

How do Markets Shape Preferences?

Evidence from a Field Experiment

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[Preliminary Draft: Comments Appreciated]

January 2017

Abstract

Recent decades have seen a dramatic rise in the prominence of finance throughout the developed and even in the developing world. This is reflected not only in the increase in the size of the financial sector and its share of GDP, but also in the fact that more and more individuals are now engaged in financial trading, either directly or via their pension savings. How does engagement with financial markets affect social outlook and policy preferences? A long line of thinkers – from Adam Smith and Marx, to Schumpeter and Polanyi – have contended that markets have strong attendant effects on social behavior and values, yet they disagreed on the nature and direction of these effects. Country-level data suggests that countries with a larger fraction of the population trading in stock markets, also tend to have lower aversion to inequality as an incentive for individual effort and lower support for redistribution. Whether this pattern represents a causal relationship requires systematic data on the effects of exogenous market exposure. In this study we report results from a large-scale field experiment we administered in which a national sample of UK citizens received substantial monetary sums they could repeatedly invest in stocks over a six-week period. Participants' social and political attitudes were tracked as part of a seemingly unrelated study. The experimental treatment was significant: As compared to the control group, exposure to the investment treatments led subjects –62% of which never invested in the stock market before – to adopt a more right-leaning social outlook on issues of fairness and deservingness, redistribution, and the role of luck vs merit in explaining individual success. Subjects also shifted to the right on concrete policy questions, including support for privatizing national insurance and letting people invest their own savings in the stock market. This evidence suggests that as financial markets continue to expand, they may also lead to rightward shifts in preferences over economic policy.

Introduction

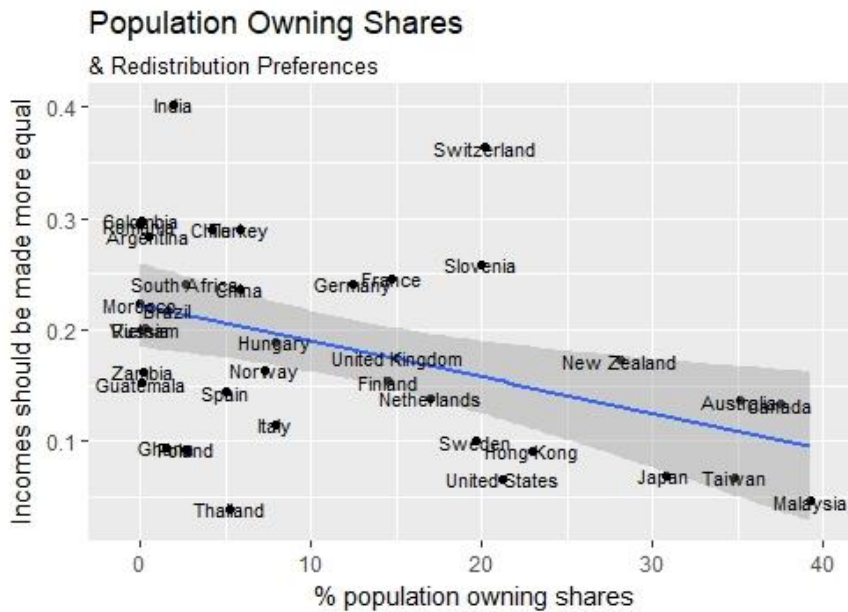
Do markets shape social people's values and political preferences, and if so, in what way? A common critique of modern capitalist systems holds that markets have progressively changed their role over the 20th century in deleterious ways. From a traditional market economy, namely a system for structuring the production and allocation of goods, critics hold that capitalism has evolved into a market society, where "market relations, market incentives and market values come to dominate all aspects of life" (Sandel, 2012). The debate over the role of markets in shaping social relations is of course not new, a concern occupying thinkers ranging from Adam Smith to Marx and Schumpeter. Whereas some attributed to markets positive influences, nurturing "bourgeois virtues" such as probity and responsibility (McCloskey 2006), others held far more critical views, arguing that markets commodify social relations, and make people more egoistic and instrumental in their treatment of others (Polanyi 1957).

The influence of markets on society and politics has arguably become even more relevant in recent decades, with the dramatic rise in the prominence of finance throughout the developed, and increasingly also the developing world. This rise is reflected not only in the growing size of the financial sector and its share of national output, but also in the fact that more and more individuals are engaged in trading of stocks, either directly or via their pension savings. This engagement with stock market trading means that people are increasingly participating in an activity that is almost exclusively centered on material gains, involves continued consideration of risk taking and risk mitigation, and often evokes strong notions of winners and losers. Moreover, stock trading is highly sensitive to economic and political developments. With all these attendant aspects, how does engagement in financial markets affect investors' social outlook and political stance?

There are good reasons to suspect that engagement in markets exerts a notable attitudinal effect. Figure 1 presents a simple cross-sectional correlation between the share of the adult population invested in the stock market and the share supporting income redistribution. As the graph makes clear, there is a clear and strong ($r=XX$) negative relationship. In countries with a larger fraction of the population trading in stock markets, support for income redistribution is lower. This pattern may not reflect a causal relationship, as other factors could account for both outcomes. Yet the notion that the growth of markets in social life could have significant influences on people's values and preferences is clearly one that merits a serious assessment.

The effects of market engagement on mass preferences may also be the basis for a broader political strategy. Under the banners of the "investor class theory" or the "ownership society", some have argued that broadening the share of the population who own stakes in the market would also lead to the expansion of the ideological Right's constituency (O'Sullivan 2000, Continetti 2005).

Figure 1. Share of Stock Owners and Support for Redistribution



This view gained particular traction during President George W. Bush's push to "privatize" social security. In his reelection campaign in 2004, Bush's chief legislative agenda called for allowing Americans to invest some of their pension savings in the stock market. The key argument in favor of this policy was that it would provide savers with higher long-term returns. Yet some on the Right supported this policy by advancing a very different --- and far more partisan -- argument, contending that privatizing social security would expose a larger share of the population to the influence of the market. This, as conservative activist Norquist argued, would lead to a subsequent shift in public opinion and would make the Republican Party a "true and permanent majority" (Calmes 2005).

The Republican's drive to privatize social security waned and ultimately collapsed.¹ One therefore cannot use the policy's implementation to test its impact on public attitudes. Indeed, the notion that exposure to markets, particularly financial markets, affects individuals' social values and political preferences remains an unproven theory. Yet testing it empirically is a formidable challenge. Simply comparing the political and social views of non-investors and investors in the stock market is problematic, as research shows that the two groups differ on a host of dimensions (age, gender, income, and more), and potentially also in some unobserved characteristics (Guiso et al, 2008; Barabas 2006). More broadly, the fact that exposure to financial markets is not randomly assigned means that differences in preferences may reflect factors unaccounted for in the analysis.

In this paper we address this empirical challenge using a field experiment. As part of the study, we randomly assigned a national sample of 1,560 Britons to receive substantial monetary sums (£50) that they could repeatedly invest in financial assets

¹ Some have attributed this failure to the escalation of the Iraq war and political capital the President lost because of it. Others have argued that the policy failed because of insufficient support among the public.

over a six-week period. In the weeks before and after the study, we also tracked participants' social and political attitudes as part of a seemingly unrelated study.

Within our national sample, over sixty percent had never invested in the stock market before. For those individuals, the experiment represented their first engagement with such investment activity. All subjects were assigned into one of five treatments, each of them differing in subtle ways. Among other features, the treatments varied in whether or not the investments were tied to real monetary rewards, and whether the investments were in the stock market or in assets tied to sporting events. This variation in the design allows us to assess the effect of repeated exposure to the investment process, but also to learn about the mechanism by which engagement with financial assets influences investors' views and preferences.

Overall, we find that participants assigned into one of the asset treatments shifted rightward in their social values, i.e., in their attitudes on issues such as economic fairness, inequality and redistribution, and the role of luck in economic success. Using a composite index of these items, we find that exposure to the asset treatment led to a rightward shift in social values equivalent to a 9-12% of the distance between Labour and Conservative voters.

The effect is primarily driven by the treatment group assigned to investments in stocks of firms and where real financial incentives are at stake. Among subjects in this group, the effect was equivalent to a 11-14% closing of the Labour-Conservative gap. By contrast, among subjects in treatments where the investment was in "fantasy money", i.e., without real monetary rewards, the estimated effect was substantively small and statistically insignificant. The effect was also insignificant when investments were in assets tied to the performance of baseball teams rather than in the stock market. Put differently, the treatment effect was dependent on both the financial rewards at stake and the nature of the investment activity.

We also find that the rightward shift in social values occurred among both left- and right-wing voters, but was far more pronounced among those on the left. In terms of the mechanism, the results allow us to rule out that this attitudinal shift was caused by a change in subjects' tolerance of risk. We also find limited evidence that the change in attitudes was determined by how well participants' investments performed during the experimental period.

Turning to preferences on policy issues such as financial sector regulation and taxation on stock market gains, we find a very similar pattern. Subjects exposed to the investment treatment, particularly those investing in the stock market with real monetary stakes, moved distinctly rightwards in their views. Most notable was the effect on participants' views in the policy debate over the privatization of pension savings. Compared to the control group, we find that following the experimental period, subjects in the real stock treatment were about 7.5 percentage points more likely to support allowing citizens to invest their national insurance savings in the stock market. This represents a shift of almost 31 percent above the baseline rate of support. Put differently, exposing individuals to investment activity appears to *increase* on average their pro-market inclinations and degree of trust in the stock market.

Our findings contribute to the ongoing debate about the investor class theory (Glassman 2000; Nadler 1999). We provide the first causal evidence that engagement in investment activity drives investors to the right on both social values and on concrete policy matters. This finding has clear political implications if exposure to financial markets will continue to grow as it has in recent decades. The results also add to the literature on attitude change and motivated reasoning. The theory of motivated reasoning (Lodge and Taber 2006; Redlawsk 2002) holds that people often cling to misguided beliefs despite overwhelming evidence contrary to their stance. Yet our findings suggest that people do in fact shift their views in meaningful ways in response to a new experience, in this case personal engagement with investing in financial markets. This finding joins recent evidence showing the impact of experiences such as job loss and major drop in income on individuals' social and political views (Fisman et al 2015; Margalit 2013; Wolfers 2007). Yet in contrast to these experiences of economic hardship, exposure to financial markets shifts individuals to the right rather than the left.

The paper continues as follows. The next section discusses the literature on the link between markets and investors' political views. We then describe our experimental design and the data we collected. The subsequent sections present the results, starting with the treatment effects on subjects' social values followed by the changes in policy preferences. The final section concludes and discusses the broader implications of the findings.

II. Market Engagement, Social Values and Political Preferences

The impact of markets on human behavior and people's social outlook has long been debated. According to Hirschman's historical account of this debate, for centuries markets were seen as a civilizing force (Hirschman 1982). Indeed, the dominant view, espoused by thinkers ranging from Adam Smith to Montesquieu, was that market institutions made people more cordial, honest and pacific (Smith 1763 [1978], Montesquieu 1749 [1989]).² This view changed only in the mid-nineteenth century, when critiques of the market society began to gain credence, with a key claim – most famously articulated by Marx --- being that the weak moral foundations of the capitalist system would eventually lead to its collapse (Marx 1848). Related to this critical view, others focused on the exploitation and subsequent alienation that the market society engenders among the masses, in part a result of the egoistic behavior that markets value and rely upon (Veblen 1899 and more recently, Sandel 2000). As Karl Polanyi argued, capitalism has a strong dehumanizing effect, with markets leading to a commodification of social relations (Polanyi 1957).

The pendulum of moral evaluations of markets swung once more, when in response to the Marxist critique, some countered with a defense of the social implications of a market society. Recognizing the weakness of the market system as compared to other cultural and social forces, those thinkers contended that markets were nonetheless a

² As Smith is famously quoted: "whenever commerce is introduced into any country, probity and punctuality always accompany it".

force for the good. Its success or failure, as well as its influence, depends on the specific cultural context in which it operates, not on general rules that apply broadly. In sum, as Hirschman noted, the views of markets covered the full Monty, from a civilizing, to harmful, to beneficial-yet-feeble (Hirschman 1982).

In this study, as noted, we focus on exposure to one specific type of market activity, namely to investments in financial markets. To date, substantial research has centered on the influence of social dispositions on individuals' willingness to invest in the stock market (Guiso et al 2008, Hong et al 2004). Less research has been done on the opposite question, namely how investment in financial markets affects those dispositions and social outlook (for exceptions, see Jha and Shayo 2016; Kaustia and Torstila 2011, Richardson 2010). Interest in this possible relationship was sparked in part by the evolution of the "investor class theory", namely the claim that engagement in stock market investment leads individuals to espouse right leaning political views. Importantly, the claim is not that investors are individuals who *tend* to be more right leaning and pro-market, but rather that engagement in the stock market is itself a cause of this social and political outlook.

This theory was forcefully advanced by conservative think tanks and analysts (O'Sullivan 2000, Continetti 2005), but soon also garnered proponents in the policy community. The mechanisms responsible for this alleged effect are several. By one view, investing in the market leads to changes in people's economic interests. These interests become more aligned with investor-friendly policies, particularly those that protect the profitability of investments. Indeed, Nadler (1999) cites a survey that shows a large majority of investors (66%) favoring a reduction of capital gains tax, while only a minority (46%) of non-investors supporting such a change in policy.

A second view holds that engagement in stock market investment generates a more suspect view of government intervention. The strong free market ethos of the investment community engenders an antithetical view of government influence on the operation of the market. As a result, investors adopt a more right-leaning worldview (Glassman 1999).

Finally, a third mechanism centers on the role of information sources. Engagement in the stock market leads to growing reliance on specialized sources of information; specifically ones that help investors follow their financial investments. Since many of these sources tend to be more conservative --- e.g. The Wall Street Journal, Investor's Business Daily -- the effect is that the investor class shifts to the right over time (Nadler 1999).

The logic underlying these mechanisms suggests that the attitudinal effect of investments varies as a function of the type and size of investment one engages in. Ponnuru (2004) argues that the change in views is stronger among people who are more engaged in the investment decisions: "Owners of individual stocks were more conservative than people who only owned 401(k), who were in turn more conservative than passive recipients of income from bonds". Norquist argues that the effect on a pro-Republican outlook is stronger if the investment is higher than five thousand dollars, again presumably a proxy for engagement (Norquist 2004).

The debate over the merits of the investment class theory became particularly relevant during the push made by the Republican Party to "privatize" social insurance. The initiative, eagerly advanced during President George W. Bush's reelection campaign in 2004, sought to allow people to invest some of their pension savings in the stock market. Several arguments were put forward for this policy, chief among them was the notion that it would provide savers with higher long-term returns. In addition, it was advocated as a way to decrease government intervention by allowing people to have a greater say on how their money was to be invested.

Yet beyond such arguments, a more partisan political rationale undergirded the call for privatizing social security. This rationale built on the logic of the investor class theory. By expanding the investor class through the creation of private accounts for stock investments of social security savings, a larger share of the population would be exposed to the influence of the market. The result would be to cement the Republican Party majority over time (Calmes 2005).

Several studies have explored the empirical evidence on this claim. Barabas (2006) uses both cross-sectional and longitudinal data to show that the performance of the main stocks markets (Dow Jones Industrial Average, S&P 500 Index) is positively and significantly associated with the public's support for privatization of social security. The shifts, he notes, run both ways: when the markets go up support for privatization rises, but when they fall, the effect reverses in a more pronounced manner. Notably, these results are in contrast with people's expectations of their own behavior. When a nationwide sample was asked in a poll whether their support for social security privatization would change if the stock market was sagging, the majority answered it would not.³

The unique standing of social security in the American public --- often referred to as the "third rail" of American politics --- perhaps accounts for the major significance attached to public opinion in the debate over privatization of social security savings. Indeed, the timing of the Bush administrations' efforts to advance the legislation was often attributed to calculations centered the public's stance on this issue (Barabas 2006). Assessing the role of exposure to financial markets in shaping individuals' views on this matter is thus a topic of both theoretical and practical interest.

III. Experimental Approach

This section describes the design of the experiment, focusing on the study's sequence and the content of the different treatments. Detailed versions of the recruitment and invitation correspondence with participants, as well as screen captures from the various treatments are included in the Supplemental Information appendix.

³ The exact wording was as follows "Now looking ahead over the next year or so . . . As a result of what's been happening with the stock market and economy, please tell me if you will be less likely to do any of the following. . . . Will you be less likely to support the idea of changing Social Security to allow individuals to invest some of their Social Security taxes in the stock market?" The poll was conducted by Princeton Survey Research Associates.

Sequence

Using the services of international polling firm Respondi, in April 2016 we sent 40,000 Britons an email invitation to participate in “an international study on economic behavior”. To take part in this study, recipients were asked to complete a short survey that included questions on their attitudes on economic issues as well as a series of items gauging their understanding of economics and principles of finance. Participants were informed that a lottery will be carried out and that winners will take part in a study that will last “about two months” and will require them to complete a set of weekly surveys. Recipients were told that those drawn to take part in the study will receive up to £50, and that they will then be asked to make weekly investment decisions with this sum.⁴

To learn about their views on social and political matters, we fielded to all those who completed the initial survey on economic issues an invitation to take part in another (seemingly unrelated) survey. This invitation had a different user interface and did not include any details or information that indicated that the two studies (i.e. the economic and the socio-political) were connected. This separation was made in order to minimize the possibility of experimenter “demand effects” influencing how participants answered the survey.⁵

Among the individuals who completed both surveys we conducted a lottery. Five hundred and twenty participants were assigned to the control group (more on which below), while another 2,183 were selected to take part in one of the three experimental interventions that involved the task of investing in assets over a period of six consecutive weeks.

The online platform we had programmed for trading was designed to mimic key features of the user interface of popular trading platforms such as Ameritrade or E*trade (see appendix Figure A1). Among other things, the platform provided participants with links that allowed them to read more information about each of the companies. Participants were asked to allocate their investment across the three assets. Allocation of a sum to investment in a given asset was shown as a share of the total investment. The investment had to sum up to 100% of the earnings up to that point, i.e., subjects were not allowed to keep part of the sum in cash.⁶ After submitting their chosen allocation across assets, participants were prompted with an open-ended box in which they were asked to explain the rationale for their investment decision.

The following weekend, subjects were invited by email to re-enter the online platform to see how well their investments had performed during the previous week and make decisions regarding the allocation of investment across the assets for the coming week. Allowing the investment decisions to take place only in the weekend was made

⁴ Participants were informed that these investments “may increase your earnings even further, or if your choices are unsuccessful, you could lose some of this money.”

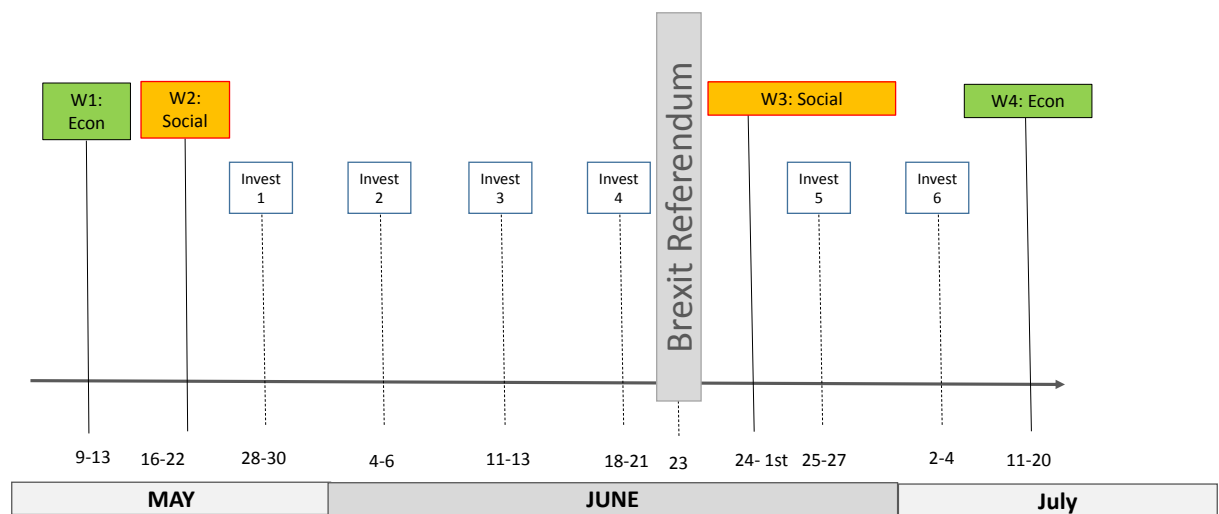
⁵ The term ‘demand effects’ describes instances where subjects express certain view or behave in a certain way because they think that this is what the investigator expects to hear or observe.

⁶ Some subjects, for example, chose to allocate the fifty pounds in equal shares across all three assets, others opted to concentrate all of their investment in a single asset, and so on.

to ensure that all participants saw the exact same prices for the different assets, thus providing the same treatment for all participants in that given week. Furthermore, in order to promote ongoing engagement with the study, subjects were informed that failing to enter the system in a given week is penalized by a deduction of ten percent of their total portfolio's worth. For a period of four additional weeks (i.e. six in total), participants were invited to make their investment decisions.

Figure2 presents the experiment sequence. Colored boxed denote surveys that included knowledge and attitudinal questions (green boxes refer to surveys on economic matters; orange boxes on socio-political issues). Boxes with light background ('Invest') denote the period of investment in each week.

Figure2 . Study sequence



Experimental Treatments

The *Real Stocks treatment*: 1560 individuals were assigned the task of investing £50 in a portfolio that consisted of three financial assets. These assets represented firms in three different sectors: technology, automotive and wine & spirits.⁷

The *Fantasy treatment*: This group of 311 subjects received the exact same conditions as the *real stock treatment*, with one important variant. Instead of making investment decisions on real money, participants were informed that their investments were on 'fantasy money', i.e., that the financial stakes involved were zero. Note that participants in this treatment group were invited to take part in the same study as the basic treatment, received the same type of information throughout the study and had to make investment allocation decisions on the exact same assets. Yet unlike

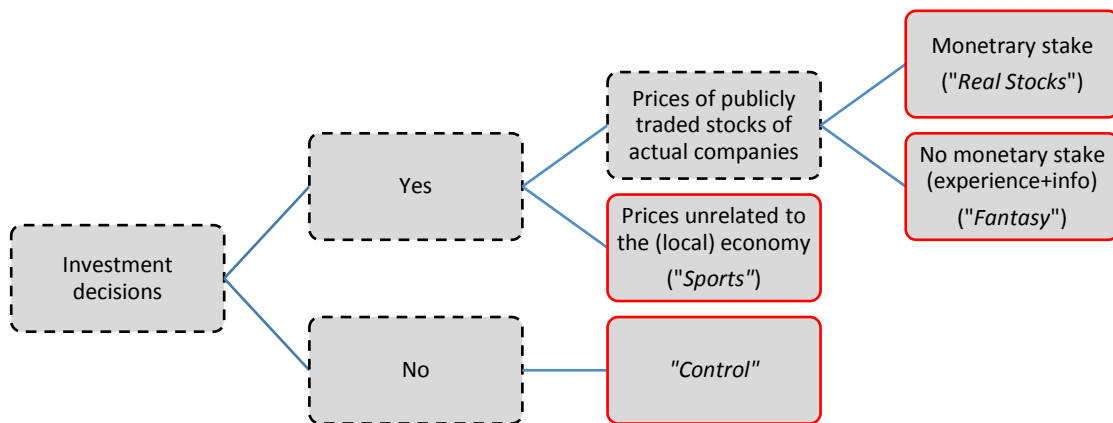
⁷ This treatment consisted of four sub-groupings, in which the home country of the firms in the portfolio differed: whereas 832 received portfolios in which all assets were of companies in the UK, other groupings received stocks either from American firms (312) or from European firms (416). Given that the results with respect to the outcomes we study were very similar across all three sub-groupings, we treat all participants in these sub-groups as members of the *real stock treatment*.

participants in the *real stocks* treatment, in this case there were no £50 payments involved.

The *Sports treatment* replicated the same investment experience as the real stocks treatment, only instead of investing the £50 sum in stocks of firms traded on the stock market, the assets available for investment to the 312 subjects in this treatment group were all based on the performance rankings of baseball teams. To mimic the variability in stock market prices, we used the ratings of baseball teams' strength (as published on the website 538.com). This rating score varied on a weekly basis as a function of a number of factors, such as how well the team performed during the preceding week, changes in the injury status of its players, or the performance of other competing teams in its division. By including this treatment in the experiment, we are able to distinguish between effects that stem from engaging with investments in financial assets, as opposed to the experience of investing in *something* during the preceding period. To this end, we ensured that the investment experience in the sports treatment replicated the one offered in the real stocks treatment, with the one real difference being the nature of the assets involved.

Finally, the control group did not participate in any of the investment waves, but instead completed only the two sets of surveys, before and after the intervention. Figure 3 summarizes the logic guiding the allocation across the control and the different treatment groups.

Figure 3. Decision rules differentiating the experimental groups



Note: Colored boxed denote final groupings.

IV. Data

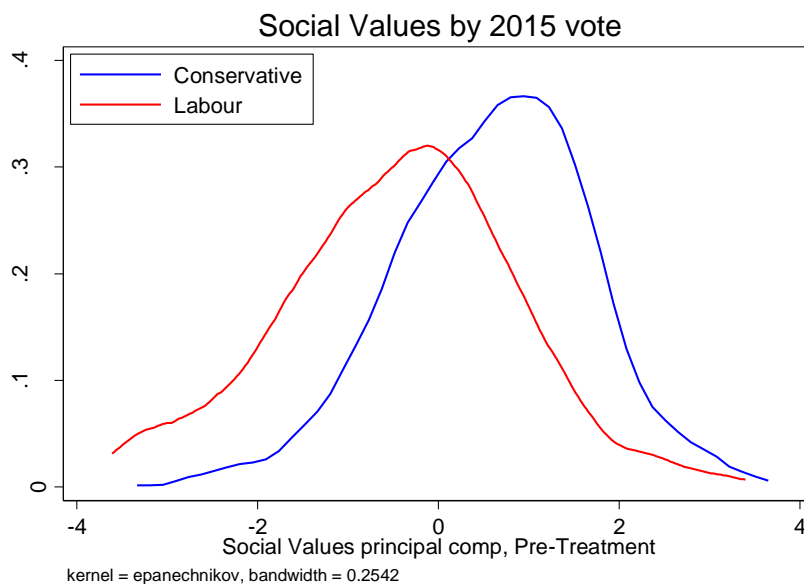
The randomized assignment of participants in the study into control and treatment groups ensured that the two groups were similar with respect to all the key features. Table A.1 presents the balance statistics of all variables used in subsequent analyses. The figures we report in the table pertain to the individuals who completed at least one of the post-treatment surveys (W3 or W4). Several patterns are of note. First, the

p-values obtained from a t-test comparing the means of all variables in the *asset treatment* and the *control* groups are all well above levels of statistical significance. Randomization was clearly successful.⁸

In substantive terms, the table indicates that only 39% of the participants have prior experience of investment in the stock market. Put differently, the experiment represented the first ever engagement with the stock market as investors for over sixty percent of the participants in the asset treatment group. Among those who had invested, only 33% did so in the past six months.

The average age of participants was about 50, and slightly over half were female (52%). Among the sample, just below 94% of participants were born in the UK. In terms of education, about 30% of the sample have a college degree or higher, 13% had received professional training and just over 23% completed A-levels.

Figure 4. Social Values, by 2015 Vote



A key dependent variable in the analysis below is our measure of participants’ social values (SV). The SV measure is generated by conducting a principle component analysis on four related items, pertaining to issues of economic fairness, inequality and redistribution, the role of luck in economic success and people’s views on how meritocratic society is (See appendix for full question wording). The four items load on the first dimension with an eigenvalue of 1.74. The SV takes higher values for more rightwing views. As Figure 4 shows, the distribution of the SV score among Labor voters in the 2015 is significantly lower than that of voters for the Conservatives.

⁸ In fact, given that the table includes over 30 different variables, we would have expected one or more of these differences in means between the two groups to be significant even by pure chance. Nonetheless, this is not the case in our data.

Beyond social values, we also explore the impact of the treatment on specific policy issues. In particular, we are interested in whether engagement in stock market investments affects investors' views regarding the debate on the privatization of national insurance savings. To this end, we generate a variable denoting respondents' views on this issue based on their responses to the following question: "Do you think the government should or should not allow Britons to invest a portion of their National Insurance contributions in the stock market?".⁹ For ease of interpretation, we dichotomize respondents' answers on a five-point scale and code *privatize_NI* if the respondent chose "favor somewhat" or "favor strongly". Overall, 33.2% of respondents in the Control supported privatization of the national insurance in the pre-treatment survey.

The distribution in terms of partisan preferences in the pre-treatment survey is nicely matched across treatment and control, with no differences between the two groups in support for any specific party approaching statistical significance. Among the Control, 36% supported the Conservative Party, 29% supported Labor and 15% back UKIP.

Overall, 2,703 individuals completed the two baseline surveys and were assigned to one of the experimental groups (including control). Among those, 2,334 completed the post-treatment economic survey, 2,378 completed the socio-political survey and 2,223 participants completed both post-treatment surveys. This implies that in the most conservative estimate, attrition rate was just under 18 percent.

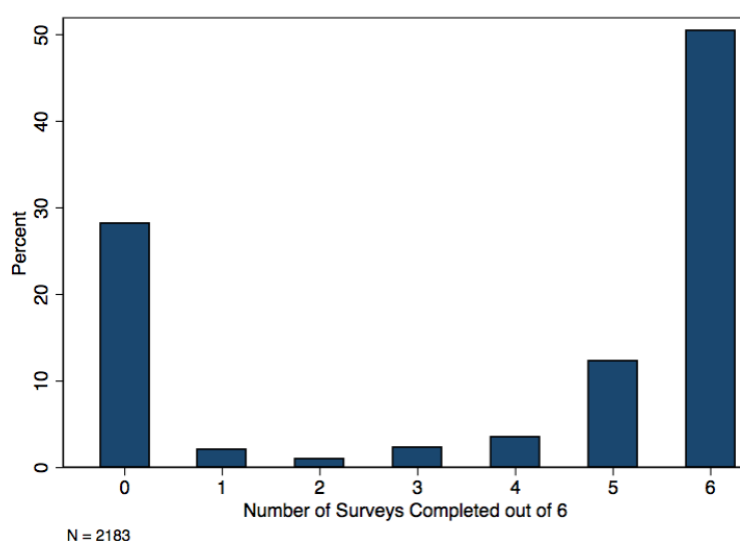
Of the individuals assigned to the asset treatments, participation patterns rates were bi-modal (see Figure 5): Half of the participants made investment decisions in all six weeks and another 12% participated in 5 investment weeks. In contrast, 28% of the subjects did not complete any of the investment surveys, meaning that other than the pre-study surveys, they dropped out from the entire experimental period.

Due to the issue of non-compliance, and the fact that non-compliance is likely to have been non-random, we report the treatment effects in all analyses below in two forms: once as Intention to Treat (ITT) and once as Treatment on the Treated (ToT). In the former, we ignore the issue of non-compliance and simply report the mean level of the outcome variable in the treatment and control groups among *all individuals* assigned to either of the groups, irrespective of their compliance level. In contrast, ToT estimates take account of the non-compliance by instrumenting participation using the assigned treatment group.¹⁰ This provides a less conservative, but more accurate estimate of the actual treatment effect.

⁹ The preamble to this question read as follows: "Some people have suggested that workers should have the option of taking some of their National Insurance contributions and putting them in investments such as the stock market. People who did this would get more money when they retired if these investments did well, but less money if those investments did poorly."

¹⁰ We define being treated as having completed an investment survey beyond the initial approach.

Figure 5. Share Participation, by Number of Weeks Invested



The stock market was quite turbulent during the period under study. This was in part due to the proximity of the experiment to the referendum on the Brexit, which took place before the fifth week of investment. As Figure A2 . indicates, the performance of the assets in the various portfolios assigned to subjects varied a good deal during the period, though assets in the stock market generally performed quite well. At its peak (in week 6), the stock of Rolls Royce Holdings rose 37%, as the same time that the stock of Siemens was in the red (losing 8% at its trough).

Overall, 25% percent of the investors in our experiment gained from their investments during the period, while 38% lost. The remaining 37% experienced a minimal change in their portfolio's value (see Figure A3 for the distribution of gains and losses among the subject pool).¹¹

V. Results

We divide the presentation of the results into three sections. We begin by laying out the findings with respect to the treatment effects on subjects' social values. We then examine the evidence on potential mechanisms account for the attitudinal shift. The third section explores the treatment effects on policy preferences.

a. Social Values

We start our analysis by examining the treatment effects on our measure of social values. Table 1 shows the overall treatment effect on SV, without distinguishing between sub-treatments. That is, we do not distinguish treated individuals who were assigned assets tied to the stock market or assets tied to sporting events, nor do we distinguish real from fantasy stocks. Columns 1-4 show intent-to-treat (ITT) estimates, which compare individuals according to whether or not they were *assigned*

¹¹ In this classification, we treat investors that remained within the range of 2 pounds from the initial investment (i.e. 4%) as cases in which the portfolio remained stable during the investment period.

to the treatment group, regardless of whether they actually participated and took up assets.

The first column shows the average difference between the treatment and control groups, without including any controls. The point estimate indicates an increase of 0.095 in SV. To get a substantive sense of the effect's magnitude, consider the values of SV among voters of the two main parties in 2015 (as shown in Figure 1). Among Labour voters in our sample, the pre-treatment mean SV is -0.44, whereas among people who voted for the Conservatives the mean is 0.59. Thus, the estimated treatment effect is equivalent to a rightward movement of roughly 9% of the gap between average Labour and Conservative voters.

Table 1. Impact of Asset Treatment on Social Values

	(1)	(2)	(3)	(4)	(5)
Asset Treatment	0.0945 (0.0712)	0.0891* (0.0533)	0.0969* (0.0527)	0.0982* (0.0525)	0.125* (0.0664)
Lagged DV		0.701*** (0.0173)	0.669*** (0.0187)	0.655*** (0.0193)	0.654*** (0.0192)
Political Controls	NO	NO	YES	YES	YES
Demographic Controls	NO	NO	NO	YES	YES
Estimation	ITT	ITT	ITT	ITT	TOT
Observations	2,223	2,223	2,223	2,223	2,223
R-squared	0.001	0.473	0.481	0.488	0.487

Robust standard errors in parentheses; ***<0.01, * p<0.05, * p<0.1

In Columns 2-4 we progressively add controls for the pre-treatment level of SV; for party vote in the 2015 general election; and for income, gender, education, prior investment history and risk attitudes, all measured pre-treatment. Not surprisingly, the explanatory power of the regression increases a good deal (from 0.001 in Column 1 to between 0.47 and 0.49). Nonetheless, and consistent with random assignment, the treatment effect remains stable at around -0.095 and becomes more precisely estimated. Finally, Column 5 reports the estimated effect of the treatment on the treated (TOT), using assignment to treatment as an instrument for actually participating (defined as completing at least the first investment survey). Not surprisingly, the estimated effect on those who actually took up the treatment is larger and corresponds to a rightward shift of about 12% of the gap between Labour and Conservative party voters.

Next, we examine more closely the nature of this effect. The first question is whether it is investment activity *per se* that induces a change in social values, or whether the effect has to do with the type of assets that participants are exposed to. More specifically, our design allows us to investigate whether mere engagement in repeated investment decisions, regardless of the types of assets involved – even if the assets are

indexed to sporting outcomes in a different country – causes a rightward shift in SV. Alternatively, the effect seen in Table 1 may be restricted to those treatments that engaged participants with stocks of publicly traded companies.

Table 2 repeats the estimation of treatment effects from the previous analysis, only now we estimate separately the effect of each sub-treatment. As the third row (“Sports, real”) suggests, investment in assets tied to sporting events has a rather small and statistically insignificant effect on SV. Thus it seems that the treatment effect observed in Table 1 hinges on exposure to actual stocks.

Table 2. Treatment Effect on Social Values, by Sub-Treatment

	(1)	(2)	(3)	(4)	(5)
Stocks, real	0.138* (0.0737)	0.113** (0.0551)	0.118** (0.0545)	0.119** (0.0542)	0.144** (0.0655)
Stocks, fantasy	-0.0474 (0.109)	0.0299 (0.0753)	0.0493 (0.0751)	0.0513 (0.0754)	0.0806 (0.117)
Sports, real	0.00695 (0.103)	0.0219 (0.0793)	0.0364 (0.0783)	0.0388 (0.0784)	0.0530 (0.106)
Lagged DV		0.701*** (0.0173)	0.668*** (0.0186)	0.655*** (0.0192)	0.654*** (0.0192)
Political Controls	NO	NO	YES	YES	YES
Demographic Controls	NO	NO	NO	YES	YES
Controls	NO	YES	YES	YES	YES
Estimation	ITT	ITT	ITT	ITT	TOT
Observations	2,223	2,223	2,223	2,223	2,223
R-squared	0.003	0.474	0.481	0.488	0.487

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

This, however, raises a second question. Is it necessary that participants have real stakes in the assets to induce a change in social values, or is it enough to be exposed to financial markets via “fantasy money”? The results in Table 2 indicate that the asset treatment effect is mostly driven by the real stocks. The point estimate on the fantasy treatment in the full ITT specification (column 4) is less than half the size of the real stock and statistically insignificant. Due to non-compliance, the TOT point estimate of the fantasy effect appears more substantial (column 5) but, perhaps due to small sample size, is imprecisely estimated and statistically insignificant.

Together, the results suggest that it is the combination of having a real financial stake in the investment and that these investments are made in stocks traded in the stock market that has the largest effect.

b. Mechanisms

Next, we explore *why* engagement in repeated investment decisions causes a rightward shift in participants' social values. In the theoretical discussion, we laid out a set of potential mechanisms that could account for such a shift. We now turn to investigate these potential mechanisms more closely.

One possible explanation is that engagement in investment activity leads to a subsequent change in people's attitudes toward risk. If a key concern underlying left-leaning social values is providing insurance against hardships, an experience that causes people to become more risk tolerant may also lead them to embrace more right leaning positions. We explore this possibility by examining whether the treatment increased subjects' tolerance of risk. We use the following question: "*How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? Please tick a box on the scale, where the value 0 means: 'not at all willing to take risks' and the value 10 means: 'very willing to take risks'.*" Dohmen et al (2011) confirm the behavioral validity of this measure using paid lottery choices and argue that it outperforms other measures in predicting risky behavior.

Table 3 shows the estimated treatment effect (by sub-treatments) on either an indicator for above-median risk tolerance (columns 1-3) or on the original 1 to 10 scale. Neither the ITT nor the TOT estimates suggest any meaningful effect of the treatment on risk attitudes. A similar result obtains when examining the overall treatment effect. We thus conclude that the risk mechanism does not seem to account for the shift in subjects' right-leaning shift.

Table 3. Treatment Effects by Tolerance of Risk

	Risk tolerance indicator			Risk tolerance (1-10)		
	(1)	(2)	(3)	(4)	(5)	(6)
Stocks, real	-0.0156 (0.0245)	-0.0162 (0.0237)	-0.0196 (0.0285)	0.0717 (0.110)	0.0721 (0.109)	0.0874 (0.132)
Stocks, fantasy	-0.0328 (0.0340)	-0.0327 (0.0329)	-0.0512 (0.0514)	-0.0242 (0.151)	-0.0198 (0.149)	-0.0308 (0.232)
Sports, real	-0.0305 (0.0338)	-0.0283 (0.0325)	-0.0386 (0.0443)	0.0614 (0.143)	0.0595 (0.144)	0.0810 (0.195)
Demographic Controls	No	Yes	Yes	No	Yes	Yes
Pre-treatment DV	Yes	Yes	Yes	Yes	Yes	Yes
Estimation	ITT	ITT	IV-TOT	ITT	ITT	IV-TOT
Observations	2,223	2,223	2,223	2,223	2,223	2,223
R-squared	0.287	0.342	0.340	0.469	0.474	0.475
Demographic Controls	No	Yes	Yes	No	Yes	Yes
Pre-treatment DV	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Rather than change people's preferences, engagement in the market may lead to attitude change via two distinct mechanisms. It could be that close exposure to the operation of financial markets --- with their responsiveness to real world events, technical sophistication and impressive visuals (e.g. graphs and charts) -- leads participants to view the system as more open and professional and less "rigged" than they had imagined. If so, the effect should be in a similar direction regardless of pre-existing leanings. Moreover, those *ex-ante* more suspect of the financial industry, typically positioned on the ideological left, would also be the ones more likely to shift rightwards. Put differently, the movement in social values should be perhaps registered among both left and right, but the effect is likely to be most pronounced among left-leaning individuals. Alternatively, if most people are "motivated reasoners", then exposure to the operation of financial markets should generate a *polarizing effect*. Individuals on the right would find the investment experience reassuring of their priors and would move to the right; conversely, those on the left would find the experience as evidence substantiating their distrustful view of markets and would shift further to the left. If the rightward shift is more pronounced, the polarization following exposure to the markets could lead to an overall strengthening of the right wing camp.

Figure 6 . Social Values Post Treatment, by 2015 Vote

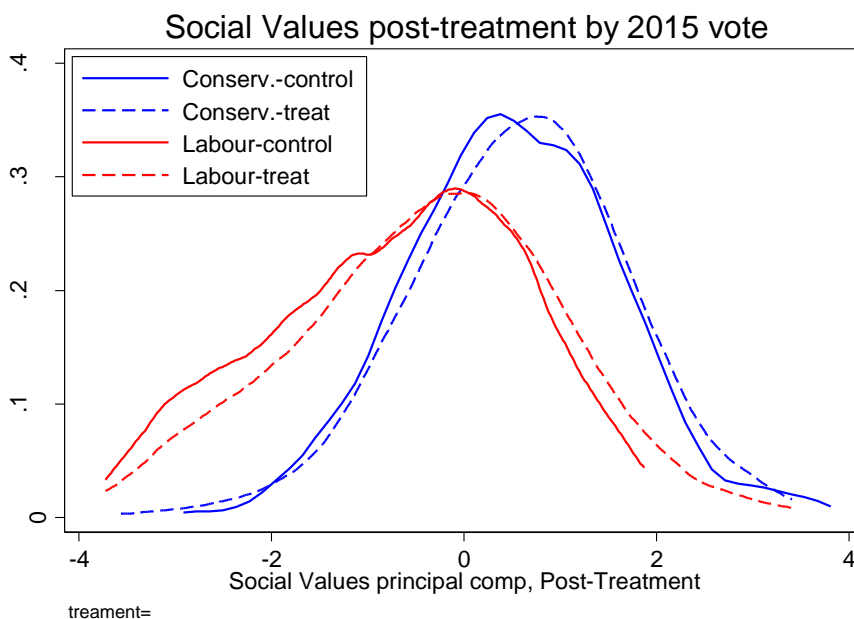


Figure 6 illustrates the main patterns of movement in the raw data, distinguishing Labour and conservative voters. The figure seems to suggest a rightward shift of both conservative and Labour voters, consistent with the first hypothesis. However, the shift appears more pronounced among the Labour voters.

Table 4 presents the results by subjects' political leanings in 2015. Specifically, we subset the analysis to contrast voters of Labour (columns 1-3) and the Conservatives

(4-6). As before, we assess the relationship between exposure to the treatment and a change in subjects' social values: the first models (columns 1 and 4) are unconditional, the second model (cols 2 and 5) include demographic controls, and the third model (columns 3 and 6) analyzes the treatment on the treated. As all these analyses indicate, exposure to the real stocks treatment had the strongest effect on attitudes. However, the table again seems to suggest a partisan difference. Not only is the estimated effect statistically significant only among those on the left, the point estimates are a good deal larger. Whereas the effect of the real stocks had a sizable impact on the SV of Labour supporters (0.206, representing an 18% shift toward the mean score of Conservatives), among Conservatives the effect was roughly one half in size (.118).

This pattern goes against the polarization hypothesis, and instead suggests that exposure to markets has, if anything, a stronger effect on left-leaning individuals.

Table 4 . Treatment Effects by Political Attitudes

	Voted Labour in 2015			Voted Conservatives in 2015		
	(1)	(2)	(3)	(4)	(5)	(6)
Stocks, real	0.214** (0.107)	0.206* (0.106)	0.240* (0.122)	0.121 (0.0866)	0.118 (0.0877)	0.148 (0.109)
Stocks, fantasy	0.197 (0.133)	0.183 (0.137)	0.271 (0.200)	0.0850 (0.136)	0.0771 (0.139)	0.131 (0.228)
Sports, real	0.108 (0.167)	0.136 (0.168)	0.179 (0.220)	0.0447 (0.115)	0.0517 (0.117)	0.0752 (0.165)
Estimation	ITT	ITT	TOT	ITT	ITT	TOT
Demographic Controls	No	Yes	Yes	No	Yes	Yes
Pre-treatment DV	Yes	Yes	Yes	Yes	Yes	Yes
Observations	686	686	686	752	752	752
R-squared	0.453	0.470	0.465	0.347	0.355	0.354

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Finally, people's own experiences in the market could also help account for the rightward shift in attitudes. Individuals who are successful may come to view themselves as "winners" and become less sympathetic to the notion of redistribution to the "losers". If this effect is in play, we should observe a strong association between how people's investments performed during the experimental period and their subsequent attitudinal change. Yet empirically, this is not we find. Whether interacting the treatments with a continuous measure of the portfolio's percentage change, or when sub-setting the analysis by gainers and losers, we observe no significant difference in the treatment effect as a function of how well the investors performed during the experiment.

c. Policy Preferences

So far we have seen that engagement with investment activity shifted subjects to the right with respect to social values. We now turn to examine the impact of the treatments on participants' policy preferences.

In columns 1-3 of Table 5 we report the treatment effects on *Market Regulation*, our measure of respondents' attitudes toward reforms aimed at checking the market. Recall, as with *social values*, this measure is also based on responses to four survey items dealing with related matters (e.g., higher taxes on gains in the stock market, capping wages in the financial industry).¹²

As the Table indicates, exposure to the real stock treatment is associated with a 0.11-0.13 shift on the scale, representing 17-21% of the pre-treatment gap between voters of Labour and Conservatives in the 2015 elections. This effect remains stable when adding demographic controls (column 2) as well as when using the treatment-on-treated estimates (column 3). In stark contrast, the coefficients on the fantasy treatment are a good deal smaller, indicating that having financial stakes in the investment was responsible for at least part of the observed effect. The fact that the coefficients on the sports treatment were small and slightly *negative* indicates that engagement with financial stocks (rather than any assets) was consequential in shifting subjects' attitudes on market regulation.

Finally, we examine the effect that the experimental treatments exerted on subjects' views in the policy debate over the privatization of pension savings, i.e. on whether to allow citizens to invest some of their national insurance savings in the stock market. The results are presented in columns 4-6 of Table 5. The table indicates that following the experimental period, participants in the real stock treatment were 7.4-9.2 percentage points more likely to support privatization of the national insurance than individuals assigned to the control group. This effect is significant at the $p < 0.01$ level. Given that only 24.2% of the control group supported privatization in the post-treatment, this represents a sizable effect of over 31-38% above the baseline rate.

Notably, the other treatments were also positive and only marginally below statistical significance. This was not the case in the previous analyses pertaining to social values or attitudes on market reforms. It appears then with respect to the debate over privatization of pension savings, the treatment effect was partially a result of mere engagement in investment activity, irrespective of whether the assets were financial, as indicated by the sports treatment. Moreover, as the marginal effect on the fantasy treatment indicates, investing even without real financial stakes had a comparable treatment effect.

¹² As noted, by relying on multiple items, we are able to reduce measurement noise and are less affected by peculiarities of a specific item's question wording.

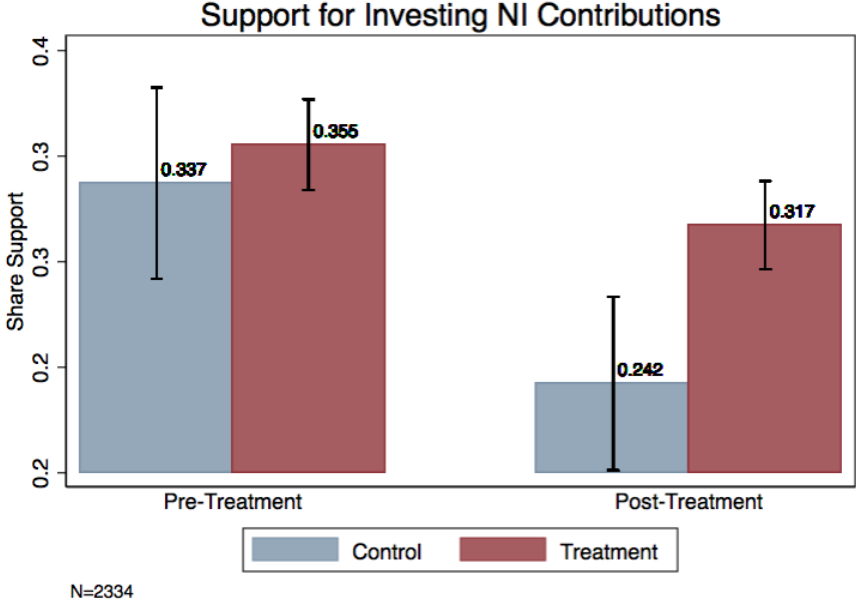
Table 5. Treatment Effects on Policy Preferences

	Market Regulation			Privatize National Insurance		
	(1)	(2)	(3)	(4)	(5)	(6)
Stocks, real	0.111*	0.106*	0.131*	0.0743***	0.0748***	0.0917***
	(0.0616)	(0.0612)	(0.0749)	(0.0223)	(0.0222)	(0.0271)
Stocks, fantasy	0.0275	0.0420	0.0673	0.0517	0.0504	0.0803
	(0.0844)	(0.0848)	(0.134)	(0.0331)	(0.0331)	(0.0523)
Sports, real	-0.0328	-0.0223	-0.0305	0.0497	0.0518*	0.0707*
	(0.0816)	(0.0813)	(0.111)	(0.0306)	(0.0305)	(0.0415)
Demographic Controls	No	Yes	Yes	No	Yes	Yes
Pre-treatment DV	Yes	Yes	Yes	Yes	Yes	Yes
Estimation	ITT	ITT	TOT	ITT	ITT	TOT
Observations	2,335	2,335	2,335	2,334	2,334	2,334
R-squared	0.394	0.405	0.406	0.183	0.200	0.198

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

The effect of the treatments should however be interpreted carefully. Figure 7 illustrates why. As can be seen in the figure, before the experimental period participants in the control and the asset treatment supported NI at a similar rate: 33.7% versus 35.5%, respectively. (As the confidence intervals indicate, the difference was statistically indistinguishable from zero). However, after the investment period, a sizable gap in attitudes had opened up. Whereas support for NI privatization among the control group had dropped to 24.2%, the rate of support among the treatment group stood at 31.7%. Recall that during the experimental treatment period, the referendum on the Brexit had taken place, instigating several weeks of great uncertainty in financial markets worldwide. The sizable treatment effect can more correctly be interpreted as an indication that at a time of high uncertainty in the market, individuals engaged in investments were more likely to *maintain* --- rather than increase --- their belief in the stock market as a valid long-term savings vehicle.

Figure 7. Support for Investing NI Contributions



VI. Discussion

TBD

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APPENDIX

Variable	Asset		Difference	P (diff)	Obs
	Treatment	Control			
Ever Invested	0.388	0.393	-0.005	0.8411	2489
	0.487	0.489	0.025	.	.
Age	50.03	50.247	-0.218	0.7684	2489
	14.439	14.308	0.739	.	.
Female	0.531	0.508	0.023	0.3731	2489
	0.499	0.5	0.026	.	.
Social Values (pre)	-0.008	-0.022	0.014	0.8273	2489
	1.292	1.27	0.066	.	.
Market Regulation (pre)	-0.019	0.068	-0.087	0.2438	2489
	1.355	1.469	0.075	.	.
Pro NI Privatization	0.357	0.332	0.025	0.3127	2489
	0.479	0.471	0.024	.	.
No Education	0.049	0.043	0.005	0.6094	2489
	0.216	0.204	0.011	.	.
E_Gs	0.285	0.304	-0.019	0.4299	2489
	0.452	0.46	0.024	.	.
A Levels	0.221	0.228	-0.006	0.7683	2489
	0.415	0.42	0.022	.	.
Professional Training	0.131	0.132	-0.002	0.9248	2489
	0.337	0.339	0.017	.	.
College Degree	0.314	0.293	0.021	0.3673	2489
	0.464	0.456	0.024	.	.
Income (wave II)	27560.51	28167.03	-606.523	0.4647	2466
	15896.05	16055.77	829.434	.	.
Voted Conservatives (2015)	0.334	0.362	-0.028	0.2503	2489
	0.472	0.481	0.025	.	.
Voted Labor (2015)	0.307	0.293	0.014	0.5561	2489
	0.461	0.456	0.024	.	.
Voted UKIP (2015)	0.16	0.15	0.01	0.5857	2489
	0.366	0.357	0.019	.	.
Voted Other (2015)	0.2	0.195	0.004	0.8271	2489
	0.4	0.397	0.02	.	.
Risk Tolerance (pre)	0.421	0.427	-0.006	0.8073	2489
	0.494	0.495	0.026	.	.
Trust Levels (pre)	0.348	0.358	-0.01	0.692	2489
	0.476	0.48	0.025	.	.
Redistribution	0.479	0.469	0.011	0.6767	2489
	0.5	0.5	0.026	.	.
Market Reform 1 (pre)	0.549	0.525	0.024	0.3443	2489
	0.498	0.5	0.026	.	.
Market Reform 2 (pre)	0.669	0.651	0.018	0.4543	2489
	0.471	0.477	0.025	.	.
Market Reform 3 (pre)	0.715	0.709	0.006	0.8089	2489
	0.452	0.455	0.023	.	.

Market Reform 4 (pre)	0.379	0.349	0.03	0.2252	2489
	0.485	0.477	0.025	.	.
People Competent Investors	0.78	0.764	0.016	0.463	2489
	0.415	0.425	0.022	.	.
Time Discount	0.511	0.508	0.003	0.9087	2422
	0.5	0.501	0.026	.	.
System to Blame (pre)	0.515	0.518	-0.004	0.8876	2489
	0.5	0.5	0.026	.	.
Meritocracy	0.659	0.662	-0.003	0.9079	2489
	0.474	0.474	0.024	.	.
Luck in Success	0.541	0.523	0.018	0.4813	2489
	0.498	0.5	0.026	.	.
Religious	0.447	0.438	0.009	0.7381	2489
	0.497	0.497	0.026	.	.
Born In the UK	0.936	0.937	-0.001	0.9241	2489
	0.245	0.243	0.013	.	.
Financial Literacy	73.652	72.162	1.49	0.301	2489
	27.84	27.952	1.44	.	.

Notes: Columns 1 and 2 report the means in the asset treatment and control and their standard deviations. Column 3 shows the difference in means and the standard errors. Column 4 presents the p values for the difference in means.

Appendix 1. Texts of Correspondence Material with Participants and Investment Instructions

Initial Invitation for Participation in the Study

Greetings! You are invited to take part in an international study on economic behaviour. The study will last about two months and involve a series of surveys. You will receive the standard payment for each survey you complete. In addition, after filling in the first survey, you will have the chance to win up-to £50 with which you will make a range of choices on a weekly basis. The choices you make may increase your earnings even further, or if your choices are unsuccessful, you could lose some of this money. In other words, if you win the lottery you will earn around £50, but your exact earnings will depend on your weekly decisions. By July 2016, you will get the full value of your earnings in the form of mangle-points. You can exchange these for a cash transfer into a bank account or a gift voucher. In addition you can donate their equivalent value. Participating in this study requires completing a series of short surveys, including over the weekends. If you are available and interested in participating, please click to continue and receive further details.

- I am interesting in participating and available to complete surveys over the weekends in the coming two months (1)
- No thanks (0)

Email to lottery winners

Thank you for completing the economic attitudes survey earlier this month and congratulations! You have won the draw to participate in an academic study on economic behavior. As part of this study, **you will receive 50 pounds**, which you will be able to invest in different ways. The study will allow us to learn about the choices and investment decisions that participants make.

On Saturday morning, you will receive another email with details and instructions for participating in the study. Participating in the study this weekend is a condition for being qualified for the 50 pounds. Please make sure to look for that invitation email and take part in this exciting study.

Invitation to first investment wave

Regular:

Thank you very much for participating in an academic study of economic behavior. Congratulations! **You have won £50 in real money to invest!** In the coming weekends you will be able to invest this sum in three different financial assets. You will be able to see each week how well your investments are doing and make new

investment decisions. By trading between these assets, you may also be able to learn about the stock market and about your abilities as an investor.

If you complete the survey each week, you will be entitled by the end of the study in July to the full value of your investments, which you will receive in the form of mingle-points.

Please remember to complete the survey by Monday morning at 7:00am.

For details... [standard link to the survey]].

Sport:

Thank you very much for participating in an academic study of economic behavior. Congratulations! **You have won £50 in real money to invest!** In the coming weekends you will be able to invest this sum in three different ways.

If you complete the survey each week, you will be entitled by the end of the study in July to the full value of your earnings, which you will receive in the form of mingle-points.

Please remember to complete the survey by Monday morning at 7:00am.

For details... [standard link to the survey]].

Fantasy:

Thank you very much for participating in an academic study of economic behavior. We would now like to invite you to take part in a study on the way people make investment decisions. As part of this study, you will receive £50 in “fantasy money” which you can invest in three different financial assets over the coming weekends. You will be able to see each week how well your investments are doing and make new investment decisions. Please note that this is not real money. However, by participating and trading between these assets, you may be able to learn about the stock market and about your abilities as an investor. In addition, you will be paid the standard payment of Mingle Points for every survey that you complete. We only ask that you remember to complete the survey by Monday morning at 7:00am.

For details... [standard link to the survey]].

Appendix 2. Question Wording of Survey Items

The Social Values (SV) measure is based on a principle component analysis of the four following items.

For each of the following statements, please note whether you agree or disagree: (1) Strongly agree; (5) Strongly disagree.

1. “Economic positions are legitimate reflections of people’s achievements”
2. “There are no inherent differences between rich and poor, it is purely a matter of circumstances into which you are born”
3. “Most people who don’t get ahead in our society should not blame the system; they have only themselves to blame”
4. (1) “We need larger income differences as incentives for individual effort- (10) “Incomes in the UK should be made more equal”

The *Market Regulation* measure is based on a principle component analysis of the four following items:

Please tell us whether you are in favour or opposed to the following measures:

1. Increasing the tax on gains made in the stock market
2. Placing limits on wages in the financial sector
3. Tougher rules on tax avoidance and tax havens
4. The introduction of a tax on financial transactions

Answers were on a 5-point scale: (1) strongly support; (2) somewhat support; (3) neither support nor oppose; (4) somewhat oppose; (5) strongly oppose.

The item on privatization of national insurance reads as follows:

Some people have suggested that workers should have the option of taking some of their National Insurance contributions and putting them in investments such as the stock market. People who did this would get more money when they retired if these investments did well, but less money if those investments did poorly. Do you think the government should or should not allow Britons to invest a portion of their National Insurance contributions in the stock market?

Answers ranged on a 5-point scale from (1) “Favor Strongly” to (5) “Oppose Strongly”.

Figure A1 . User interface in investment portfolio screen.

You will now have the opportunity to make your investment decisions for the coming week. Here, once again, is the table showing how your investments performed over the past week. Remember: these are the real prices of real stocks. You may click on the name of each asset to learn more about the stock:

Asset	Price	Percent change from last week	Value of your holdings
Vodafone	↑ 229.2	+4.5%	£0.0
Diageo	↑ 2107	+12.2%	£28.1
Rolls-Royce	↑ 711.5	+9.6%	£27.5
The total value of your portfolio is £55.64			

You have a total of £55.64 to invest. Now, please choose how to invest your money. Indicate what percent of your total funds you wish to invest in each stock. In making your investment decisions, remember that the total allocation across all stocks cannot exceed 100%

The numbers below reflect the investments you made last week and the change in the price of the assets. However, you are free to change the numbers as you see fit.

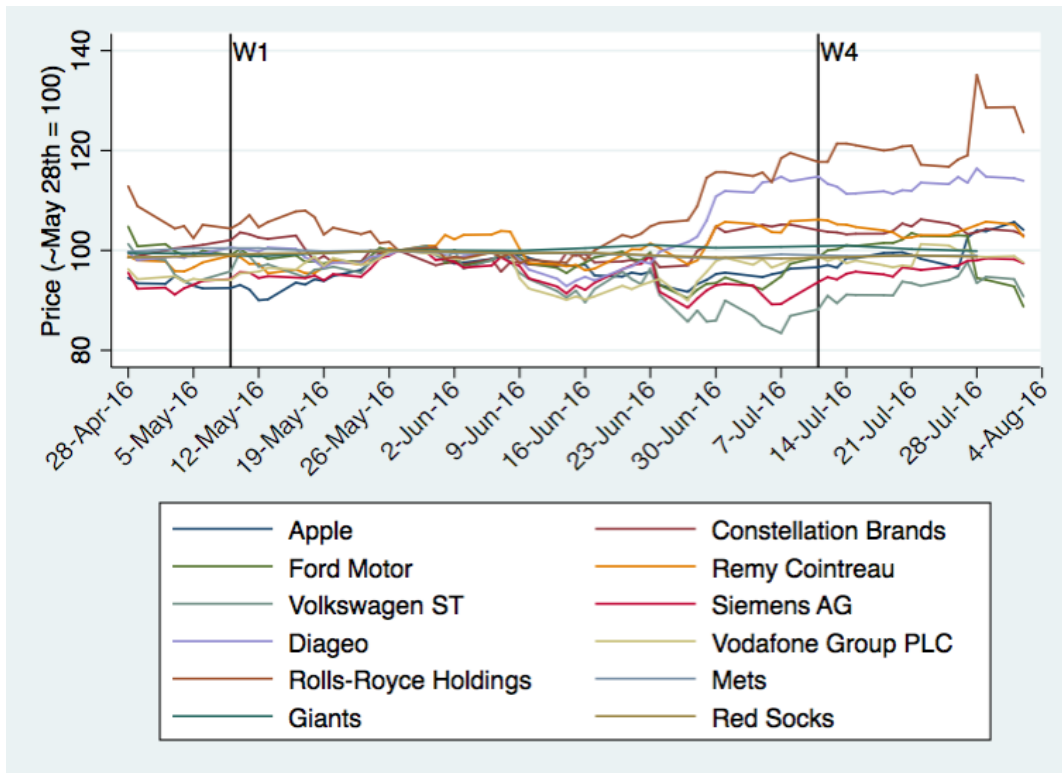
Decision:

Vodafone - Of my total £55.64, I wish to invest:	<input type="text" value="0"/> %
Diageo - Of my total £55.64, I wish to invest:	<input type="text" value="51"/> %
Rolls-Royce - Of my total £55.64, I wish to invest:	<input type="text" value="49"/> %
Total	<input type="text" value="100"/> %

Please tell us the main considerations guiding your investment choices this week. We are interested in learning about your decision-making process so please mention any relevant details or considerations.

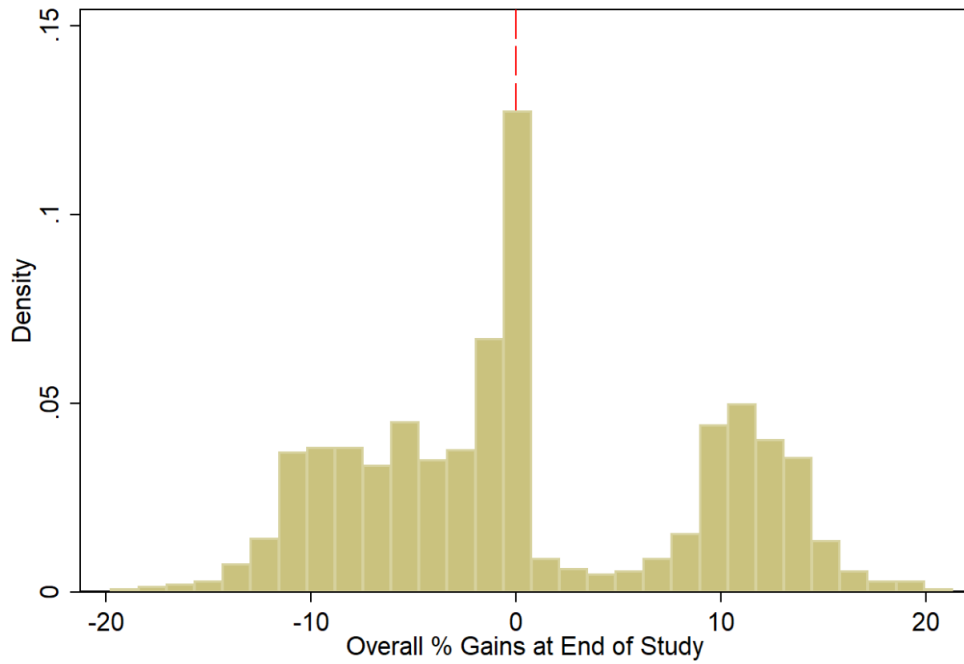
Continue

Figure A2 . Assets' Performance during Experiment Period



Note: Asset prices are indexed to May 28th, the date of the first investment wave.

Figure A3 Distribution of Gains and Losses during the Experimental Period



Note: Excludes non-compliers in any investment survey