presents the summary statistics for the sample used to estimate how democratic participation affects housing returns throughout the paper. Panel A reports the demographic features of the dataset, retrieved from the L2 data. Panel B reports the characteristics of transaction records from CoreLogic. The minimum holding year is set as 0.5 year while the annual return is winsorized at the 1% tail. Noting that we will observe 1-7 times of voter registration during our observation period, we classify the levels of participation into low, medium and high. If the participation times is 1 to 2, the agent will be identified as low participation and if the participation times is 3 to 5, the agent will be classified as medium participation. The rest of the voters are high participating voters.

Table 2. Annual Return of Different Electoral Participation: Baseline Results

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00181***	0.00063	0.00090	0.00370***
	(0.00042)	(0.00082)	(0.00084)	(0.00065)
Participating 3 Elections	0.00491***	0.00361***	0.00320***	0.00726***
	(0.00041)	(0.00081)	(0.00082)	(0.00062)
Participating 4 Elections	0.00874***	0.00696***	0.00852***	0.01051***
	(0.00039)	(0.00075)	(0.00079)	(0.00058)
Participating 5 Elections	0.00824***	0.00631***	0.00726***	0.01048***
	(0.00039)	(0.00078)	(0.00079)	(0.00059)
Participating 6 Elections	0.01083***	0.00848***	0.01018***	0.01329***
	(0.00036)	(0.00070)	(0.00072)	(0.00055)
Participating 7 Elections	0.01762***	0.01373***	0.01790***	0.01974***
	(0.00035)	(0.00066)	(0.00068)	(0.00054)
N	3,569,497	848,888	1,039,031	1,549,416
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes

Note: The table presents the baseline result of housing return for voters with different levels of democratic participation, measured by the number of voter registrations. Column (1) reports the return differentials for all voters, while in columns (2)-(4) there are results for different party affiliations. Democrat voters and republican voters are identified by a voter's party affiliation history: if a voter always votes for democratic party (or republican party), then that voter's affiliation will be identified a democrat (or republican). If a voter votes for a third party or switches party, such voter will be identified as 'Other Voters'. To rule out potential effect of geographic feature, transaction time and preference difference of investor of different age group, we add fixed effects for the intersection of year-month of sale (when the return is realized) and FIPS, birth year and length of holding. Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 3. Annual Return of Different Electoral Participation Intensity: Different Spatial Levels

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Panel A: Regression Results with Tract-Level Fixed Effects				
Participating 2 Elections	0.00171***	0.00136	0.00169*	0.00365***
	(0.00044)	(0.00109)	(0.00103)	(0.00072)
Participating 3 Elections	0.00449***	0.00421***	0.00367***	0.00679***
	(0.00043)	(0.00108)	(0.00100)	(0.00069)
Participating 4 Elections	0.00829***	0.00668***	0.00789***	0.01047***
	(0.00040)	(0.00099)	(0.00094)	(0.00066)
Participating 5 Elections	0.00782***	0.00559***	0.00803***	0.01037***
	(0.00041)	(0.00102)	(0.00094)	(0.00067)
Participating 6 Elections	0.01069***	0.00966***	0.01086***	0.01343***
	(0.00038)	(0.00092)	(0.00087)	(0.00063)
Participating 7 Elections	0.01627***	0.01380***	0.01647***	0.01837***
	(0.00037)	(0.00088)	(0.00083)	(0.00062)
N	3,231,474	552,068	738,211	1,223,904
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Sale Year × Tract FE	Yes	Yes	Yes	Yes
Panel B: Regression Results with Congressional District Level Fixed Effects				
Participating 2 Elections	0.00172***	0.00042	0.00077	0.00350***
	(0.00043)	(0.00084)	(0.00086)	(0.00066)
Participating 3 Elections	0.00476***	0.00313***	0.00309***	0.00707***
	(0.00042)	(0.00082)	(0.00084)	(0.00063)
Participating 4 Elections	0.00858***	0.00661***	0.00833***	0.01036***
	(0.00040)	(0.00076)	(0.00081)	(0.00060)
Participating 5 Elections	0.00815***	0.00603***	0.00713***	0.01030***
	(0.00040)	(0.00079)	(0.00081)	(0.00060)
Participating 6 Elections	0.01061***	0.00789***	0.00991***	0.01305***
	(0.00037)	(0.00071)	(0.00073)	(0.00056)
Participating 7 Elections	0.01719***	0.01313***	0.01744***	0.01927***
	(0.00036)	(0.00066)	(0.00070)	(0.00055)
N	4,363,003	1,039,479	1,276,803	1,912,857
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Sale Year × FIPS × Congressional District FE	Yes	Yes	Yes	Yes
Panel C: Regression Results with Block Group Level Fixed Effects				
Participating 2 Elections	0.00155***	0.00064	0.00062	0.00320***
	(0.00042)	(0.00084)	(0.00085)	(0.00064)
Participating 3 Elections	0.00466***	0.00297***	0.00313***	0.00672***
	(0.00041)	(0.00083)	(0.00083)	(0.00062)
Participating 4 Elections	0.00843***	0.00682***	0.00783***	0.01004***
	(0.00038)	(0.00076)	(0.00078)	(0.00059)
Participating 5 Elections	0.00791***	0.00569***	0.00677***	0.01004***
	(0.00039)	(0.00079)	(0.00079)	(0.00059)
Participating 6 Elections	0.01060***	0.00832***	0.00993***	0.01276***
	(0.00036)	(0.00071)	(0.00072)	(0.00055)
Participating 7 Elections	0.01693***	0.01304***	0.01696***	0.01885***
	(0.00035)	(0.00067)	(0.00068)	(0.00054)
N	3,550,206	825,187	1,014,002	1,526,836
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Sale Year × Block Group	Yes	Yes	Yes	Yes

Note: This table reports the regression results of the same specification as the baseline, yet with higher spatial granularity to better look at how the choice of neighborhood affects the return differential on democratic participation. Panel A adds an extra sale year intersecting tract fixed effect, while Panel B looks as congressional district. Panel C adds block group-sale year fixed effect. Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 4. Market Timing Effects

	(1)	(2)	(3)	(4)	(5)	
	Purchase and Selling Prices		Hodrick-Prescott Shocks			Excess Return
	Purchase Price	Sell Price	Purchase Shock	Sell Shock	Sell-Purchase	Excess Return
Participating 2 Elections	-0.00294	0.00004	-0.02679*	-0.00531	0.04261*	0.00184***
	(0.00179)	(0.00166)	(0.01579)	(0.01382)	(0.02186)	(0.00044)
Participating 3 Elections	-0.00576***	0.00012	-0.04593***	-0.00115	0.07427***	0.00444***
	(0.00170)	(0.00158)	(0.01503)	(0.01313)	(0.02071)	(0.00042)
Participating 4 Elections	-0.01597***	-0.00488***	-0.01552	0.01282	0.04957**	0.00718***
	(0.00160)	(0.00149)	(0.01412)	(0.01239)	(0.01945)	(0.00040)
Participating 5 Elections	-0.01564***	-0.00408***	-0.01450	0.03190**	0.05845***	0.00688***
	(0.00163)	(0.00152)	(0.01466)	(0.01261)	(0.02013)	(0.00040)
Participating 6 Elections	-0.01965***	-0.00278**	-0.01213	0.04600***	0.06308***	0.00918***
	(0.00152)	(0.00141)	(0.01330)	(0.01163)	(0.01830)	(0.00037)
Participating 7 Elections	-0.04602***	-0.02210***	-0.00259	0.05867***	0.06875***	0.01474***
	(0.00144)	(0.00133)	(0.01232)	(0.01103)	(0.01726)	(0.00036)
N	2,549,205	2,549,205	2,806,930	2,806,930	2,806,930	2,424,373
Transaction Year-Month × FIPS FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Tract × Transaction Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Sale Year FE	N/A	N/A	N/A	N/A	Yes	N/A
Race FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: This table shows evidence on whether market timing or voters investment skill plays a role in observed return differential across different levels of democratic participation. We examine such effect first by looking at prices of property at purchase and sale and the results are reported in columns (1) and (2). We then retrieve the tract-level house price index (HPI) from American Consumer Survey and deploy Hodrick-Prescott filter ($\lambda = 6.25$ for quarterly data, as suggested by Ravn and Uhlig 2002) to filter out the shock of the local housing market. Columns (3) and (4) report the average market shock at the time of purchase and sale respectively and column (5) reflects the aggregate market timing effect. We eventually compute excess return by subtract the average annual house price index change: $r^e = r - [(\frac{HPI^S}{HPI^B})^{\frac{1}{t^S - t^B}} - 1]$. Then we estimate whether the excess return still differs with democratic participation. The result is presented in column (6). The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 5. House Features of by Electoral Participation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	House Features						Assessed Value
	Living Sq.feet	Room	Bedrooms	Bathrooms	Fireplace	Pool	log(House Value)
Participating 2 Elections	-7.04305	-0.01202	0.00839	-0.01111**	0.00311	-0.00099	-0.00273
	(6.16680)	(0.01703)	(0.01678)	(0.00547)	(0.00238)	(0.00173)	(0.00269)
Participating 3 Elections	-11.92438**	-0.02660	0.00106	-0.01403***	0.00135	0.00063	-0.00414
	(5.83070)	(0.01812)	(0.01594)	(0.00529)	(0.00229)	(0.00168)	(0.00257)
Participating 4 Elections	-22.19259***	-0.02086	-0.00224	-0.02515***	-0.00338	0.00091	-0.00987***
	(6.25299)	(0.01489)	(0.01422)	(0.00500)	(0.00216)	(0.00160)	(0.00242)
Participating 5 Elections	-22.50711***	-0.04346***	-0.00173	-0.02370***	-0.00437**	0.00230	-0.01090***
	(5.90189)	(0.01527)	(0.02247)	(0.00501)	(0.00216)	(0.00159)	(0.00245)
Participating 6 Elections	-14.23826**	-0.03133**	-0.00525	-0.02077***	-0.00083	0.00097	-0.01022***
	(6.01868)	(0.01393)	(0.01447)	(0.00458)	(0.00199)	(0.00147)	(0.00227)
Participating 7 Elections	-61.50432***	-0.08217***	-0.02464*	-0.05138***	-0.01003***	-0.00654***	-0.03883***
	(5.16516)	(0.01289)	(0.01413)	(0.00436)	(0.00188)	(0.00137)	(0.00216)
N	982,057	463,549	766,606	893,867	1,050,491	1,050,491	1,045,363
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sale Year × Tract	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: This tables presents the results for house features across voters with different levels of democratic participation as a balance test to check whether the observed return differential is the result of differential in house features. The house feature is identified by linking the house return data with the house assessment record from CoreLogic and limiting the observation year being the same as the year of sale. Columns (1)-(6) presents the regression results for specific house features, including square feet of living space (column(1)), total number of rooms (column(2)), number of bedrooms (column(3)), number of bathrooms (column(4)), indicator of fireplace (column(5)) and indicator of swimming pools (column(6)). Column (7) presents the result for log(House Value) as an aggregate measure of house feature. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 6. Party Affiliation and Electoral Participation Intensity

	(1)	(2)	(3)	(4)	(5)
	Voter Fraction			Return	
	Democrat	Republican	Other	All Voters	Two-Party Voters
	Voter Fraction	Voter Fraction	Voter Fraction	Annual Return	Annual Return
Participating 2 Elections	-0.01702***	-0.01940***	0.03642***	0.00213***	0.00110
	(0.00144)	(0.00152)	(0.00161)	(0.00052)	(0.00091)
Participating 3 Elections	-0.02678***	-0.02513***	0.05191***	0.00495***	0.00363***
	(0.00138)	(0.00146)	(0.00157)	(0.00050)	(0.00088)
Participating 4 Elections	-0.03348***	-0.02439***	0.05787***	0.00884***	0.00792***
	(0.00128)	(0.00136)	(0.00146)	(0.00047)	(0.00084)
Participating 5 Elections	-0.04401***	-0.03654***	0.08055***	0.00862***	0.00751***
	(0.00132)	(0.00139)	(0.00152)	(0.00048)	(0.00084)
Participating 6 Elections	-0.03607***	-0.02051***	0.05658***	0.01144***	0.01066***
	(0.00123)	(0.00131)	(0.00143)	(0.00044)	(0.00077)
Participating 7 Elections	-0.01714***	-0.00161	0.01875***	0.01771***	0.01707***
	(0.00115)	(0.00123)	(0.00132)	(0.00043)	(0.00073)
Democrat				-0.00055	-0.00353***
				(0.00073)	(0.00096)
Participating 2 Elections and Democrat				-0.00164*	-0.00059
				(0.00099)	(0.00129)
Participating 3 Elections and Democrat				-0.00192**	-0.00001
				(0.00095)	(0.00124)
Participating 4 Elections and Democrat				-0.00243***	-0.00101
				(0.00090)	(0.00118)
Participating 5 Elections and Democrat				-0.00367***	-0.00185
				(0.00092)	(0.00120)
Participating 6 Elections and Democrat				-0.00334***	-0.00193*
				(0.00083)	(0.00108)
Participating 7 Elections and Democrat				-0.00576***	-0.00409***
				(0.00077)	(0.00101)
N	3,569,497	3,569,497	3,569,497	3,231,474	1,598,473
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes	Yes

Note: The table presents 1) how the distribution of political affiliation varies with democratic participation 2) the partisanship effect on annual housing return. Table (1)-(3) shows the differential of the democratic voters, republican voters and other voters' fraction across different levels of democratic participation. Table (4)-(5) presents evidence on whether political party affiliation affects housing return, where table (4) compares democratic voters with all voters and table (5) illustrates democratic and republican voter comparison. The regression specification follows the specification of Table 3 Panel A to absorb effect of tract-level feature. Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 7. Annual Return of Different Holding Period: Different Races

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Black	-0.00121	-0.00544**	0.00913	0.00246
	(0.00179)	(0.00225)	(0.00932)	(0.00354)
Participating 2 Elections	0.00196***	0.00062	0.00131	0.00348***
	(0.00052)	(0.00109)	(0.00096)	(0.00082)
Participating 3 Elections	0.00537***	0.00275***	0.00386***	0.00824***
	(0.00050)	(0.00106)	(0.00093)	(0.00078)
Participating 4 Elections	0.00884***	0.00534***	0.00966***	0.01007***
	(0.00048)	(0.00100)	(0.00089)	(0.00074)
Participating 5 Elections	0.00855***	0.00522***	0.00851***	0.01053***
	(0.00048)	(0.00103)	(0.00090)	(0.00074)
Participating 6 Elections	0.01127***	0.00682***	0.01136***	0.01383***
	(0.00044)	(0.00091)	(0.00081)	(0.00069)
Participating 7 Elections	0.01793***	0.01227***	0.01870***	0.01955***
	(0.00042)	(0.00086)	(0.00076)	(0.00068)
Participating 2 Elections and Black	0.00768***	0.00191	0.00987	0.01428***
	(0.00257)	(0.00333)	(0.01338)	(0.00491)
Participating 3 Elections and Black	0.00849***	0.01182***	0.00860	0.00264
	(0.00250)	(0.00325)	(0.01372)	(0.00471)
Participating 4 Elections and Black	0.00330	0.00922***	-0.01016	-0.00032
	(0.00226)	(0.00290)	(0.01124)	(0.00437)
Participating 5 Elections and Black	-0.00054	0.00058	-0.01891*	0.00450
	(0.00223)	(0.00289)	(0.01114)	(0.00427)
Participating 6 Elections and Black	0.00151	0.00750***	-0.01548	-0.00147
	(0.00207)	(0.00266)	(0.01073)	(0.00393)
Participating 7 Elections and Black	0.00171	0.00885***	-0.01560	0.00173
	(0.00191)	(0.00240)	(0.00968)	(0.00378)
N	2,379,862	518,874	745,684	988,603
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes

Note: The table presents the result of races' effect on housing return across different levels of democratic participation to check whether the result if driven by race. Noting that the race is missing for around 30% of the observations in our return data, the number of observation is smaller than that of Table 2. Column (1) reports the result for all voters while in columns (2)-(4) there are results for different party affiliations. Column (2) reports the heterogeneity effect of race on return differentials for democrat voters. Column (3) reports the result for republican voters and column (4) reports the result for other voters. Here, other voters mean the voter being neither democrat voters nor republican voters. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 8. Annual Return of Different Holding Period: Different Genders

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Male	0.00425***	0.00384***	0.00075	0.00518***
	(0.00067)	(0.00118)	(0.00160)	(0.00102)
Participating 2 Elections	0.00211***	0.00079	-0.00089	0.00416***
	(0.00073)	(0.00117)	(0.00184)	(0.00110)
Participating 3 Elections	0.00440***	0.00386***	0.00161	0.00637***
	(0.00070)	(0.00115)	(0.00179)	(0.00104)
Participating 4 Elections	0.00763***	0.00564***	0.00479***	0.01052***
	(0.00066)	(0.00107)	(0.00171)	(0.00100)
Participating 5 Elections	0.00662***	0.00275**	0.00455***	0.01014***
	(0.00067)	(0.00110)	(0.00173)	(0.00099)
Participating 6 Elections	0.00966***	0.00749***	0.00564***	0.01316***
	(0.00063)	(0.00100)	(0.00160)	(0.00093)
Participating 7 Elections	0.01377***	0.01042***	0.01172***	0.01752***
	(0.00059)	(0.00093)	(0.00153)	(0.00089)
Participating 2 Elections and Male	-0.00043	-0.00010	0.00231	-0.00071
	(0.00089)	(0.00161)	(0.00203)	(0.00135)
Participating 3 Elections and Male	0.00086	-0.00018	0.00215	0.00132
	(0.00085)	(0.00157)	(0.00198)	(0.00129)
Participating 4 Elections and Male	0.00183**	0.00282*	0.00491***	0.00015
	(0.00081)	(0.00146)	(0.00189)	(0.00121)
Participating 5 Elections and Male	0.00259***	0.00701***	0.00361*	0.00065
	(0.00082)	(0.00154)	(0.00191)	(0.00122)
Participating 6 Elections and Male	0.00190**	0.00223	0.00601***	0.00033
	(0.00076)	(0.00136)	(0.00175)	(0.00114)
Participating 7 Elections and Male	0.00557***	0.00591***	0.00796***	0.00318***
	(0.00071)	(0.00124)	(0.00167)	(0.00108)
N	3,544,772	841,999	1,034,138	1,536,575
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes

Note: The table presents the result of the effect of gender on housing return across different levels of democratic participation to check whether the observed return differential is driven by genders. Column (1) reports the result for all voters while in columns (2)-(4) there are results for different party affiliations. Column (2) reports the result for democrat voters. Column (3) reports the result for republican voters and column (4) reports the result for other voters. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 9. The Tract-Level Feature Effect on Return

	(1)	(2)	(3)	(4)
	Annual Return	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00205***	0.01890	0.00200***	0.00797
	(0.00047)	(0.01304)	(0.00047)	(0.01665)
Participating 3 Elections	0.00500***	0.02766**	0.00496***	0.01910
	(0.00046)	(0.01269)	(0.00045)	(0.01656)
Participating 4 Elections	0.00850***	0.06098***	0.00843***	0.03031**
	(0.00043)	(0.01191)	(0.00043)	(0.01528)
Participating 5 Elections	0.00819***	0.05675***	0.00807***	0.03238**
	(0.00043)	(0.01214)	(0.00043)	(0.01559)
Participating 6 Elections	0.01069***	0.06260***	0.01060***	0.01088
	(0.00040)	(0.01118)	(0.00040)	(0.01440)
Participating 7 Elections	0.01711***	0.08550***	0.01690***	0.01620
	(0.00038)	(0.01064)	(0.00038)	(0.01350)
log(House Value)	-0.02041***			
	(0.00043)			
log(Median Income)			-0.02789***	
			(0.00043)	
Participating 2 Elections × log(House Value)		-0.00139		
		(0.00104)		
Participating 3 Elections × log(House Value)		-0.00186*		
		(0.00101)		
Participating 4 Elections × log(House Value)		-0.00425***		
		(0.00095)		
Participating 5 Elections × log(House Value)		-0.00395***		
		(0.00097)		
Participating 6 Elections × log(House Value)		-0.00419***		
		(0.00089)		
Participating 7 Elections × log(House Value)		-0.00557***		
		(0.00085)		
Participating 2 Elections × log(Median Income)				-0.00058
				(0.00149)
Participating 3 Elections × log(Median Income)				-0.00132
				(0.00148)
Participating 4 Elections × log(Median Income)				-0.00202
				(0.00137)
Participating 5 Elections × log(Median Income)				-0.00224
				(0.00140)
Participating 6 Elections × log(Median Income)				-0.00005
				(0.00129)
Participating 7 Elections × log(Median Income)				-0.00002
				(0.00121)
N	2,934,939	2,590,381	2,934,939	2,590,381
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Sale Year × Tract	No	Yes	No	Yes
Race FE	Yes	Yes	Yes	Yes

Note: The table presents evidence that tract-level house value and median income are not driving factors of the phenomena that housing return increases with democratic participation, ruling out the spatial sorting scenario - higher return is observed in neighborhood with higher house value or income. Column (1)-(2) presents the effect of house value and column (3)-(4) presents the effect of median income. We present the effect of house value and income in general (since house value and median income are tract-level statistics from ACS, tract-level fixed effects are not absorbed) in column (1) and (3), while the heterogeneity of effects across groups is presented in column (2) and (4). Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 10. Assessment Value and Gap of Purchase and Selling across Groups

	(1)	(2)	(3)	(4)
	Purchase		Sell	
	Assessed Every Year	All States	Assessed Every Year	All States
Panel A: Market-Assessment Gap				
Participating 2 Elections	-0.00603	-0.00028	0.00867***	0.00329*
	(0.01011)	(0.00614)	(0.00311)	(0.00173)
Participating 3 Elections	-0.02127**	-0.01405**	0.01636***	0.00694***
	(0.00918)	(0.00562)	(0.00296)	(0.00169)
Participating 4 Elections	-0.01185	-0.01353**	0.01555***	0.00728***
	(0.00866)	(0.00538)	(0.00278)	(0.00157)
Participating 5 Elections	-0.02008**	-0.01284**	0.02520***	0.01094***
	(0.00856)	(0.00527)	(0.00281)	(0.00163)
Participating 6 Elections	-0.01772**	-0.01179**	0.03166***	0.01637***
	(0.00833)	(0.00501)	(0.00269)	(0.00153)
Participating 7 Elections	-0.04311***	-0.03747***	0.03371***	0.01808***
	(0.00793)	(0.00485)	(0.00266)	(0.00153)
Panel B: Assessed Value				
Participating 2 Elections	-0.00653	-0.00087	-0.01266**	-0.00455
	(0.01102)	(0.00658)	(0.00622)	(0.00329)
Participating 3 Elections	-0.00490	-0.00250	-0.02111***	-0.01414***
	(0.01022)	(0.00602)	(0.00602)	(0.00316)
Participating 4 Elections	-0.02035**	-0.01344**	-0.02870***	-0.02409***
	(0.00948)	(0.00568)	(0.00568)	(0.00299)
Participating 5 Elections	-0.01226	-0.01396**	-0.03415***	-0.02673***
	(0.00947)	(0.00560)	(0.00580)	(0.00303)
Participating 6 Elections	-0.02266**	-0.02426***	-0.04271***	-0.03536***
	(0.00918)	(0.00535)	(0.00558)	(0.00291)
Participating 7 Elections	-0.03941***	-0.03861***	-0.06741***	-0.06307***
	(0.00873)	(0.00515)	(0.00545)	(0.00286)
N	169,053	526,878	182,564	564,844
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Sale Year × Tract	Yes	Yes	Yes	Yes
Race FE	Yes	Yes	Yes	Yes

Note: The table presents regression results on assessment gap and assessment value to check whether the high-participating voters are able to purchase at lower price and sell at higher price conditional on the same assessed value derived from CoreLogic assessment records. We further select a subsample in which assessments are done annually to rule out the possibility of the frequency of assessment affecting assessment value and eventually confounding the assessment value and assessment gaps. Columns (1)-(2) present the result at the time of purchase, and column (1) reports the result for states where assessments are done annually while column (2) reports the result of the full sample. Columns (3)-(4) present the result at the time of sale, with column (3) reporting the result of the sample with annual assessment and column (4) reporting the full sample. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 11. Income Differences Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)
	Income				Return	
	log(Income)	log(Income)	log(Income)	log(Income)	Annual Return	Annual Return
Participating 2 Elections	-0.00551	-0.00105	-0.00496	-0.00239	0.00100*	0.00097*
	(0.00349)	(0.00380)	(0.00404)	(0.00452)	(0.00057)	(0.00056)
Participating 3 Elections	-0.01400***	-0.00554	-0.01599***	-0.01189***	0.00283***	0.00272***
	(0.00338)	(0.00368)	(0.00396)	(0.00438)	(0.00053)	(0.00053)
Participating 4 Elections	-0.02630***	-0.01759***	-0.01974***	-0.01433***	0.00482***	0.00468***
	(0.00320)	(0.00347)	(0.00377)	(0.00425)	(0.00049)	(0.00049)
Participating 5 Elections	-0.02686***	-0.01361***	-0.02313***	-0.01519***	0.00513***	0.00498***
	(0.00318)	(0.00344)	(0.00374)	(0.00417)	(0.00051)	(0.00051)
Participating 6 Elections	-0.03262***	-0.02292***	-0.02219***	-0.01379***	0.00726***	0.00712***
	(0.00294)	(0.00317)	(0.00341)	(0.00384)	(0.00046)	(0.00046)
Participating 7 Elections	-0.04461***	-0.04082***	-0.01276***	-0.00975***	0.00614***	0.00606***
	(0.00279)	(0.00303)	(0.00332)	(0.00373)	(0.00045)	(0.00045)
log(Income)						-0.00954***
						(0.00017)
N	1,219,325	995,212	1,115,310	891,589	895,559	895,559
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	No	Yes	No	Yes	Yes	Yes
Gender FE	No	Yes	No	Yes	Yes	Yes
FIPS FE	Yes	Yes	N/A	N/A	N/A	N/A
Sale Year-Month × FIPS FE	No	No	Yes	Yes	Yes	Yes
Sale Year × Tract	No	No	Yes	Yes	Yes	Yes
Holding Month	No	No	Yes	Yes	Yes	Yes

Note: The table presents the result on the effect of income on house return differentials across different levels of democratic participation with income data extracted from Home Mortgage Disclosure Act (HMDA) data. Columns (1)-(4) presents the log(Income) differential across groups under different fixed effect setup. Column (1) presents the result only controlling for baseline birth year and county fixed effect. Comparing with column (1), column (3) adds the fixed effect of transaction time intersecting spatial fixed effect. While columns (2) and (4) add extra race and gender fixed effects comparing with column (1) and (3) respectively. Columns (5)-(6) follow the fixed effect setup of column (4), while column (5) presents the baseline house return differential under the return data and HMDA data merge and column (6) presents the result adding log(Income) as control to check whether income difference leads to observed return difference across groups. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 12. Wealth Differences Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)
	Wealth				Return	
	Net Wealth (in $10000)	Net Wealth (in $10000)	Net Wealth (in $10000)	Net Wealth (in $10000)	Annual Return	Annual Return
Participating 2 Elections	-0.27128	-0.02997	-0.12049	-0.16238	0.01122*	0.01113*
	(0.65179)	(0.69035)	(0.87527)	(0.96867)	(0.00587)	(0.00581)
Participating 3 Elections	-1.24699**	-0.90365	-0.40816	-0.56350	0.00783	0.00749
	(0.56532)	(0.62593)	(0.79497)	(0.92888)	(0.00561)	(0.00554)
Participating 4 Elections	-1.53797***	-1.34493**	-1.36084*	-1.85732**	0.01376***	0.01270**
	(0.56268)	(0.60304)	(0.81104)	(0.89194)	(0.00509)	(0.00505)
Participating 5 Elections	-1.35684**	-0.96629	-0.99468	-1.18069	0.01334**	0.01269**
	(0.63148)	(0.61927)	(0.85564)	(0.86729)	(0.00552)	(0.00544)
Participating 6 Elections	-0.45900	-0.11070	-0.99873	-1.06413	0.01385***	0.01321***
	(0.54538)	(0.58565)	(0.79065)	(0.87327)	(0.00486)	(0.00478)
Participating 7 Elections	-1.90400***	-1.83911***	-0.91855	-1.03757	0.01897***	0.01839***
	(0.50603)	(0.54001)	(0.73013)	(0.78253)	(0.00511)	(0.00503)
Wealth (in $10000)						-0.00058***
						(0.00008)
N	21,526	18,820	15,730	13,266	13,355	13,355
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	No	Yes	No	Yes	Yes	Yes
Gender FE	No	Yes	No	Yes	Yes	Yes
FIPS FE	Yes	Yes	N/A	N/A	N/A	N/A
Sale Year-Month × FIPS FE	No	No	Yes	Yes	Yes	Yes
Sale Year × Tract	No	No	Yes	Yes	Yes	Yes
Holding Month	No	No	Yes	Yes	Yes	Yes

Note: The table follows the same regression specification as Table 9, but focuses on the effect of total net wealth. Net wealth of a household is identified by credit data from North Carolina and it is proxied by the value of the house owned by the voter net of the outstanding bank card balance, student mortgage balance, car loan and house mortgage. To guarantee the value correctly signal the voter's net wealth at the time of house sale, we limit the credit report year to be the same year as the year of sale. Columns (1)-(4) report the result of net wealth. Column (5) reports the baseline result of return differential for the return data and North Carolina data merge, and column (6) adds net wealth to check whether house return differential is triggered by net wealth differences across people with different levels of democratic participation. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 13. Education Differences Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)
	Years of Education				Return	
	Education Years	Education Years	Education Years	Education Years	Annual Return	Annual Return
Participating 2 Elections	0.03988***	0.04228***	0.06530***	0.06632***	0.00173**	0.00177**
	(0.00999)	(0.01104)	(0.01618)	(0.01945)	(0.00082)	(0.00082)
Participating 3 Elections	0.10736***	0.11743***	0.15545***	0.15617***	0.00423***	0.00432***
	(0.00977)	(0.01074)	(0.01556)	(0.01845)	(0.00081)	(0.00081)
Participating 4 Elections	0.16325***	0.17713***	0.20388***	0.22488***	0.00683***	0.00696***
	(0.00926)	(0.01013)	(0.01476)	(0.01751)	(0.00078)	(0.00078)
Participating 5 Elections	0.26225***	0.28721***	0.28157***	0.29402***	0.00744***	0.00762***
	(0.00964)	(0.01054)	(0.01530)	(0.01821)	(0.00079)	(0.00079)
Participating 6 Elections	0.38568***	0.40571***	0.39656***	0.40543***	0.00872***	0.00897***
	(0.00878)	(0.00963)	(0.01403)	(0.01663)	(0.00072)	(0.00072)
Participating 7 Elections	0.59959***	0.60854***	0.59293***	0.60747***	0.01507***	0.01544***
	(0.00789)	(0.00864)	(0.01271)	(0.01510)	(0.00066)	(0.00066)
Education Years						-0.00059***
						(0.00008)
N	1,341,383	1,101,890	833,490	619,095	887,532	887,532
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	No	Yes	No	Yes	Yes	Yes
Gender FE	No	Yes	No	Yes	Yes	Yes
FIPS FE	Yes	Yes	N/A	N/A	N/A	N/A
Sale Year-Month × FIPS FE	No	No	Yes	Yes	Yes	Yes
Sale Year × Tract	No	No	Yes	Yes	Yes	Yes
Holding Month	No	No	Yes	Yes	Yes	Yes

Note: The table follow the regression specification of Table 9, but look at the individual education attainment level of voters. The education is top-encoded as HS- (Lower than high school), HS (High school), Some col (Some college education), Bach (Bachelor's Degree) and Grad (Graduate Degree) and they are assigned 10, 12, 14, 16 and 18 years of education respectively. Columns (1)-(4) report how years of education differ across voters with different voting intensity. Duplicate observations for each voter is dropped as we are running voter-level regression. Columns (5)-(6) report how years of education affect annual return of property. Since not all voters have observed years of education, column (5) reports the baseline result following the regression specification of Table 3A. Column (6) reports the effect taking years of education into account. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 14. The Tract-Level Education Effect on Return

	(1)	(2)	(3)
	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00199***	0.01889***	0.00785
	(0.00047)	(0.00708)	(0.00805)
Participating 3 Elections	0.00495***	0.02086***	0.00720
	(0.00045)	(0.00682)	(0.00781)
Participating 4 Elections	0.00841***	0.03062***	0.02091***
	(0.00043)	(0.00636)	(0.00723)
Participating 5 Elections	0.00816***	0.01953***	0.01259*
	(0.00043)	(0.00653)	(0.00732)
Participating 6 Elections	0.01068***	0.00766	0.00839
	(0.00040)	(0.00600)	(0.00686)
Participating 7 Elections	0.01704***	0.02464***	0.01742***
	(0.00038)	(0.00560)	(0.00645)
Tract Average Education Years	-0.01070***	-0.01009***	
	(0.00015)	(0.00040)	
Participating 2 Elections × Tract Average Education Years		-0.00122**	-0.00045
		(0.00050)	(0.00057)
Participating 3 Elections × Tract Average Education Years		-0.00115**	-0.00020
		(0.00048)	(0.00055)
Participating 4 Elections × Tract Average Education Years		-0.00161***	-0.00093*
		(0.00045)	(0.00051)
Participating 5 Elections × Tract Average Education Years		-0.00082*	-0.00036
		(0.00046)	(0.00052)
Participating 6 Elections × Tract Average Education Years		0.00022	0.00014
		(0.00043)	(0.00048)
Participating 7 Elections × Tract Average Education Years		-0.00055	-0.00011
		(0.00040)	(0.00046)
N	2,935,537	2,935,537	2,590,682
Sale Year-Month × FIPS FE	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes
Sale Year × Tract	No	No	Yes
Race FE	Yes	Yes	Yes

Note: The table presents the result of tract-level average education level's effect on house return across different participation time with the merged return data and American Consumer Survey data. Column (1) reports the baseline result of return differential adding the average years of education of the tract as the additional control. Noting that years old education is a tract-level statistics, the fixed effect of sale year intersecting tract is not absorbed to avoid multicollinearity. Column (2) additional reports the heterogeneity in tract-level average years of education's effect on housing return. Column (3) reports the result adding the sale year intersecting tract fixed effect and the coefficient of tract-level average years of education becomes omitted due to perfect collinearity, yet the heterogeneity result remains. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 15. Credit Performance Differences Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Defaults			Bankruptcies & Foreclosures		Credit Score	Return	
	Over 30 Days	Over 60 Days	Over 90 Days	Bankruptcies	Foreclosures	Credit Score	Annual Return	Annual Return
Participating 2 Elections	-0.02269	-0.00773	-0.01473	0.00197	-0.03608	12.00499**	0.01122*	0.01135*
	(0.02942)	(0.02175)	(0.01677)	(0.00893)	(0.02596)	(4.84879)	(0.00587)	(0.00588)
Participating 3 Elections	-0.03620	-0.01526	-0.02727*	-0.00764	-0.05933**	18.94119***	0.00783	0.00805
	(0.02843)	(0.02115)	(0.01492)	(0.00769)	(0.02668)	(4.31415)	(0.00561)	(0.00562)
Participating 4 Elections	-0.02489	-0.01633	-0.01894	0.00523	-0.06483***	11.43530**	0.01376***	0.01389***
	(0.02839)	(0.02159)	(0.01620)	(0.00905)	(0.02482)	(4.71036)	(0.00509)	(0.00510)
Participating 5 Elections	0.02796	0.00160	-0.01576	0.00107	-0.03979	12.86809***	0.01334**	0.01348**
	(0.02809)	(0.02116)	(0.01600)	(0.00879)	(0.02474)	(4.56833)	(0.00552)	(0.00553)
Participating 6 Elections	-0.03360	-0.01075	-0.02483	-0.00025	-0.05691**	19.11595***	0.01385***	0.01407***
	(0.02784)	(0.02066)	(0.01541)	(0.00849)	(0.02362)	(4.45247)	(0.00486)	(0.00489)
Participating 7 Elections	-0.05584**	-0.02331	-0.02743*	-0.00824	-0.05954***	22.35890***	0.01897***	0.01923***
	(0.02594)	(0.01877)	(0.01439)	(0.00783)	(0.02290)	(4.24115)	(0.00511)	(0.00515)
Credit Score								-0.00001
								(0.00001)
N	13,355	13,355	13,355	13,355	13,355	13,355	13,355	13,355
Sale YM × FIPS FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sale Year × Tract	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Holding Month	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: The table presents results of differences of credit performance across voters with different participation time with credit performance extracted from North Carolina credit performance data and we limit the credit performance year be the same year as the year of sale. The measure of credit performance includes three dimensions: defaults, bankruptcies and foreclosures and credit as the aggregate measure. Columns (1)-(3) report the result of the times of bank card defaults (delinquencies): column (1) reports the result for the number of defaults over 30 days, column (2) reports the number of defaults over 60 days, and column (3) reports the number of defaults over 90 days. Column (4) reports the number of times that a voter file bankruptcy and column (5) reports the result for foreclosure filings. Column (6) reports the differential of credit scores across different levels of democratic participation. The Standard errors in the parentheses are clustered by tract.***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 16. Homeownership/Merging Rate Differences Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A: Merging Rate for Return Data				**Panel B: Merging Rate for CoreLogic Data**			
	Merge Rate	Merge Rate	Merge Rate	Merge Rate	Merge Rate	Merge Rate	Merge Rate	Merge Rate
Participating 2 Elections	0.00368***	0.00443***	0.00365***	0.00440***	0.01142***	0.01513***	0.01142***	0.01508***
	(0.00012)	(0.00013)	(0.00012)	(0.00013)	(0.00036)	(0.00039)	(0.00035)	(0.00038)
Participating 3 Elections	0.00642***	0.00690***	0.00634***	0.00681***	0.02201***	0.02479***	0.02182***	0.02460***
	(0.00013)	(0.00015)	(0.00013)	(0.00015)	(0.00038)	(0.00041)	(0.00037)	(0.00041)
Participating 4 Elections	0.00733***	0.00759***	0.00729***	0.00750***	0.03104***	0.03429***	0.03081***	0.03391***
	(0.00017)	(0.00018)	(0.00017)	(0.00019)	(0.00051)	(0.00055)	(0.00050)	(0.00055)
Participating 5 Elections	0.01697***	0.01515***	0.01678***	0.01498***	0.05898***	0.05436***	0.05836***	0.05382***
	(0.00026)	(0.00026)	(0.00025)	(0.00026)	(0.00063)	(0.00063)	(0.00063)	(0.00063)
Participating 6 Elections	0.02717***	0.02282***	0.02671***	0.02249***	0.09641***	0.08159***	0.09486***	0.08043***
	(0.00034)	(0.00030)	(0.00033)	(0.00030)	(0.00085)	(0.00074)	(0.00084)	(0.00074)
Participating 7 Elections	0.01492***	0.00385***	0.01436***	0.00362***	0.10364***	0.06000***	0.10120***	0.05866***
	(0.00032)	(0.00023)	(0.00032)	(0.00024)	(0.00110)	(0.00079)	(0.00110)	(0.00080)
Constant	0.01610***	0.02190***	0.01643***	0.02207***	0.07075***	0.09202***	0.07207***	0.09285***
	(0.00021)	(0.00020)	(0.00021)	(0.00017)	(0.00066)	(0.00062)	(0.00064)	(0.00052)
N	114,987,981	90,556,143	114,977,864	90,546,955	114,987,981	90,556,143	114,977,864	90,546,955
FIPS	Yes	Yes	No	No	Yes	Yes	No	No
Tract	No	No	Yes	Yes	No	No	Yes	Yes
Gender	No	Yes	No	Yes	No	Yes	No	Yes
Birth Year	No	Yes	No	Yes	No	Yes	No	Yes
Race	No	Yes	No	Yes	No	Yes	No	Yes

Note: The table reports the merging rate of L2 with CoreLogic transaction data and return data to check whether the voters in L2 data with different number of participation time are merging with CoreLogic data at the rate. Panel A reports the results of how L2 data is merged with return data (the observations with both valid purchase and sale records under the same name for the same property). Columns (1)-(2) report the result absorbing county fixed effects and columns (3)-(4) report the result absorbing tract fixed effects. Panel B reports the results of how L2 data is merged with CoreLogic transaction deeds data. Columns (5)-(6) report the result with county-level fixed effects and columns (7)-(8) report the result with tract-level fixed effects. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

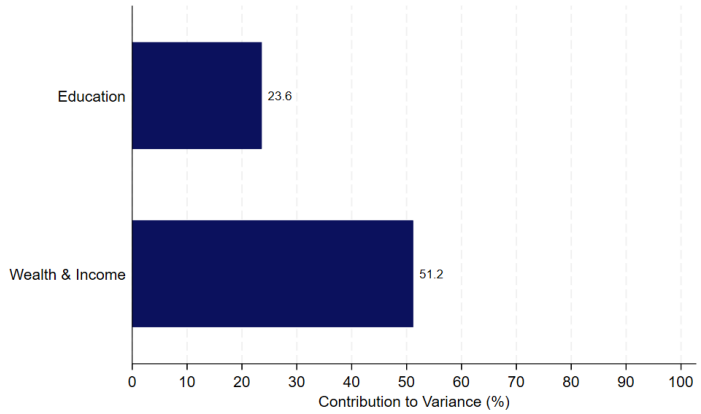
Table 17. More Specific Forms of Democratic Participation

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Panel A: Intensity of Donation to a Political Party				
Donation Intensity	0.00572***	0.00481***	0.00456***	0.00631***
	(0.00021)	(0.00051)	(0.00045)	(0.00035)
N	3,245,284	554,675	740,273	1,230,633
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes
Panel B: Intensity of Voting in General Election				
Voting Percent	0.00375***	-0.00048	0.00814***	0.00202***
	(0.00041)	(0.00110)	(0.00100)	(0.00072)
N	1,991,837	280,360	403,410	718,662
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes

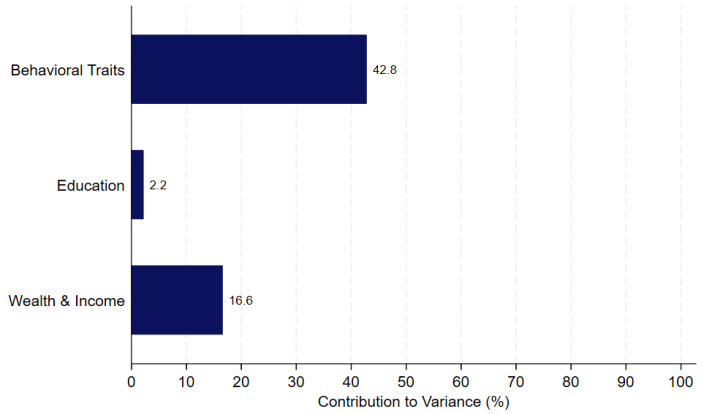
Note: Our main result uses voter registration as a measure of democratic participation. The table reports the result for the effect of democratic participation on housing return measured by other forms of participation. Panel A reports the result of donation to a certain political party and Panel B reports the result the result of voting in general election. Note that we can only observe whether a voter donates or not when a voter registers to vote, the donation times can be confounded by the frequency of voter registration. We establish the measure of donation intensity by letting $DI = \frac{\sum 1(Donation=1)}{\sum 1(VoterReg=1)}$, which measures the likelihood of additionally donating to a certain party conditional on registering to vote. For voting in general election, the voting percentage is measured by $VP = \frac{\sum 1(Voted)}{\sum 1(Eligible)}$, where $1(Voted)$ is the indicator of the voter voted and $1(Eligible)$ the indicator of a voter being eligible to vote. Column (1) reports the result for all voters, while column (2)-(4) report the result for voters of different political affiliations: column (2) report the result for democratic voters, column (3) reports the result for republican voters and column (4) report the result for other voters.

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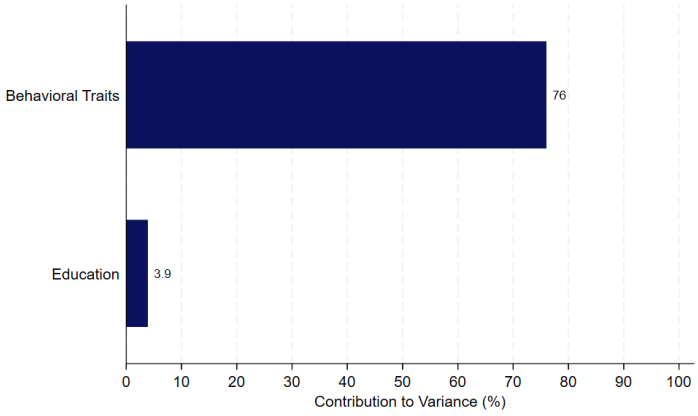
Figure 1. Variance Decomposition of Homeownership



(a) Decomposition without Behavioral Traits



(b) Decomposition with Behavioral Traits



(c) Decomposition Beyond Income & Wealth

11 Appendix

Table 18. Annual Return by Neighborhood Partisanship

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Annual Return	Annual Return	Annual Return	Annual Return
Republican Difference	-0.06165***	-0.08347***	-0.04644***	-0.07695***
	(0.00277)	(0.00504)	(0.00532)	(0.00441)
Participating 2 Elections	0.00177***	0.00112	0.00113	0.00367***
	(0.00042)	(0.00084)	(0.00095)	(0.00064)
Participating 3 Elections	0.00488***	0.00366***	0.00335***	0.00713***
	(0.00041)	(0.00082)	(0.00094)	(0.00061)
Participating 4 Elections	0.00868***	0.00724***	0.00818***	0.01031***
	(0.00039)	(0.00076)	(0.00088)	(0.00058)
Participating 5 Elections	0.00820***	0.00616***	0.00660***	0.01052***
	(0.00039)	(0.00079)	(0.00090)	(0.00058)
Participating 6 Elections	0.01083***	0.00875***	0.00950***	0.01336***
	(0.00036)	(0.00071)	(0.00081)	(0.00055)
Participating 7 Elections	0.01748***	0.01308***	0.01750***	0.01930***
	(0.00035)	(0.00067)	(0.00075)	(0.00053)
Participating 2 Elections Rep Diff	-0.00033	0.01516**	-0.00404	-0.00211
	(0.00327)	(0.00656)	(0.00674)	(0.00547)
Participating 3 Elections Rep Diff	-0.00644**	0.00423	-0.00170	-0.00783
	(0.00315)	(0.00629)	(0.00669)	(0.00522)
Participating 4 Elections Rep Diff	0.00079	0.01172**	0.00609	-0.00743
	(0.00298)	(0.00576)	(0.00644)	(0.00489)
Participating 5 Elections Rep Diff	0.00205	0.00208	0.01185*	0.00147
	(0.00301)	(0.00614)	(0.00650)	(0.00485)
Participating 6 Elections Rep Diff	0.00475*	0.01147**	0.01283**	0.00252
	(0.00277)	(0.00545)	(0.00581)	(0.00457)
Participating 7 Elections Rep Diff	-0.00165	-0.00591	0.00645	-0.01111**
	(0.00261)	(0.00504)	(0.00534)	(0.00435)
N	3,569,497	848,888	1,039,031	1,549,416
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes

Note: The table presents the effect of the difference of tract-level Republican voter fraction from national average on return differential. The difference is defined by the fraction of Republican voter of tract *i* minus the fraction of Republican voter of the whole nation. The objective of this table is to check whether the return differential is driven by neighborhood-level partisanship. Column (1) reports the result for all voters. Column (2)-(4) report the results of voters with different political affiliation. Column (2) reports the result for Democrat voters. Column (3) reports the result for Republican voters and column (4) reports the result for other voters. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 19. Cash and Mortgage Payment

	(1)	(2)	(3)	(4)
	Without Race Control		With Race Control	
	Cash	Mortgage	Cash	Mortgage
Participating 2 Elections	0.00086	-0.00006	0.00145	-0.00060
	(0.00112)	(0.00123)	(0.00130)	(0.00142)
Participating 3 Elections	0.00102	-0.00087	0.00159	-0.00115
	(0.00109)	(0.00120)	(0.00126)	(0.00138)
Participating 4 Elections	0.00606***	-0.00551***	0.00693***	-0.00629***
	(0.00101)	(0.00111)	(0.00116)	(0.00127)
Participating 5 Elections	0.00364***	-0.00376***	0.00432***	-0.00441***
	(0.00103)	(0.00113)	(0.00118)	(0.00129)
Participating 6 Elections	0.00500***	-0.00379***	0.00570***	-0.00434***
	(0.00096)	(0.00105)	(0.00110)	(0.00121)
Participating 7 Elections	0.02252***	-0.02142***	0.02335***	-0.02208***
	(0.00090)	(0.00099)	(0.00103)	(0.00113)
N	3,189,829	3,189,829	2,549,205	2,549,205
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes
Race FE	No	No	Yes	Yes

Note: The table presents results for the fraction of voters choosing cash or mortgage payment when purchasing houses as a balance test to check whether people at different levels of democratic participation choose different ways of purchasing houses, with the control group being the voters who only vote once. Cash or mortgage purchase is identified by the cash purchase indicator from CoreLogic data. Columns (1)-(2) report the result not controlling for race and columns (3)-(4) report the result controlling for race. Column (1) and (3) illustrate the differential of fraction of voters choosing cash payment while column (2) and (4) present the result for the fraction of voters choosing mortgage finance. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 20. The Tract-Level Feature Effect on Return

	(1)	(2)	(3)
	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00206***	0.00190***	0.00153***
	(0.00047)	(0.00047)	(0.00050)
Participating 3 Elections	0.00502***	0.00495***	0.00443***
	(0.00046)	(0.00045)	(0.00049)
Participating 4 Elections	0.00858***	0.00842***	0.00798***
	(0.00043)	(0.00043)	(0.00046)
Participating 5 Elections	0.00812***	0.00816***	0.00752***
	(0.00044)	(0.00043)	(0.00047)
Participating 6 Elections	0.01058***	0.01071***	0.01038***
	(0.00040)	(0.00040)	(0.00043)
Participating 7 Elections	0.01729***	0.01699***	0.01594***
	(0.00038)	(0.00038)	(0.00041)
Latino Fraction (0-100)		0.00021***	
		(0.00001)	
Black Fraction (0-100)		0.00032***	
		(0.00002)	
Unemployment Rate		0.00082***	
		(0.00007)	
Median Age		0.00025***	
		(0.00003)	
SNAP		0.00094***	
		(0.00004)	
House Owner Fraction		0.00025***	
		(0.00001)	
log(House Value)		0.00617***	
		(0.00065)	
log(Median Income)		-0.02358***	
		(0.00091)	
N	2,934,939	2,934,939	2,590,381
Sale Year-Month × FIPS FE	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes
Sale Year × Tract	No	No	Yes
Race FE	Yes	Yes	Yes

Note: The table presents the result of tract-level features' effect on house return differentials. The data is the merge of our return data and American Consumer Survey and the properties without tract are dropped. (This makes the result different from our benchmark estimation shown in Table 2 and 3.) Column (1) presents the baseline result for this table, following the regression specification in Table 2. Column (2) presents the result of return differential controlling for tract-level features linearly. Sale Year × Tract fixed effect is omitted to avoid perfect collinearity. Column (3) present the result of return differential when tract feature is fully absorbed, following the regression specification in Table 3 Panel A. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 21. Voting Intensity on Return: Before Voting Observation Period

	(1)	(2)
	Return-to-Voting: Sell Before 2014	Voting-to-Return: Buy After 2014
	Annual Return	Annual Return
Participating 2 Elections	0.00072	0.00857***
	(0.00088)	(0.00133)
Participating 3 Elections	0.00376***	0.01414***
	(0.00086)	(0.00127)
Participating 4 Elections	0.00354***	0.02262***
	(0.00078)	(0.00123)
Participating 5 Elections	0.00422***	0.02157***
	(0.00080)	(0.00128)
Participating 6 Elections	0.00431***	0.02722***
	(0.00071)	(0.00126)
Participating 7 Elections	0.01032***	0.05183***
	(0.00064)	(0.00127)
N	1,305,777	420,540
Sale Year-Month × FIPS FE	Yes	Yes
Birth Year FE	Yes	Yes
Holding Month FE	Yes	Yes
Sale Year × Tract	Yes	Yes
Race FE	Yes	Yes

Note: The table presents the result of house return differential in different period to discuss whether the return differential is the result of active voters taking advantage of post Great Recession real estate market decline and whether our observations of democratic participation 2014-2020 is a robust way of reflecting a person's level of democratic participation in general. Column (1) presents the result for property sold before 2014. Column (2) presents the result for houses purchased in or after 2014, which exactly aligns of our observation of democratic participation with the house return observations. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 22. Excess Return Across Groups

	(1)	(2)	(3)
	Excess Return	Excess Return	Excess Return
Participating 2 Elections	-0.00159***	-0.00110**	0.00184***
	(0.00039)	(0.00044)	(0.00044)
Participating 3 Elections	-0.00117***	-0.00052	0.00444***
	(0.00038)	(0.00043)	(0.00042)
Participating 4 Elections	0.00135***	0.00183***	0.00718***
	(0.00036)	(0.00041)	(0.00040)
Participating 5 Elections	0.00093**	0.00161***	0.00688***
	(0.00037)	(0.00041)	(0.00040)
Participating 6 Elections	0.00098***	0.00134***	0.00918***
	(0.00034)	(0.00038)	(0.00037)
Participating 7 Elections	0.01047***	0.00890***	0.01474***
	(0.00032)	(0.00036)	(0.00036)
N	3,444,512	2,782,052	2,424,373
Birth Year FE	No	Yes	Yes
FIPS FE	No	Yes	N/A
Race FE	No	Yes	Yes
Sale Year-Month × FIPS FE	No	No	Yes
Sale Year × Tract	No	No	Yes
Holding Period	No	No	Yes

Note: The table presents the result of excess return, measured by individual annual return net of the annual return suggested by tract-level house price index: $r^e = r - [(\frac{HPI^S}{HPI^B})^{\frac{1}{t^S - t^B}} - 1]$ under different fixed effect specifications. Column (1) presents the result of not absorbing any fixed effect as the baseline. Column (2) presents the results absorbing demographic fixed effects including birth year, county and race. Column (3) presents the result with demographic fixed effects and spatial fixed effects with higher granularity, including Sale Year-Month × FIPS, Sale Year × Tract and holding periods to control the neighborhood effects and timing of purchase. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 23. Wealth Percentile Differences Across Groups

	(1)	(2)	(3)	(4)
	Net Wealth Pct	Net Wealth Pct	Net Wealth Pct	Net Wealth Pct
Participating 2 Elections	-1.22994	-0.82025	-0.58861	-0.83491
	(0.89834)	(0.97513)	(1.22849)	(1.41108)
Participating 3 Elections	-2.21081***	-1.51677	-0.69124	-1.00944
	(0.84335)	(0.93387)	(1.23543)	(1.43468)
Participating 4 Elections	-2.27242***	-2.04948**	-1.52446	-2.47803*
	(0.84985)	(0.91916)	(1.18253)	(1.33228)
Participating 5 Elections	-2.12292**	-1.88011**	-1.26051	-1.84489
	(0.82702)	(0.89440)	(1.14532)	(1.29492)
Participating 6 Elections	-0.47033	-0.08555	-0.65028	-0.93056
	(0.79406)	(0.86056)	(1.17654)	(1.34621)
Participating 7 Elections	-2.50619***	-2.38129***	-0.86342	-1.41991
	(0.72599)	(0.78040)	(1.03543)	(1.15204)
N	21,665	18,939	15,831	13,355
Birth Year FE	Yes	Yes	Yes	Yes
Race FE	No	Yes	No	Yes
Gender FE	No	Yes	No	Yes
FIPS FE	Yes	Yes	N/A	N/A
Sale Year-Month × FIPS FE	No	No	Yes	Yes
Sale Year × Tract	No	No	Yes	Yes
Holding Month	No	No	Yes	Yes

Note: The table presents the result of net wealth percentiles differences across voters with different levels of democratic participation as a balance test on net wealth, with the merge between return data and North Carolina credit data and OLS regression. Column (1) presents the result with baseline fixed effects: birth year and county and column (2) presents the result with extra gender and race fixed effects. Column (3) presents the result of baseline fixed effects adding higher granular spatial × time fixed effect to control the neighborhood effects and timing of purchase and column (4) adds extra fixed effects on race and gender comparing with column (3). The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 24. Wealth Percentile Differences Across Groups: Poisson Regression

	(1)	(2)	(3)	(4)
	Net Wealth Pct	Net Wealth Pct	Net Wealth Pct	Net Wealth Pct
Participating 2 Elections	-0.01680	-0.01146	-0.00942	-0.01097
	(0.01201)	(0.01306)	(0.01590)	(0.01822)
Participating 3 Elections	-0.02993***	-0.02075*	-0.01096	-0.01317
	(0.01130)	(0.01252)	(0.01598)	(0.01853)
Participating 4 Elections	-0.03002***	-0.02743**	-0.02138	-0.03313*
	(0.01138)	(0.01233)	(0.01521)	(0.01710)
Participating 5 Elections	-0.02898***	-0.02594**	-0.01835	-0.02571
	(0.01105)	(0.01194)	(0.01487)	(0.01688)
Participating 6 Elections	-0.00569	-0.00071	-0.00920	-0.01209
	(0.01051)	(0.01139)	(0.01510)	(0.01718)
Participating 7 Elections	-0.03365***	-0.03190***	-0.01267	-0.01842
	(0.00968)	(0.01040)	(0.01331)	(0.01479)
N	21,526	18,820	15,730	13,266
Birth Year FE	Yes	Yes	Yes	Yes
Race FE	No	Yes	No	Yes
Gender FE	No	Yes	No	Yes
FIPS FE	Yes	Yes	N/A	N/A
Sale Year-Month × FIPS FE	No	No	Yes	Yes
Sale Year × Tract	No	No	Yes	Yes
Holding Month	No	No	Yes	Yes

Note: The table presents the result of net wealth percentiles differences across voters with different levels of democratic participation as a balance test on net wealth, with the merge between return data and North Carolina credit data. Noting that the percentiles are integers, we also run a Poisson regression instead of OLS regression as reported in Table 22. Column (1) presents the result with baseline fixed effects: birth year and county and column (2) presents the result with extra gender and race fixed effects. Column (3) presents the result of baseline fixed effects adding higher granular spatial × time fixed effect to control the neighborhood effects and timing of purchase and column (4) adds extra fixed effects on race and gender comparing with column (3). The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

Table 25. Other Forms of Democratic Participation: Validity of Measure

	(1)	(2)	(3)	(4)
	All Voters	Democrat Voters	Republican Voters	Other Voters
	Participation	Participation	Participation	Participation
Panel A: Democratic Participation Measured by Donation Intensity				
Participating 2 Elections	0.00247	0.00304	0.00233	0.00999***
	(0.00171)	(0.00474)	(0.00424)	(0.00281)
Participating 3 Elections	0.00690***	0.00881*	0.00942**	0.01279***
	(0.00163)	(0.00457)	(0.00401)	(0.00267)
Participating 4 Elections	0.02707***	0.02226***	0.03362***	0.03247***
	(0.00153)	(0.00423)	(0.00376)	(0.00254)
Participating 5 Elections	0.04307***	0.03761***	0.05661***	0.04764***
	(0.00156)	(0.00434)	(0.00395)	(0.00254)
Participating 6 Elections	0.06829***	0.05679***	0.08641***	0.06996***
	(0.00146)	(0.00402)	(0.00362)	(0.00244)
Participating 7 Elections	0.12364***	0.11153***	0.14225***	0.11538***
	(0.00141)	(0.00378)	(0.00341)	(0.00238)
N	2,602,730	410,509	575,148	953,236
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes
Panel B: Democratic Participation Measured by Voting Percentage				
Participating 2 Elections	0.10733***	0.12999***	0.11119***	0.10002***
	(0.00154)	(0.00534)	(0.00434)	(0.00225)
Participating 3 Elections	0.17114***	0.20215***	0.19345***	0.15450***
	(0.00144)	(0.00483)	(0.00403)	(0.00214)
Participating 4 Elections	0.23127***	0.25789***	0.25972***	0.21218***
	(0.00134)	(0.00446)	(0.00369)	(0.00198)
Participating 5 Elections	0.30360***	0.32850***	0.34215***	0.28060***
	(0.00138)	(0.00455)	(0.00378)	(0.00203)
Participating 6 Elections	0.38003***	0.41010***	0.42732***	0.34168***
	(0.00133)	(0.00431)	(0.00356)	(0.00195)
Participating 7 Elections	0.43357***	0.45267***	0.47989***	0.38893***
	(0.00129)	(0.00413)	(0.00343)	(0.00191)
N	1,991,837	280,360	403,410	718,662
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes

Note: The table reports the result for 'balance test' of other forms of democratic participation across different participation levels of voting registration. Column (1) reports the result for all voters. Column (2) reports the result for democratic voters. Column (3) reports the result for republican voters and column (4) reports the result for other voters. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.

12 Appendix 2: Don't Need

Table 26. Annual Return: Interaction of Personal Voting and Tract-Average

	(1)	(2)	(3)	(4)
	Annual Return	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00162***	0.00138***	0.00181***	0.00174***
	(0.00042)	(0.00044)	(0.00042)	(0.00042)
Participating 3 Elections	0.00452***	0.00434***	0.00492***	0.00468***
	(0.00041)	(0.00043)	(0.00041)	(0.00041)
Participating 4 Elections	0.00813***	0.00837***	0.00876***	0.00837***
	(0.00039)	(0.00040)	(0.00039)	(0.00038)
Participating 5 Elections	0.00741***	0.00742***	0.00825***	0.00765***
	(0.00039)	(0.00041)	(0.00039)	(0.00039)
Participating 6 Elections	0.00978***	0.00991***	0.01084***	0.00998***
	(0.00036)	(0.00037)	(0.00036)	(0.00036)
Participating 7 Elections	0.01631***	0.01636***	0.01756***	0.01642***
	(0.00034)	(0.00036)	(0.00035)	(0.00034)
Voting Percentage	0.07543***			
	(0.00316)			
Average Participation Times		0.06837***		
		(0.00612)		
Voting < 33 %			-0.04248***	
			(0.01292)	
33 % < Voting < 66 %			-0.04198***	
			(0.01290)	
Voting > 66%			0.00912	
			(0.01380)	
Participating 2 Elections × Tract Average		-0.01164		
		(0.00732)		
Participating 3 Elections × Tract Average		-0.01158		
		(0.00712)		
Participating 4 Elections × Tract Average		0.01374**		
		(0.00687)		
Participating 5 Elections × Tract Average		-0.00853		
		(0.00704)		
Participating 6 Elections × Tract Average		-0.00020		
		(0.00643)		
Participating 7 Elections × Tract Average		0.01813***		
		(0.00614)		
N	3,569,497	3,569,497	3,569,497	3,569,247
Sale Year-Month × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Tract Voting Percentage × Sale Year FE	No	No	No	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 27. Market-Assessment Gap of Purchase and Selling across Groups

	(1)	(2)	(3)	(4)
	Without Race Control		With Race Control	
	Purchase Gap	Sell Gap	Purchase Gap	Sell Gap
Participating 2 Elections	-0.00368	0.00367**	-0.00028	0.00329*
	(0.00508)	(0.00148)	(0.00614)	(0.00173)
Participating 3 Elections	-0.01441***	0.00756***	-0.01405**	0.00694***
	(0.00472)	(0.00145)	(0.00562)	(0.00169)
Participating 4 Elections	-0.01504***	0.00839***	-0.01353**	0.00728***
	(0.00456)	(0.00136)	(0.00538)	(0.00157)
Participating 5 Elections	-0.01353***	0.01158***	-0.01284**	0.01094***
	(0.00440)	(0.00141)	(0.00527)	(0.00163)
Participating 6 Elections	-0.01613***	0.01704***	-0.01179**	0.01637***
	(0.00421)	(0.00133)	(0.00501)	(0.00153)
Participating 7 Elections	-0.04067***	0.01899***	-0.03747***	0.01808***
	(0.00404)	(0.00132)	(0.00485)	(0.00153)
N	679,626	715,411	526,878	564,844
Transaction YM × FIPS FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes	Yes
Transaction Year × Tract	Yes	Yes	Yes	Yes
Race FE	No	No	Yes	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 29. Return Differential across Groups

	(1)	(2)	(3)
	Assessed Every Year	All States	
	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00912***	0.00471***	0.00382***
	(0.00204)	(0.00102)	(0.00121)
Participating 3 Elections	0.01365***	0.00880***	0.00824***
	(0.00194)	(0.00097)	(0.00115)
Participating 4 Elections	0.02053***	0.01436***	0.01363***
	(0.00188)	(0.00093)	(0.00110)
Participating 5 Elections	0.02218***	0.01476***	0.01312***
	(0.00187)	(0.00094)	(0.00112)
Participating 6 Elections	0.02790***	0.01990***	0.01838***
	(0.00180)	(0.00090)	(0.00107)
Participating 7 Elections	0.04072***	0.03157***	0.03003***
	(0.00187)	(0.00092)	(0.00107)
Assessed Every Year			-0.00293
			(0.00180)
Assessed Every Year × Participating 2 Elections			0.00230
			(0.00219)
Assessed Every Year × Participating 3 Elections			0.00155
			(0.00209)
Assessed Every Year × Participating 4 Elections			0.00195
			(0.00202)
Assessed Every Year × Participating 5 Elections			0.00441**
			(0.00204)
Assessed Every Year × Participating 6 Elections			0.00408**
			(0.00194)
Assessed Every Year × Participating 7 Elections			0.00415**
			(0.00194)

Table 28. Market Timing Across Groups

	(1)	(2)	(3)	(4)	(5)	(6)
	Purchase		Sell		Sell-Purchase	
	HP Filter	Z-Score	HP Filter	Z-Score	HP Filter	Z-Score
Participating 2 Elections	-0.02679*	0.00577**	-0.00531	0.00465*	0.04261*	-0.00118
	(0.01579)	(0.00261)	(0.01382)	(0.00259)	(0.02186)	(0.00369)
Participating 3 Elections	-0.04593***	0.00597**	-0.00115	0.00648***	0.07427***	0.00108
	(0.01503)	(0.00251)	(0.01313)	(0.00245)	(0.02071)	(0.00352)
Participating 4 Elections	-0.01552	0.00684***	0.01282	0.00706***	0.04957**	0.00156
	(0.01412)	(0.00234)	(0.01239)	(0.00229)	(0.01945)	(0.00330)
Participating 5 Elections	-0.01450	0.01134***	0.03190**	0.01172***	0.05845***	0.00153
	(0.01466)	(0.00241)	(0.01261)	(0.00234)	(0.02013)	(0.00337)
Participating 6 Elections	-0.01213	0.01149***	0.04600***	0.01444***	0.06308***	0.00447
	(0.01330)	(0.00221)	(0.01163)	(0.00215)	(0.01830)	(0.00310)
Participating 7 Elections	-0.00259	0.00531***	0.05867***	0.01196***	0.06875***	0.00888***
	(0.01232)	(0.00203)	(0.01103)	(0.00202)	(0.01726)	(0.00290)
N	2,806,930	2,806,930	2,806,930	2,806,930	2,806,930	2,806,930
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Transaction Year-Month FE	Yes	Yes	Yes	Yes	N/A	N/A
Purchase Year-Month FE	N/A	N/A	N/A	N/A	Yes	Yes
Sale Year-Month FE	N/A	N/A	N/A	N/A	Yes	Yes
FIPS FE	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	Yes	Yes	Yes	Yes	Yes	Yes
Holding Period	Yes	Yes	Yes	Yes	Yes	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 30. Income Differences Across Groups

	(1)	(2)	(3)
	log(Income)	log(Income)	log(Income)
Participating 2 Elections	0.00100*	0.00097*	0.00508
	(0.00057)	(0.00056)	(0.01071)
Participating 3 Elections	0.00283***	0.00272***	0.02337**
	(0.00053)	(0.00053)	(0.01031)
Participating 4 Elections	0.00482***	0.00468***	-0.00953
	(0.00049)	(0.00049)	(0.00946)
Participating 5 Elections	0.00513***	0.00498***	-0.00591
	(0.00051)	(0.00051)	(0.00977)
Participating 6 Elections	0.00726***	0.00712***	-0.02424***
	(0.00046)	(0.00046)	(0.00884)
Participating 7 Elections	0.00614***	0.00606***	-0.05716***
	(0.00045)	(0.00045)	(0.00837)
log(Income)		-0.00954***	-0.01256***
		(0.00017)	(0.00071)
Participating 2 Elections × log(Income)			-0.00036
			(0.00094)
Participating 3 Elections × log(Income)			-0.00183**
			(0.00091)
Participating 4 Elections × log(Income)			0.00124
			(0.00083)
Participating 5 Elections × log(Income)			0.00095
			(0.00086)
Participating 6 Elections × log(Income)			0.00275***
			(0.00078)
Participating 7 Elections × log(Income)			0.00556***
			(0.00074)
N	895,559	895,559	895,559
Sale Year-Month × FIPS FE	Yes	Yes	Yes
Sale Year × Tract	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Holding Month	Yes	Yes	Yes
Race FE	Yes	Yes	Yes
Gender FE	Yes	Yes	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 31. Wealth Differences Across Groups

	(1)	(2)	(3)
	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.01122*	0.01113*	0.01384*
	(0.00587)	(0.00581)	(0.00747)
Participating 3 Elections	0.00783	0.00749	0.00681
	(0.00561)	(0.00554)	(0.00700)
Participating 4 Elections	0.01376***	0.01270**	0.01323*
	(0.00509)	(0.00505)	(0.00677)
Participating 5 Elections	0.01334**	0.01269**	0.01726**
	(0.00552)	(0.00544)	(0.00793)
Participating 6 Elections	0.01385***	0.01321***	0.01281**
	(0.00486)	(0.00478)	(0.00614)
Participating 7 Elections	0.01897***	0.01839***	0.01853***
	(0.00511)	(0.00503)	(0.00627)
Wealth (in $10000)		-0.00058***	-0.00052**
		(0.00008)	(0.00026)
Participating 2 Elections × Wealth (in $10000)			-0.00022
			(0.00032)
Participating 3 Elections × Wealth (in $10000)			0.00005
			(0.00029)
Participating 4 Elections × Wealth (in $10000)			-0.00005
			(0.00035)
Participating 5 Elections × Wealth (in $10000)			-0.00036
			(0.00038)
Participating 6 Elections × Wealth (in $10000)			0.00002
			(0.00028)
Participating 7 Elections × Wealth (in $10000)			-0.00001
			(0.00027)
N	13,355	13,355	13,355
Sale Year-Month × FIPS FE	Yes	Yes	Yes
Sale Year × Tract	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Holding Month	Yes	Yes	Yes
Race FE	Yes	Yes	Yes
Gender FE	Yes	Yes	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 32. Voting Intensity on Return: Before Voting Observation Period

	(1)
	Participation Times
Annual Return	0.04616***
	(0.00189)
N	1,305,777
Sale Year-Month × FIPS FE	Yes
Birth Year FE	Yes
Holding Month FE	Yes
Sale Year × Tract	Yes
Race FE	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 33. Market Timing Across Groups (Old Version)

	(1)	(2)	(3)	(4)	(5)	(6)
	Purchase		Sell		Sell-Purchase	
	HP Filter	Z-Score	HP Filter	Z-Score	HP Filter	Z-Score
Participating 2 Elections	-0.02283	0.00493*	-0.00388	0.00344	-0.01551	-0.01654***
	(0.01581)	(0.00261)	(0.01383)	(0.00259)	(0.02473)	(0.00426)
Participating 3 Elections	-0.03085**	0.00386	-0.00648	0.00360	-0.02139	-0.01982***
	(0.01504)	(0.00251)	(0.01314)	(0.00245)	(0.02360)	(0.00409)
Participating 4 Elections	0.00606	0.00412*	-0.00708	0.00321	-0.02832	-0.00308
	(0.01412)	(0.00234)	(0.01238)	(0.00229)	(0.02204)	(0.00380)
Participating 5 Elections	0.00621	0.00851***	0.01188	0.00812***	-0.05357**	-0.00928**
	(0.01466)	(0.00240)	(0.01260)	(0.00234)	(0.02280)	(0.00390)
Participating 6 Elections	0.01718	0.00778***	0.01427	0.01001***	0.01660	0.00224
	(0.01329)	(0.00221)	(0.01160)	(0.00214)	(0.02072)	(0.00359)
Participating 7 Elections	0.02016	0.00276	0.02312**	0.00841***	0.14324***	0.06546***
	(0.01230)	(0.00203)	(0.01096)	(0.00201)	(0.01947)	(0.00334)
N	2,806,932	2,806,932	2,806,932	2,806,932	2,806,932	2,806,932
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Transaction Year FE	Yes	Yes	Yes	Yes	Yes	Yes
FIPS	Yes	Yes	Yes	Yes	Yes	Yes
Race FE	Yes	Yes	Yes	Yes	Yes	Yes

Errors clustered at the tract level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 34. Annual Return on Voting Intensity: Different Types of Purchase

	(1)	(2)	(3)
	All Buyers	Cash Purchase	Mortgage Purchase
	Annual Return	Annual Return	Annual Return
Participating 2 Elections	0.00171***	0.00500*	0.00119***
	(0.00044)	(0.00303)	(0.00039)
Participating 3 Elections	0.00449***	0.00901***	0.00334***
	(0.00043)	(0.00294)	(0.00037)
Participating 4 Elections	0.00829***	0.01834***	0.00535***
	(0.00040)	(0.00278)	(0.00035)
Participating 5 Elections	0.00782***	0.01747***	0.00602***
	(0.00041)	(0.00276)	(0.00036)
Participating 6 Elections	0.01069***	0.02083***	0.00754***
	(0.00038)	(0.00260)	(0.00033)
Participating 7 Elections	0.01627***	0.03647***	0.00880***
	(0.00037)	(0.00245)	(0.00032)
N	3,231,474	200,598	2,524,715
Sale Year-Month × FIPS FE	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Holding Month FE	Yes	Yes	Yes
Tract × Sale Year FE	Yes	Yes	Yes

Note: The table presents the result of the return differential on voter participation by methods of payment at the time of purchase to check whether the return differential is driven by means of payment. Column (1) reports the result for the full sample. Column (2) reports the result for properties purchased with cash. Column (3) presents the result for properties financed by mortgage at the time of purchase. The Standard errors in the parentheses are clustered by tract. ***,** and * indicate significance at 1%, 5% and 10% level respectively.