Stability Pays Dividends: Financial Market Exposure and Political Risk

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Abstract

This paper investigates the causal impact of financial market exposure on partisan identification, using longitudinal data from the United Kingdom that spans from 1999 to 2020. While prior studies have emphasized a correlation between financial exposure and right-wing attitudes, I argue that this relationship only exists at relatively low levels of stock market participation. As a larger proportion of income is derived from investment activities, financial market exposure instead provokes support for political incumbents, irrespective of party ideology. This effect occurs through two key channels: (1) rational risk aversion, in which participants compensate for financial uncertainty with political stability, and (2) social buy-in, whereby recurring investment income strengthens identification with domestic institutions. Leveraging fixed effects in panel data, interactions with party incumbency, and an instrumental variable based on regional variation in financial education, this study finds robust evidence that financial market exposure initially increases alignment with the political right; however, this effect becomes incumbent-biased once investment income is relatively high. These findings offer novel insights into theories of economic voting and depict financial inclusion as a strategic, political tool in contemporary democracies.

"The outstanding fact is the extreme precariousness on the basis of which our estimates of prospective yield have to be made."

— J.M. Keynes (1936)

1 Introduction

Does financial market exposure shape partisan identification, and if so, in what way? The prevailing literature discussing the political economy of financial markets tends to examine the effect of political expectations and outcomes on market volatility (Wong and McAleer 2009; Girardi and Bowles 2018; Girardi 2020; Mnasri and Essaddam 2021; Micozzi et al. 2024). However, few studies have placed financial market exposure (FME) as the explanatory factor in the causal chain of political attitudes. This paucity is not necessarily surprising; as Crane

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et al. (2024) explain, self-selection into stock market participation and the forward-looking nature of markets makes it difficult to disentangle the relationship between politics' impact on markets and markets' impact on politics. However, since interest, dividends, and capital gains are considered to be the reward for parting with liquidity, it is likely that the act of shouldering risk related to market fluctuations shapes how participants interpret and interact with political institutions and parties. Markets not only respond to political outcomes but also simultaneously cause them.

This paper contributes to two rich bodies of literature. For one, I draw insights from "economic voting" theories—which depict electoral outcomes as a function of material conditions—and I explore stock market participation as a key channel through which economic concerns translate into political outcomes. Nonetheless, to the best of my knowledge, this is the first study examining the causal effect of FME on partisan *identification*, rather than focusing solely on electoral behavior. This choice allows me to intentionally broaden the analytical scope and also speak to economic sociologists; as such, I contribute to theories that explore how engagement in economic institutions shapes cognitive logics and political attitudes.

The conventional wisdom points to explicit relationships between FME and support for centre-right (Margalit and Shayo 2021; Kaustia and Torstila 2011) and incumbent (Crane et al. 2024) parties. Although these two outcomes are often studied independently, I argue that a holistic understanding of the causal effect of FME on political attitudes must necessarily address the moderating role of the party in power. After accounting for individual characteristics, I suggest that actors self-select into FME due to right-wing, pro-business attitudes. Relatively uninformed participants therefore tend to support centre-right parties' policy proposals as a heuristic for mitigating the increased risk associated with FME. However, as exposure to financial risk and its concomitant remuneration increases, highly involved participants become more likely to identify with the incumbent party, regardless of extant ideological leaning. The latter effect of FME translates into incumbent support through two primary channels—one economic and the other sociological. First, political and economic risk tend to be substitutes, not complements. To mitigate heightened economic uncertainty, stock market participants engage in compensatory behavior that reinforces stability in the political sphere. Second, the financial gains derived from domestic institutions also foster an aggregate attachment of what I call

"social buy-in," a mechanism through which the inflow of "unearned" revenue deepens a sense of trust and links egocentric to sociotropic economic concerns.

Using longitudinal data that follows a cohort in the United Kingdom (UK) from 1999 to 2020 (Understanding Society), I find evidence that substantiates these two channels. After considering the conditional effect of the party in power, I find that relatively high exposure to financial markets leads to a preference for political stability (incumbents) over instability (challengers). When the Conservative Party is in power, this relationship takes on a linear shape, yet when Labour is the incumbent, I find a brief reactionary spike before the incumbent preference takes effect. Employing person and year fixed effects and incorporating an instrumental variable (IV), I contribute to the literature by advancing a causal interpretation of the effect of FME on political attitudes. This study also has implications for understanding why political elites might champion financial inclusion programs, offering insights into the origins of institutional trust.

In Section 2, I discuss my argument's relation to extant research examining the sociopolitical consequences of financial inclusion. In Section 3, I outline my theoretical arguments and corresponding hypotheses, and then describe the utilized data and methods in Section 4. In Section 5, I conduct three separate analyses to test my hypotheses. First, I conduct a panel regression spanning 20 years with 1,055,000+ observations. I incorporate interaction terms to consider the temporal dynamics related to the conditional effect of a party being the incumbent. Then, I evaluate the relationship between FME and specific policy preferences to disaggregate the mediating mechansims, utilizing a factor score for economic liberalism. Lastly, I use exogenous regional variation in financial education as an instrument for FME. Section 6 concludes.

2 Market Interactions & Political Risk

From Marx (1867) to Polanyi (1944), grand accounts have depicted social interactions and cognitive logics as structurally embedded within their institutional contexts. In light of the increasingly "mass participatory" nature of Anglophone finance (Davis 2009), contemporary economic sociologists have echoed these analytical frameworks and convincingly demonstrated a resulting "normalization" of economic risk, in which actors who have previously engaged in financial markets are more likely to aggressively invest in the future, irrespective of losses during

economic crises (Goldstein and Knight 2023).

The predominant sociological approach therefore conceptualizes "risk" and "risk tolerance" as largely economic phenomena, determined largely by choices related to financial market engagement (e.g. whether to invest, what portfolio, how much), with political factors taking a back seat. As such, the emphasis on actors' internalization of risk as a natural part of the income-generating process implies that actors accept financial markets' concomitant risks at face value. This framework therefore runs the risk of ignoring alternative (social, political) tools that actors use to compensate for economic uncertainties. Since uncertainty brings the rules of social life back into the analytical foreground (Beckert 1996; Knight 1921; Keynes 1921), the burgeoning economic precarity associated with the "convention" of the stock market plausibly spills into other spheres of life. While actors may normalize economic risk in response to financialization (Goldstein and Knight 2023), it is worth considering how investment decisions translate into preferences for political risk.

The view that financial risk affects political outcomes is particularly evident in Durnev and Wang's (2021) proposal that an additional function of the stock market is to align voters' preferences with politicians' objectives and prevailing institutions. According to Durnev and Wang, citizens that hold firm equity vote according to both political orientation and stock market performance, with the latter taking precedence when corporations perform well. Under this logic, pro-business politicians are more likely to win elections in states where stock market participation and corporate performance are high. However, by simultaneously considering the supply and demand sides of electoral outcomes, Durnev and Wang ignore voter heterogeneity and make it difficult to isolate the causal effect of FME on individual behavior. Additionally, their empirical findings belie a similar study conducted by Crane et al. (2024), which finds that U.S. counties with higher levels of FME possess a higher vote share in favor of the incumbent party when the market has performed relatively well, regardless of party ideology. In this sense, stock market participants could politically compensate for economic risk in multiple ways, a priori, voting either for incumbent or pro-business parties when these options conflict.

More crucially, neither Durnev and Wang (2021) nor Crane et al. (2024) address individual self-selection into stock market participation based on unobserved factors, which are likely correlated with county and state of residence. For instance, previous studies display that

selection into FME is determined by pre-existing social networks (Hong et al. 2004), social trust (Georgarakos and Pasini 2011), right-leaning ideology (Kaustia and Torstila 2011), and political engagement (Bonaparte and Kumar 2013). The real question then, is whether FME still maintains a residual effect after accounting for selection bias.

In an effort to address this puzzle, Moses Shayo has conducted two innovative field experiments, finding that financial market exposure increases support for peace in the context of Israeli-Palestinian relations (Jha and Shayo 2019) and deepens pro-market economic attitudes in the UK (Margalit and Shayo 2021). These studies emphasize the causal nature of market interactions on socioeconomic values via increased risk exposure. While randomized control trials are often considered to be the gold standard in causal identification, experiments intrinsically present limitations in terms of external validity and sample size, constraining the degree to which claims about financial market exposure's effect on electoral behavior can be universalized in distinct political contexts. Goldstein and Knight (2023) have similarly acknowledged the general lack of longitudinal evidence in relation to the effects of the "portfolio society" (Davis 2009) on economic behavior—much less political preferences. The next step, then, is to explore the impact of FME on partisan support over time, examining how this effect is moderated by the party in power. Accordingly, the dual channels of the electoral behavior of risk management (i.e. support for pro-business vs. incumbent parties) can be explored concurrently.

3 Theory

3.1 Endogenous Participation

In the context of this paper, financial market exposure is defined as an individual's engagement in equity markets, either directly—through the purchase of individual stocks—or indirectly—via mutual funds, retirement accounts, or other investment vehicles. This exposure is, of course, not random, and actors are more or less inclined to participate in investment activities based on institutional, individual, and behavioral factors (Kaustia et al. 2023). For instance, social networks and ideological norms surrounding "unearned" income play a role in encouraging or dissuading participation. In this sense, left-wing voters' personal values and social networks are on average associated with a form of "stock market aversion" that blocks participation (Ke 2024; Kaustia and Torstila 2011). I therefore assume the association between financial market

exposure and right-party identification is at least in part a result of self-selection.

It is reasonable to expect that this relationship is not directly related to right-wing "cultural" attitudes such as anti-immigrant and pro-family policies, but rather is better explained by liberal economic preferences.¹ Unsurprisingly, individuals who hold more positive views of capitalistic enterprise and free market policies should be more likely to engage in investment activities, as summarized in the following expectation.

Hypothesis 1 Financial market exposure is positively associated with pro-business and liberal economic attitudes.

3.2 The Dual Channels of Causal Effects

After the selection process occurs and investment income begins to flow into participants' bank accounts, I propose the existence of dual channels—risk compensation and aggregate "social buy-in"—that could either (1) bolster this centre-right identification or instead (2) drive participants toward a preference for incumbents. As such, initial political orientation can be overwritten depending on the strength of the economic factors influencing preferences for particular parties. However, I suggest that the risk channel operates as a heuristic only for participants with relatively low financial market exposure as they attempt to compensate for a lack of information: a form of "rational ignorance." Thus, as the degree of financial exposure increases, participants are incentivized to acquire the relevant information that, in turn, reduces perceptions of economic risk and relaxes the effect of FME on political preferences for the sufficiently engaged investor.

3.2.1 Rational Risk Aversion

I first assume that stock market participation is a form of economic risk, in which participants give up liquidity today in exchange for greater expected income tomorrow. While those who engage in investment activities may possess a higher risk tolerance ex ante, the rational response to undertaking economic risk involves attempts to mitigate other dimensions of uncertainty. Consequently, as stock market participants engage in speculative economic activity, they initially counteract this risk by supporting candidates they believe to be best for their investment

¹I refer to "liberal" economic attitudes in the classical European rather than modern American verbiage.

portfolios. Political and economic risk are therefore not complements but substitutes.

Nonetheless, I suggest that this compensation mechanism operates only at moderate levels of financial market exposure, implying a quadratic, inverted U-shaped relationship. As depicted in Figure 1, individuals near the y-axis with exiguous financial market exposure possess both limited risk and limited information, and are thus more likely to prioritize their extant political preferences. However, as financial market exposure increases, participants begin to compensate for economic risk by reducing political risk, generating an upward sloping curve. In this stage, participants are not yet strongly incentivized to develop extensive investment acumen and rather rely on partisan support as a Downsian heuristic. Ignorance is rational for the low-to-moderately invested participant because signals of partisan support are a relatively low-cost behavior, whereas information acquisition is costly and its benefits only exceed these costs when financial market exposure is sufficiently high. Yet, after this inflection point, participants begin to reduce their perceived economic risk by becoming "experts" and making increasingly more calculated investment decisions. Here, the perceived utility from supporting a particular party becomes less relevant and actors begin to rely on their erstwhile political preferences again.

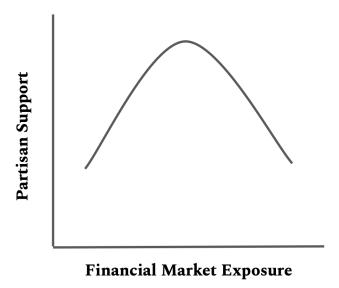


Figure 1: Financial Market Exposure and Partisan Support

This relationship can be expressed formally by considering an agent who holds a share α of company equity expected to be valued at V_i under the incumbent² or V_o under the opposition.

²While I refer to the incumbent here, this theoretical model could similarly apply to centre-right parties, as espoused by the dual hypotheses 2a and 2b.

This agent possesses initial political preferences m, in which $m \in [0,1]$ and m=1 corresponds to full support for an opposition party. Additionally, $n \in \mathbb{R}_+$ scales the strength of political preference m, such that higher n implies stronger ideological commitment. The degree to which citizens value their political orientation depends on the perceived economic risk λ they are exposed to, which increases $pari\ passu$ with financial market exposure α . The value of the total risk parameter λ^{α}_{i} is also inversely related with an agent's information i regarding their investment activities, since well-informed investors are more likely to make prudent decisions that reduce risk. I subtract this risk parameter from 1 since I assume that $\lambda^{\alpha}_{i} \in [0,1]$, indicating that if $\lambda^{\alpha}_{i} = 0$ —which could result if an agent does not engage in financial markets whatsoever—then the initial utility received from voting for the opposition party mn is unaltered. However, if $\lambda^{\alpha}_{i} = 1$ —which could theoretically occur if a fully informed agent receives all of their income from investment activities—then mn = 0, signifying that the investor is very unlikely to vote for the opposition. To complete the model, the incumbent reservation utility, or the minimum utility required for the agent to signal incumbent support, is represented by \overline{U} . Therefore, a given agent will signal incumbent support if the following equality holds:

$$\alpha(V_i - V_o) - mn(1 - \lambda \frac{\alpha}{i}) \ge \overline{U},$$
 (1)

Under the assumption that $\overline{U}=0$, an agent will support the incumbent if the expected difference in payoffs from investment activity under the incumbent is greater than the utility associated with voting for alternative party options, the latter of which depend on the economic risk associated with supporting alternatives. Since markets tend to react negatively to uncertainty, I assume that $\lambda>0$, indicating that if an agent participates in financial markets to any extent (i.e. $\alpha\neq 0$), they will sacrifice a degree of their initial political orientation for political stability. Thus, the trade-off between political and economic risk: Investing in institutions and receiving benefits from their stability placate the possible utility obtained from political change. Nonetheless, this effect is undermined when information increases at a faster rate than financial risk (i.e. $\frac{\partial i}{\partial \alpha} > \frac{\partial \lambda}{\partial \alpha}$), which occurs after the inflection point discussed above.

Of course, the crucial and underlying question is whether this heuristic relied upon by moderately invested participants is related to support for the incumbent or rather centre-right parties. This question, in some ways, opens the door to considering not only perceptions of risk but also the empirical regularities in financial markets' reactions to different parties' victories. For example, Girardi's (2020) comparative study claims that left-wing electoral victories cause short-term declines in financial market valuations, and public opinion surveys in the UK indicate that a clear majority perceive the centre-right Conservative Party to be associated with superior stock market outcomes (Wild 2024; YouGov 2023). However, these public opinion surveys may reflect the endogenous relationship between Conservative identification and financial market participation, and Girardi finds that stronger left-induced depressions tend to occur in developing economies with more radical policy proposals. Since markets tend to be less volatile when incumbents win elections in advanced capitalist economies (Mnasri and Essaddam 2021), I evaluate these two potentially conflicting outcomes by testing the following expectations:

Hypothesis 2a Holding market performance constant, financial market exposure will initially increase identification with the incumbent party, but this effect will be reversed after a certain inflection point.

This expectation implies a conditional relationship, namely that the strength of the positive relation between financial market exposure and centre-right partisan identification (as a result of self-selection) is reduced when the incumbent party is left-leaning. However, it is also possible that there is no interaction between FME and party incumbency, and rather FME tends to be parabolically related with Conservative support.

Hypothesis 2b Holding market performance constant, financial market exposure will initially increase identification with the centre-right party, but this effect will be reversed after a certain inflection point.

3.2.2 The Aggregate Psychology of Social Buy-In

While both hypotheses have a priori grounds, the relationship between FME and incumbent support (Hypothesis 2a) appears more tenable in light of the second theoretical channel: "social buy-in." Economic self-interest is not the only avenue through which stock market participation affects partisan identification, but rather the material benefits associated with investment income prompt participants to perceive themselves as beneficiaries of domestic economic institutions—to participants, the system is "working." In this sense, investment income differs from labor income in effect because it can be perceived as unearned. Although this mechanism likely operates below the level of consciousness, the concept of social buy-in indicates that participants become not only stakeholders in particular investment portfolios but also in the nation's

stability as a whole.³

While this paper's focus rests on partisan identification rather than electoral behavior, my argument can be productively conceptualized within the context of egocentric (self-interested) and sociotropic (collective) theories of economic voting (Kinder and Kiewiet 1979; Shin 2015). In relation to financial market exposure, Elkink et al. (2019) find that sociotropic concerns are more relevant directly after the 2008 financial crisis than directly before, indicating that collective experiences related to highly financialized states can shift voters away from their own pocketbooks and toward national economic interests.

However, since pocketbook and sociotropic voting have long been thought to be interdependent—despite efforts to keep the two mechanisms conceptually distinct (Hearn 2020)—my argument emphasizes the stock market as a concrete bridge that an increasingly large proportion of the population walk across as they translate national news into personal concerns. In other words, by making a proportion of actors' individual income dependent on the overall economy's performance, financial markets can be understood as a vehicle that aligns sociotropic and egocentric interests. The proposed mechanism of social buy-in thereby implies the interdependence of these two models. Nonetheless, this conceptual bridge is likely missing a few planks. By this, I mean that rationally ignorant actors imperfectly convert the perceived effects of a policy into expectations of bank account fluctuations by relying on heuristics and conventional wisdom for best approximations. Since I suggested above that actors reward incumbents for the inflow of "unearned" revenue, I argue that financial market exposure can increase approval of the predominant institutions and thereby shift inchoate political preferences toward incumbent parties. Yet, this mechanism implies a theoretically linear relationship between FME and incumbent support, which contrasts the formerly proposed quadratic function. As such, I also test a linear version of Hypothesis 2a to compare the dual mechanisms' effects.

Hypothesis 3 Holding market performance constant, financial market exposure increases identification with the incumbent party.

³While I explicitly focus on domestic outcomes, the contemporary financial system is undoubtedly *global*. Nonetheless, I argue that the rational risk aversion and social buy-in mechanisms still apply; even if investment is international, participants plausibly prefer stable politicians who are less likely to pursue radical foreign policy.

3.3 Scope Conditions

The applicability of my theory to electoral behavior is notably limited to democratic contexts since competitive party systems are necessary for the proposed mechanisms to function. However, actors can signal political support outside of the ballot box. As evidenced by Girardi and Bowles (2018), authoritarian regimes may gain legitimacy to the extent that they provide financial "stability" to wealthy stakeholders. Yet, I note that the proposed "incumbency effect" of FME is more likely to be relevant in advanced capitalist economies, in which a meaningfully large share of the electorate is engaged in investment activity.

4 Data & Methods

4.1 Understanding Society

To capture changes in both FME and political preferences over time, I utilize data from the UK Household Longitudinal Survey, which is often referred to as Understanding Society. Understanding Society includes 40,000 UK households and builds on its predecessor, the British Household Panel Survey (BHPS), which followed 10,000 households from 1991 to 2009. After 2009, 8,000 of the original households merged into Understanding Society. Given my questions of interest (and the waves in which the relevant survey items were asked), the analyzed data ranges from 1999 to 2020, and I use the individual as my primary unit of analysis. I match the survey waves to the externally sourced control variables based on the years that Understanding Society's data collection process for each wave began. Overall, this time frame provides critical variation in historical and political events; the data span a global financial crisis (2008), the Scottish Independence Referendum (2014), the Brexit Referendum (2016), a global pandemic (2020), as well as multiple prime ministers from both Labour and Conservative parties.

4.2 Primary Explanatory Variable: Financial Market Exposure

The key independent variable is income from investment activities as a proportion of total income. In every wave, respondents report the dividends and interest they have received in pounds over the last 12 months. I then use this data to construct a continuous variable,

 $FME \in [0, 1]$, that represents the proportion of this investment income relative to annual gross income. The idea is that this measure captures the relative degree of economic risk individuals undertake resulting from investment decisions. While I would ideally consider the proportion of investment income relative to net income or wealth to more accurately capture perceptions of economic risk, this data is not available for the entire period. In this case, then, gross income can be understood as a proxy for wealth.

Of course, my aggregated measure hinders granular interpretations. Due to survey data limitations, it is impossible to differentiate between various kinds of investment activities, and it is likely that there are heterogeneous effects based on whether an individual receives yields from a government bond instead of dividends from speculative, publicly traded stocks. Nonetheless, lumping these groups together has an alternative advantage, as it inadvertently controls for personality differences that would prompt individuals to invest in funds with varying degrees of risk. In this sense, I am able to better isolate the effect of investment itself, rather than the reasons why individuals initially select into particular kinds of investment.

4.3 Primary Dependent Variable: Conservative Identification

In addition to other measures of political preferences, I primarily focus on the effect of investment income on partisan identification. Given that the UK electoral system operates on a First Past the Post (FPTP) electoral system with two dominant parties, I exclusively concentrate on self-reported identification with the Conservative Party. As the primary centre-right party, a clear majority of UK respondents perceive the Conservatives to be the most pro-business political option (YouGov 2023).

I construct the binary dependent variable from the survey question "Which political party do you think of yourself as closest to?" and set the variable equal to 1 if the respondent indicates support for the Conservative Party, and 0 if the respondent indicates support for any other party or no party at all. While this variable does not measure electoral behavior, it captures signals of conscious support and personal identification with the overall ethos of a given party. This approach is preferable because it addresses the degree to which investment income not only affects strategic, calculative electoral behavior but also an individual's expressive alignment with partisan agendas—an approach which helps illustrate the proposed "social buy-in" mechanism.

5 Results

5.1 Toward Causality: Longitudinal Data

5.1.1 Descriptive Statistics

The analyzed data spans from 1999 to 2020 and includes 1,055,000+ individual-year observations. To ensure the data's representativeness, I first consider the overall proportion of stock market participation over time. Reassuringly, the time trends in Figure 2 are analogous to historical events and business cycles; there are marked declines in participation after the dot-com bubble burst circa 2000, the 2008 financial crisis, and the 2020 global pandemic. This decline in participation and investment income is aligned with Agarwal's (2022) finding that households tend to reduce participation in financial markets as economic and political uncertainty increases.

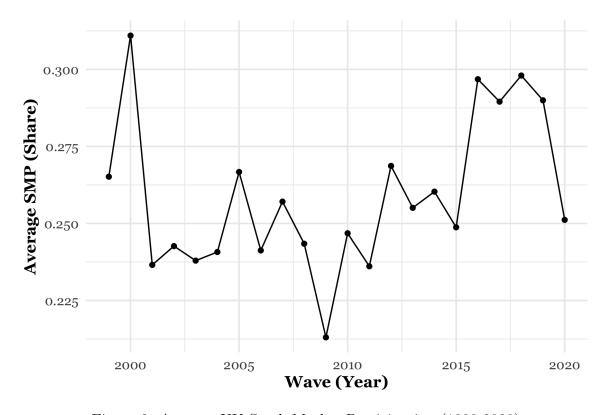


Figure 2: Average UK Stock Market Participation (1999-2020)

Additionally, aligned with initial expectations, Table 1 displays that wealthy, educated, and right-wing individuals are overrepresented in stock market participation. To evaluate the degree of variation in the dependent variable, I find that, throughout the period, 16,021 individuals

transition from not identifying to identifying with the Conservative Party and 24,737 individuals transition from not identifying to identifying with the Labour Party.

Table 1: Demographics of Stock Market Participation (1999-2020)

| | | Not Invested (%) | Invested (%) |
|------------------------|---------------------|------------------|--------------|
| Party Affiliation | Conservative | 56.0 | 44.0 |
| | Labour | 74.9 | 25.1 |
| | None/Other | 78.9 | 21.1 |
| Income Quintile | First | 84.0 | 16.0 |
| | Second | 80.1 | 19.9 |
| | Third | 77.1 | 22.9 |
| | Fourth | 71.7 | 28.3 |
| | Fifth | 57.8 | 42.2 |
| Educational Attainment | No Qualification | 84.9 | 15.1 |
| | GCSE | 79.1 | 20.9 |
| | A-Levels | 76.0 | 24.0 |
| | Other Higher Degree | 69.1 | 30.9 |
| | Degree | 60.1 | 39.9 |

5.1.2 Regression Results

To address the non-randomness of stock market participation, I first evaluate the effect of FME on identification with the Conservative Party over time. Given the binary outcome variable, $conserv_{-}id_{i}$, a logistic regression model is estimated to identify the probability of identification with the Conservative Party. Person fixed effects are incorporated to control for unobserved heterogeneity among individuals, since gender, ethnicity, social class of origin, risk tolerance, and innate cognitive skills likely affect selection into participation. I also control for a vector of variables X_{i} that change over time, such as educational attainment and income. Year fixed effects are specified to account for time-specific macroeconomic conditions and political events. The variables on the right side of the equation are lagged to capture temporal trends, as depicted in the equation below:

$$\log \left(\frac{P(conserv_id_{i,t} = 1)}{1 - P(conserv_id_{i,t} = 1)} \right) = \beta_1 conserv_id_{i,t-1} + \beta_2 FME_{i,t-1} + \beta_3 FME_{i,t-1}^2$$

$$+ \gamma X_{i,t-1} + \eta_i + \delta_t + \epsilon_{i,t}$$

$$(2)$$

It is well-known that introducing a lagged dependent variable (LDV) into a logistic regression

with two-way fixed effects leads to biased parameters (Nickell 1981). However, this bias is of order $\frac{1}{T}$, and since Beck and Katz (2011) indicate that this bias becomes nominal when T is greater than 20, I maintain the LDV model. Including an LDV aids causal identification and captures the likely inertia of political attitudes. In short, adding $conserv_id_{i,t-1}$ "introduces history into the model," thereby making the dependent variable also influenced by independent variables of the past $X_{i,t-1}$ (Urdinez and Cruz 2020).

Lastly, to address survey nonresponse, I conduct the Chi-square test and reject the null hypothesis that missingness is orthogonal to observed variables, indicating that listwise deletion may produce biased estimates (Little 1988). To ensure the results' validity, increase the number of observations, and facilitate the lagging of the independent variables, I conduct multiple imputation via chained equations (MICE). Five imputed datasets are generated, and regression estimates are pooled according to Rubin's rules (Rubin 1987).

I find that receiving income from dividends or interest is associated with a higher predicted probability that a given individual will identify with the Conservative Party (see Table 2). However, my theoretical intuition suggests that this relationship is conditional on the political party in power, so I next consider the moderating role of partisan incumbency. I expect that the strength of the relationship between FME and Conservative identification is reduced when Labour is in power, and that this effect becomes more pronounced as investment income proportional to total income rises. To test the conditional effect of incumbency, I drop the year fixed effects and instead control for changes in the FTSE 100 index. The FTSE (Financial Times Stock Exchange) 100 is the stock market index tracking the corporate performance of the 100 largest companies on the London Stock Exchange, and it is often used as a proxy for macroeconomic expectations. Since investment returns relative to income reflect both risk and market performance, incorporating the index into the right side of the equation helps partial out business cycle effects that directly impact the numerator of my independent variable FME. Formally,

$$\log \left(\frac{P(conserv_id_{i,t} = 1)}{1 - P(conserv_id_{i,t} = 1)} \right) = \beta_1 conserv_id_{i,t-1} + \beta_2 FME_{i,t-1} + \beta_3 FME_{i,t-1}^2$$

$$+ \beta_4 labour_{i,t-1} + \beta_5 FME_{i,t-1} \cdot labour_{i,t-1}$$

$$+ \beta_6 FME_{i,t-1}^2 \cdot labour_{i,t-1} + \gamma X_{i,t-1} + \eta_i + \epsilon_{i,t}$$

$$(3)$$

While the substantive effect of the log odds coefficients in Table 2 cannot be directly interpreted, the direction and statistical significance of the parameters in Model 3 reveal that the effect of investment income on Conservative identification is conditional on incumbency. When the Conservative Party is in power, the linear term is significant and positive while the quadratic term is insignificant, indicating that higher levels of investment income lead to a consistently higher likelihood of participants identifying with the Conservative Party. Although the linear term remains positive when Labour is the incumbent, the quadratic interaction term becomes significant and strongly negative. This implies an initial reactionary jump in identification with the Conservative Party for those receiving a nominal proportion of their income from investment activities, yet the predicted probability of this effect rapidly declines after proportional investment income reaches x = 0.56% of gross income.

FME is therefore associated with a preference for incumbents. However this effect is most pronounced for those who receive a greater proportion of their income from investment activities (*i.e.* individuals who take on a greater degree of relative economic risk). Figure 3 displays the predicted probabilities when holding all other variables at their means.

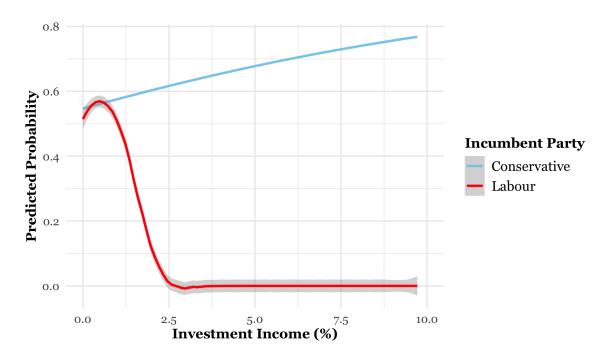


Figure 3: Financial Market Exposure and Conservative Identification

Table 2: Financial Market Exposure & Conservative Identification (1999–2020)

| | (1) | (2) | (3) |
|--------------------------|--------------|-----------------------|-----------------------|
| FME | 0.163*** | 0.173*** | 0.118** |
| | (0.028) | (0.027) | (0.031) |
| FME^2 | -0.004 | -0.004 | -0.001 |
| | (0.003) | (0.003) | (0.005) |
| Educational Attainment | 0.023 | 0.024 | 0.024* |
| | (0.011) | (0.012) | (0.010) |
| Income (Quintile) | 0.036*** | 0.039*** | 0.039*** |
| | (0.004) | (0.004) | (0.004) |
| Labour (Governing Party) | | -0.178** | -0.211*** |
| | | (0.033) | (0.037) |
| FTSE (Annual % Change) | | -0.00001 | -0.00004 |
| | | (0.001) | (0.001) |
| $FME \times Labour$ | | | 1.386* |
| | | | (0.344) |
| $FME^2 \times Labour$ | | | -1.328* |
| | | | (0.342) |
| LDV | -0.126*** | -0.125*** | -0.127*** |
| | (0.012) | (0.013) | (0.014) |
| Num. Observations | 1,055,406 | 1,055,406 | 1,055,406 |
| Pseudo-R ² | 0.15 | 0.14 | 0.14 |
| SE | pidp | pidp | pidp |
| Person FE | \checkmark | \checkmark | \checkmark |
| Year FE | \checkmark | X | X |

Note: + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

The dependent variable is identification with the Conservative Party. Standard errors are clustered by individual (pidp).

5.2 Pro-Business Preferences As a Mediator

Earlier, I commented that selection into stock market participation is likely endogenous, particularly in relation to pro-business preferences. To explore the specific attitudinal preferences driving the relationship depicted above, I use a Weighted Least Squares (WLS) estimator and consider the effect of investment income on expressed support for economically liberal policies and the populist Brexit party, UKIP/Reform. To first capture policy preferences, I utilize Principal Component Analysis (PCA) to create a factor score for latent "economic liberalism" (EL) out of granular survey items. This approach helps filter out some of the noise related to cultural factors (e.g. immigrant attitudes or family values) that might induce right identification. I include the Likert-scale survey items listed in Table 3 to operationalize support for free market economic policies and meritocratic values.

Table 3: Factor Loadings for Economic Liberalism (EL) Scale

| Item | Survey Statement | Factor Loading |
|--------|---|----------------|
| opsocc | Private enterprise is the best way to solve economic problems | 0.448 |
| opsocf | Strong trade unions are necessary (reversed) | 0.655 |
| opsoce | Government responsibility to provide jobs (reversed) | 0.489 |
| opsocd | Public services ought to be state-owned (reversed) | 0.543 |

My approach builds on Everett's (2013) economic conservatism scale that combines indicators related to fiscal responsibility, limited government, and minimal welfare benefits. I select items that are traditionally aligned with pro-business policies, including limited government responsibility in providing jobs and state ownership, as well as positive views of private enterprise and negative attitudes toward union strength. While I find Cronbach's alpha score of $\alpha=0.613$, which is slightly lower than the traditionally recommended benchmark of 0.7, all variables load positively onto the factor, revealing a moderate correlation between the preferences. The associated specification is then

$$Conserv_{-i}d_i = \beta_0 + \beta_1 FME_i + \beta_2 FME_i^2 + \gamma X_i + \epsilon_i, \tag{4}$$

in which X_i represents a vector of controls that include gender, age, ethnicity, educational

attainment, and income.⁴ These factors likely influence both political preferences and stock market participation, since older, wealthy, educated, white men should be theoretically more likely to participate in investment activities. Since the relevant survey items were only included in Wave 12 (2020), the data for the following cross-sectional regressions is taken from this wave. As seen in Table 4, FME is positively correlated with meritocratic, anti-union, and laissez-faire policy preferences. However, the quadratic term reveals this function's concavity. While an increase in FME is initially associated with a greater degree of economic conservatism, this effect is eventually reversed as proportional investment income increases.

Then, to further evaluate if the Conservative Party identification is related to support for pro-business policies or rather right-wing cultural attitudes more generally, I consider the effect of FME on support for UKIP/Reform, the right-wing populist party that championed Britain's exit from the EU. I find no statistically significant relationship between FME and UKIP/Reform support.

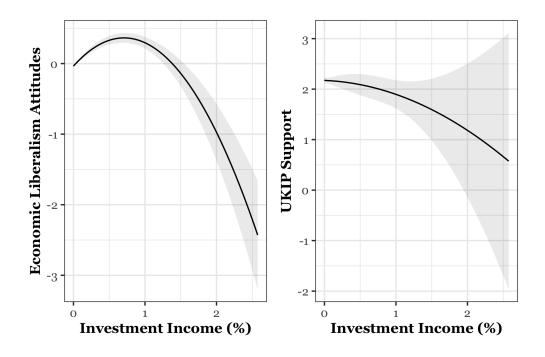


Figure 4: Attitudinal Continuous Predictions by Investment Income

Table 4: Financial Market Exposure & Attitudinal Measures

 $^{^4}$ To account for potential non-linearities, I first consider various versions of age and income. While the parameters do not substantially change and R^2 does not statistically differ between the models in which these variables are raw, quadratic, logged, and separated into quintiles, I take the natural log of age to simplify interpretation and account for its likely diminishing effect over time. Additionally, I collapse income into quintiles to address its right skewness and reduce the influence of outliers.

| | EL | | UKIP | |
|------------------------|----------|-----------|----------|-----------|
| | (1) | (2) | (3) | (4) |
| FME | 1.182*** | 1.130*** | -0.170 | -0.057 |
| | (0.337) | (0.248) | (0.373) | (0.308) |
| FME^2 | -0.913* | -0.800** | -0.077 | -0.219 |
| | (0.372) | (0.268) | (0.302) | (0.197) |
| Female | | -0.078*** | | -0.179*** |
| | | (0.014) | | (0.049) |
| Age (Logged) | | 0.192*** | | 0.228*** |
| | | (0.017) | | (0.058) |
| White | | 0.186*** | | 0.238** |
| | | (0.021) | | (0.076) |
| Educational Attainment | | -0.027*** | | -0.450*** |
| | | (0.006) | | (0.020) |
| Income (Quintiles) | | 0.042*** | | -0.116*** |
| | | (0.006) | | (0.020) |
| Constant | -0.006 | -0.912*** | 2.261*** | 3.175*** |
| | (0.007) | (0.068) | (0.025) | (0.238) |
| Num. Observations | 21171 | 21171 | 18959 | 18959 |
| AIC | 57936.1 | 57356.3 | 97010.8 | 95667.7 |
| Weights | ✓ | ✓ | ✓ | √ |

Note: + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001.

Models 1-2 represent Economic Liberalism (EL) attitudes and Models 3-4 indicate UKIP support. All models are estimated using 2020 data. Robust standard errors (HC2) are specified in parentheses to correct initial heteroskedasticity, and the relevant weights are utilized in accordance with *Understanding Society's* guidelines.

5.3 Instrumental Variable: State-Mandated Financial Education

To further support a causal interpretation of the relationship between FME and partisan identification, I next present an instrumental variable (IV) analysis. A priori, whether someone receives financial education in school should be exogenous to political attitudes. In the UK, financial education is a mandatory component of the National Curriculum, a policy that resulted from a bipartisan movement and applies to students ages 11-17 in local authority-maintained schools (Brader 2024). While academies and free schools are not technically required to follow the National Curriculum, many do in practice (Roberts and Long 2025). However, a bipartisan Parliamentary group found in 2022 that the implementation of financial literacy is not uniform across schools, and over forty percent of secondary school teachers did not know that financial education was a governmental requirement (All Party Parliamentary Group 2023).

Therefore, I suggest that whether a student is taught in school about the benefits of participating in investment activity should later impact their relative investment decisions while being exogenous to political attitudes, thereby satisfying the exclusion restriction. This approach builds on the work of Durnev and Wang (2021), which also mentions financial literacy as a useful instrument when evaluating the effect of stock market participation on electoral outcomes.⁵

Since survey data on the reception of financial education in school is not available at the individual level in *Understanding Society*, regional variation is used. In the UK, there are 12 different regions: the three member countries (Scotland, Northern Ireland, and Wales) and nine other English regions. To capture variation in financial education, I utilize data from the *UK Children and Young People's Survey in Financial Capability* (2019) and operationalize financial education as the regional average of a binary indicator representing the proportion of students reporting having learnt how to manage money in school. Descriptive data is depicted in Figure 5.

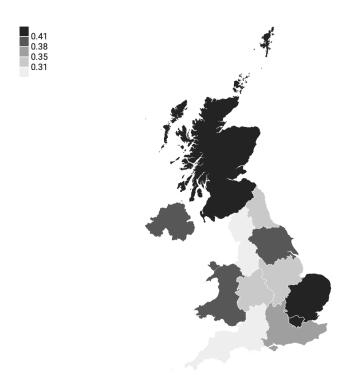


Figure 5: The Proportion of Students Taught Financial Education in School (2019)

I then match this data to the regional averages of the relevant variables found in *Understanding Society*. My 2SLS analysis is therefore a cross-sectional estimate that mirrors the

⁵I also conduct the Durbin-Wu-Hausman test and fail to reject the IV's exogeneity.

results presented above. Given the small sample size and regional data aggregation, I specify a linear rather than quadratic relationship. Specifically,

$$Conserv_{-i}d_r = \beta_0 + \beta_1 FME_r + \gamma X_r + \epsilon_r. \tag{5}$$

Then, in the first stage, the average FME per region is instrumented by the proportion of children who receive financial education in school, that is,

$$FME_r = \pi_0 + \pi_1 F E_r + \rho X_r + u_r, \tag{6}$$

where FE represents the share of region r's children who receive financial education in school, X_r is the same vector of controls included in equation (5), and u_r is the error term. The idea is that regions with higher rates of financial education should demonstrate greater support for the Conservative Party, given that the Conservative Party is in power during this period. Unfortunately, since data on UK regional financial education is only available in 2019, it is difficult to determine if this relationship is related to incumbent rather than purely centre-right party support. Nonetheless, it is a useful step toward reducing the endogeneity related to self-selection into stock market participation.

Rather than a fractional logistic regression, Linear Probability Models are utilized to facilitate interpretation given their similar substantive effects. To account for heteroskedasticity, robust standard errors are specified, and, reassuringly, no observation possesses a predicted probability outside of the [0,1] range. As shown in Table 5, the 2SLS IV estimates indicate that FME and increased investment income "cause" support for the incumbent centre-right party, with the similarity of the OLS and IV estimates reinforcing claims that endogeneity is likely not a critical issue once other demographic factors are accounted for.

Nonetheless, these results should be interpreted carefully. The sample size is small, and further regional disaggregation over time would be theoretically preferable in order to more accurately isolate the effect of investment income on incumbent support. Additionally, employing financial education as an instrument assumes that regional variation in curriculum is consistent across time; essentially, regions with higher rates of financial education were just as likely to teach students about the benefits of investment in 2019 as they were in the past.

Table 5: Instrumental Variable Regressions

| | OLS | 2SLS |
|----------------------|----------|----------|
| Constant | -3.738 | -3.695 |
| | (4.903) | (4.734) |
| FME | 31.676** | 36.398** |
| | (5.776) | (7.510) |
| Age (Logged) | 1.104 | 1.186 |
| | (1.585) | (1.711) |
| Female | 2.383 | 2.377 |
| | (1.893) | (2.339) |
| White | 0.096 | 0.125 |
| | (0.381) | (0.464) |
| Education Attainment | -0.279 | -0.311 |
| | (0.216) | (0.211) |
| Income (Quintiles) | -0.494 | -0.621 |
| | (0.420) | (0.474) |
| Num. Obs. | 12 | 12 |
| R^2 Adj. | 0.803 | 0.768 |

Note: + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Heteroskedasticity-robust standard errors (HC2) in parentheses. The dependent variable is support for the Conservative Party.

6 Discussion

Does financial market exposure shape partisan identification, and if so, how? After expanding the temporal scope, controlling for unobserved heterogeneity among individuals, and examining the conditional effect of governing parties, my results indicate that previous studies' (Durnev and Wang 2021; Kaustia and Torstila 2011) emphasis on the relationship between FME and right-wing identification is supported only at relatively low levels of stock market participation. As exposure to financial markets becomes more salient, the causal effect of FME becomes incumbent-biased. In light of these findings, on the one hand, I find support for my initial suspicion expressed in Hypothesis 2a; as FME increases, individuals become more likely to identify with the incumbent party. However, on the other hand, the quadratic relationship functions more along the lines of Conservative support as a heuristic for participants with moderate economic risk and limited information. In this sense, the "experts"—those deriving a larger portion of their income from investment activities—are increasingly more likely to support the incumbent, whereas the nominal investor (the actor deriving only 0.0-0.5% of their gross income from investment activities) expresses greater support for the Conservative Party

when Labour is in power. The latter result could be interpreted as a type of "reaction," in which the rhetorical threats of Leftist economic policies lead those with limited investment knowledge to push back. As such, this emphasis on Conservative rather than incumbent support as the primary heuristic aligns with UK survey data that display how popular opinion understands the Conservative Party as best for the UK stock market (Wild 2024).

These findings can also be interpreted in relation to pro-business preferences. Earlier, I discovered that economically liberal attitudes are also parabolically related to FME, peaking at a similar inflection point of 0.7%. Since right-wing populist support is unrelated to FME, I assume that the primary component of right-wing attitudes' association with stock market participation is essentially economic rather than cultural. I therefore interpret the concavity of EL attitudes within the context of my extant framework; the initial increase in EL attitudes likely reflects the ways that relatively uneducated investors tend to compensate for increased economic risk (*i.e.* voting against policies that are perceived to be antithetical to investment activity). However, as FME rises and financial market activity becomes more critical to incomegenerating activity, highly engaged investors likely become both more knowledgeable and more likely to prioritize macroeconomic concerns—ultimately driving them to recognize the benefits of political stability.

It is also worth discussing the function's linear nature when the Conservative Party is in power. This result likely reflects the initial heuristic of Conservative support interacting with the expert incumbent preference. Given that both effects tend to push partisan identification in the same direction when Conservatives are in power, it follows that this relationship should not experience the same progressive dip as the function does when Labour is the incumbent. Since these results are also robust to the instrument of regional variation in financial education, it is plausible that this relationship is not simply the result of self-selection into participation but rather the effect of FME itself.

Yet, as with all causal claims, the results warrant cautious interpretation. While changes in income are accounted for, the absence of wealth data may violate the conditional independence assumption, and unobserved regional factors could influence both financial education and incumbent support, raising concerns about the instrument's validity. Additionally, the generalizability of this theory is constrained by its particular political and historical context.

Throughout the period studied, both Labour and the Conservatives were centrist, institutionalist party options. It would therefore be interesting to examine the strength of this "incumbency
effect" with a more diverse party menu, as well as evaluating whether the proposed mechanisms
hold weight in alternative forms of electoral systems. Similarly, while Anglophone finance has
taken on a mass participatory bent in recent years—with 62% of Americans (Gallup 2025) and
39% of Britons involved in financial markets (Haves 2025)—it is quite a different story to assume that enough people will derive a meaningfully large proportion of income from investment
to make the "incumbent effect" relevant more broadly. Since wealth and proportional investment income are highly correlated, my proposed mechanisms likely apply to a greater extent
to the relatively wealthy middle-class, with limited implications for the political preferences of
the bottom half of the income distribution. However, given recent bipartisan efforts toward financial education expansion in the US and Europe (European Economic and Social Committee
2025; Office of the Comptroller of the Currency 2025), it is plausible that the incumbent effect
discussed here will continue to grow in importance.

Taken together, my findings provide novel insights into the causal effects of FME, with several implications for the political and social consequences of stock market participation. For one, these findings speak to the broader conversation about economic voting theories, reinforcing the conventional wisdom that voters tend to more extensively reward incumbents the better they have fared under them. I also advance this literature by incorporating the political economy of financialization into the equation; conceptualizing financial markets as a bridge that unifies sociotropic and egocentric concerns, I suggest that stock market returns affect political opinions through a channel distinct from labor income given the former's appearance as "unearned." Lastly, the expansion of financial education and the incorporation of a broader section of the electorate into the stock market could increase support for incumbents and deepen fiscally liberal attitudes. Future research programs exploring the supply-side effects of financial inclusion should consider political elites' use of propaganda to encourage stock market participation as a tactic to influence domestic politics—as evidenced by Margaret Thatcher's vision of a "shareholder democracy," for instance. Still, my findings imply that, on the demand side, investment decisions have implications for individuals' partisan alignment, demonstrating how political attitudes can be embedded within predominant economic institutions.

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