

Do External Rewards Depress Social Identification Motives to Vote?

Anita Braga

Durham University

Abstract

Can turnout be stimulated by monetary rewards to voters? Drawing on the literature on social identification motives for voting, this paper argues that for those that vote to gain benefits for their in-group, a financial reward on voting would depress turnout. It would increase one's own gains of voting at the expenses of the group's ones. I take advantage of data on membership in a religious community or a political party as a proxy of social identification and combine it with the 2011 CCES survey results on the likelihood that these groups' members will turn up on Election Day if rewards on voting were to be introduced. My results confirm the hypothesis that for strong group identifiers turnout rates are greatly depressed by the introduction of a reward on voting. However, depending on the strength of social identification there is a threshold above which rewards are high enough to make up for the lost internal motivation. These results suggest that a financial reward on voting might drastically change the composition of those involved in a country's political and social life. Furthermore, rewards on voting could make voters too dependent on external incentives as a motivation to vote.

Keywords

Turnout, pro-social behaviour, financial incentives on voting, internal motivation, social identity

Introduction

From 1960 onwards, voter turnout has monotonically decreased in most western democracies. This is especially the case in the US, where historical lows in turnout were reached in the 2016 presidential elections, when only 57.9 per cent of the eligible population voted. This decline in turnout has been interpreted by some as a symptom of the decay of democracy and the inability of modern governments to represent their citizens' wishes (Teixeira, 1987). Others see the decline in turnout as a unique opportunity to reshape politics by finding new ways in which potential voters could be mobilized (Gerber and Green, 2000; Arceneaux and Nickerson, 2009). In line with this literature, increasingly more scholars have asked themselves whether turnout could be stimulated by a monetary reward to voters (e.g. Panagopoulos, 2013; La Raja and Schaffner, 2013). This idea is not only confined to the scholarly literature: In 2006, in Arizona citizens were asked to vote on the "Voter Reward Act", which would introduce a 1-million-dollar lottery prize on voting. It is also common practice in universities to advertise the possibility of winning an Amazon voucher for those who vote on student elections. These are only two of many examples in which prizes might play a role in motivating eligible voters to vote (La Raja and Schaffner, 2013).

Given that there is growing interest in the possibility of increasing voters' turnout by means of financial rewards, it is of fundamental importance to assess whether money could indeed represent an incentive for people to vote and if so, what kind of people it would motivate. Economists (Ryan and Deci 2000; Laeazar, 2000) argue that a reward on voting would encourage a latent motivation to go to the polls. On the other end, psychologists (Gneezy et al., 2011) maintain that paying people would crowd out internal motives to vote such as social identification, altruism, civic duty and the desire to express a preference, thereby depressing turnout.

Many studies (Panagopoulos, 2013) have tried to understand whether the positive ‘economic’ nudge or the negative ‘psychological’ crowding out effect plays a greater role in determining turnout rates. However, very little research has been done on how these opposing forces might affect different population subgroups. A few scholars have investigated the relationship between incentives and turnout rates among low income groups (John et al., 2015) or non-registered voters (La Raja and Schaffner, 2013), but to my knowledge there has not been extensive research on which social groups might be affected negatively and which positively by the introduction of reward schemes on voting. On the contrary, it is very important to understand whether the possible ‘crowding out’ effect of incentives affects some groups more than others. If this were the case, even though the effect of financial rewards on turnout might be positive, the composition of those who vote might drastically change.

Drawing from the literature on social identification motives for voting (Fowler and Kam, 2007), my research project tries to fill this gap, by focusing on people whose voting behaviour could be negatively affected by extrinsic rewards: those who vote out of a sense of social identity towards the group they are part of. These people primarily vote to reaffirm their group membership and to gain benefits in favour of the in-group at the expense of the out-group (Tirole and Bénabou, 2003). If a payment on voting were introduced, they might feel that their motive for going to the polls is lost, since their personal benefit exceeds the benefit for their group. Therefore, my research project aims to test the hypothesis that for people that are particularly active in a social group (e.g. political party, religious associations) the ‘crowding out’ effect of extrinsic rewards on voting will be particularly significant and could even lead to a depressed turnout.

This paper will be structured as follows: the subsequent section will present the relevant literature on financial rewards on voting and social identification motives for voting. Then in the Data and Methodology sections I will illustrate the data set used to test my hypothesis and

the methodology followed. The Results section will present and explain the overall results. Finally, the last section will draw some general conclusions.

Theory

The question of whether financial incentives could stimulate turnout is part of a bigger debate on the role rewards play in enhancing pro-social behaviour. The latter describes all those actions that bear a personal cost to the individual, but a greater benefit to society, of which voting is just one example (Panagopoulos, 2013). Economists (Laezar, 2000; Ryan and Deci, 2000) believe that rewards reinforce desired behaviour, thereby facilitating collective action (Tirole and Bénabou, 2003). Psychologists, on the other hand, see financial incentives as a potential threat to internal motivation. They believe that there is a conflict between doing something because it is 'inherently interesting and enjoyable' or because 'it leads to a separable outcome' (Ryan and Deci 2000 p.55). Once an action is attached to an external incentive, it is possible that individuals lose their autonomous motivation to do it. This phenomenon is called 'crowding out' of internal motivation.

This debate is also very relevant in the case of voting. In this context, the economists' contribution is captured by the following equation:

$$\text{Reward of voting} = pB - C \quad (1)$$

Where B is the benefit term, p the probability of casting a decisive vote and C represents the costs of voting e.g. cost of information. If $pB > C$ rewards on voting are positive and people will turn out to vote; if on the contrary $pB < C$, the opposite will happen. Voting thus becomes an economic cost-benefit analysis: when the costs are higher than the benefits people will stay at home, otherwise they will go to the polls (Downs 1957). Scholars (Riker and Ordershook 1968; Palfrey and Rosenthal 1985; Blais 2000; Dowding 2005) have rightly pointed out that, following this reasoning, it would be irrational for people to vote at all, since in large

electorates the probability, p , of casting a decisive vote is infinitely small and the benefit term will therefore always be close to zero. However, a way to overcome this issue is precisely represented by the introduction of rewards on voting. The latter increases the benefit of voting and disentangles the B term from the probability of being decisive. It follows that if the benefit term becomes big enough to overcome the cost term, rewards will succeed in stimulating turnout.

On the other hand, psychologists maintain that voting is much more than just a cost benefit analysis. Research has shown that a sense of civic duty (Downs, 1957), altruism (Jankowski, 2007), social identification (Fowler and Kam, 2007) and the desire to express a preference (De Miguel et al., 2015) play a great role in the decision to vote. By introducing a reward on voting these internal motives could be crowded out. This might happen in the following two ways. The reward could signal to the electorate that voting is an 'undesirable action'. Indeed, if it were desirable voters would not need a financial incentive to motivate them to go to the polls. Alternatively, a reward could damage the image of those who would have voluntarily voted, but that are now paid for it. People often act in pro-social ways to show themselves and others that they have a strong internal motivation. However, once a reward on voting is introduced it is hard to distinguish whether a person pursues an action because they are internally motivated to do so, or because they are paid (Gneezy et al. 2011). For these reasons, introducing a reward on voting might negatively affect turnout.

Until recently, this debate was purely theoretical and there was no empirical evidence to confirm either version. However, in 2013, as a result of two field experiments conducted in Gilroy and Lancaster, California, C. Panagopoulos found that both the negative crowding out and the positive enforcement effects do not have meaningful consequences on the turnout rates of US citizens. Contrary to what economists maintained, rewarding people who voted resulted to be less effective than other mobilization treatments, e.g. door-to-door

campaigning. However, it also did not have the dreadful effects that psychologists predicted, thereby proving both parties wrong.

This study, which sought to put an end to the question whether financial incentives could increase turnout, stimulated further debate on the hypothesis that, despite not increasing overall turnout, payments could motivate underrepresented groups such as low-income groups. This debate, although important, often ignores the other side of the story, namely who might be negatively impacted by the introduction of a rewards scheme on voting.

My project aims to address this unexplored issue, by analysing whether financial rewards negatively affect those who identify very strongly with a social group. Social identity is defined as 'that part of an individual's self-concept which derives from his knowledge of his membership of a social group together with the emotional significance attached to that membership' (Tajfel 1978). It thus determines how an individual perceives and locates oneself within society. Social identification is arguably also the cause of behavioural patterns such as hostility towards those that are not part of one's group i.e. the out-group and the desire to gain benefits for the group one identifies with i.e. the in-group. Furthermore, it has been proven that social identity plays a very important role in motivating people to vote. One of the most prominent papers on this topic was published by Fowler and Kam (2007). The authors ran an experiment to see if people are more likely to vote when they can gain benefits for the in-group.

The experiment is set up as a 'Dictator Game': in the first round one player is asked to split a certain amount of money between himself and the opponent. In the second round the other player decides whether to accept or reject the offer (Kahneman et al., 1986). The authors noticed that consistently throughout the game, people favoured the in-group over the out-group. For instance, people who were told that they had to split their money with members of

the same party were willing to give up much more than when they knew the other player was from the opposition. Furthermore, individuals were willing to give more depending on the strength of their social identity. These observations led to the conclusion that social identity is a fundamental component of voting (Fowler and Kam, 2007, p. 825).

The evidence that social identity motivates people to vote is the starting point to explain why the turnout rates of those who vote out of social identity might be depressed if a reward on voting were to be introduced. To show why this might be the case, it is necessary to go back to the concept of 'crowding out' of internal motivation. It has been said that when external incentives are introduced, the autonomous reasons for performing an action might disappear. Indeed, in the case of voting out of social identification, people who vote to gain benefits for their in-group might stop voting if they feel that by going to the polls it looks like they are rewarding themselves (since they are being paid) rather than their group. That is why, by combining the literature on social identification and on financial incentives and turnout I hope to show that, differently to what happens in the general population, those who socially identify with a group will be strongly affected by rewards on voting. This will allow me to draw more general conclusions on the different effects that reward schemes on voting might have on different population sub-groups.

Data

The data used in the following sections of this essay are drawn from the 2011 edition of the Cooperative Congressional Election Study (CCES). This is a national survey of the American electorate conducted yearly by 39 American universities, in order to study Congressional and Presidential elections. Released for the first time in 2006, in 2010-2011 it already surveyed 55,400 American citizens. The survey is divided into two sections: The Common Content

section is based on a questionnaire administered to all survey respondents that concerns commonly asked questions on political attitudes and other general aspects. It provides outstanding evidence of the socio-economic characteristics of the American electorate. The survey's second section, the so-called Team Content section, is based on further, diverse questionnaires, administered to subsamples of 1000 citizens.ⁱ To ensure the generalizability of the results to the population, the participants of the Team Content section are recruited by means of a matched random sample design. In other words, they are selected by matching their characteristics (e.g. gender, age) to those of a randomly selected sample of American adults. If the random sample is representative of the population and the matched sample manages to mimic the characteristics of the random sample, then it will also be representative of the population.

The 2011 CCES Team Content run by Brian Schaffner and Raymond la Raja perfectly matches my research question. On one hand, it contains information about the participants' membership in various social and political groups. On the other hand, it provides data on participants' likelihood to vote under different rewards schemes. The authors randomly presented the interviewed subjects with 4 different rewards treatments on voting and asked them how likely they would have been to vote on a scale from 0-100 if these schemes were to be introducedⁱⁱ. Before going into further detail about the analysis carried out in my project, I wish to underline that since the Team Content data are not posted in the CCES official site, I asked the Teams leaders for such data. I am thus very grateful to Brian Schaffner who very kindly forwarded the data to me.

I take membership in political parties and in religious communities as a proxy of social identification. I consider whether respondents are registered as Democrats or Republicans, therefore focusing on affiliation to the two major US parties. Moreover, I consider participation in any religious community. I further distinguish religious people in two groups:

those that go to church more than once a week and therefore very strongly identify with their religious community and those that go seldom (Henceforth the last two groups will be referred to as Often and Seldom). Political parties and religious communities can be considered prominent examples of political and civic groups in the US context. Therefore, they can be thought of as primary sources of group identity for many individuals. Historically, both party and church membership are also associated with higher levels of political participation and electoral turnout (Jones-Correa et al., 2001). Therefore, a drop in turnout for these groups as a result of incentives on voting would provide important evidence on how financial rewards might affect those that are most involved in the US political life, by crowding out the feeling of group membership.

I will use the answers from 0 to 100 on how likely participants are to vote under different rewards schemes as an indication on how turnout would change with financial incentives. There are five treatment conditions labelled from *a* to *e*. *a* is the control treatment, with no incentive. *b* corresponds to a situation in which every voter would receive a smaller, guaranteed 1-dollar reward. *c*, *d* and *e*, are lotteries with the same expected pay-out, but different structures. Under treatment *c*, one person who voted would be rewarded with 220 million dollars, under treatment *d*, 100 voters would be selected to receive a reward of 2.2 million dollars and under treatment *e*, 100,000 voters would be given 2,200 dollars each. Note that respondents may roughly calculate lotteries expected values since, before answering the question ‘how likely is it that you will vote in the next presidential election?’ they are given a text saying ‘in 2008, about 220 million people were eligible to vote, but only 130 million voted’. Since the whole population is unlikely to vote in the next elections, it is reasonable to maintain that the lotteries’ expected value is going to be higher than treatment *b*. The text also aims to control for surveys’ common problem of overreporting. Indeed, individuals might feel less pressured to say that they are not going to vote if they know that a big portion of the

population did not turnout either. Since all lotteries have the same expected value, for the purpose of this research project I will only consider treatment c , that is the lottery with the highest nominal reward. I will also exclude from the sample those who replied 'I don't know' to the question about their likelihood to vote as a result of the different treatments. This is because I want to isolate the negative effect that incentives might have on turnout without considering if they also increase the proportion of the undecided. The number of observations for each treatment is provided by Table 1.

Methodology

The hypothesis I want to test for is that introducing an incentive scheme on voting will depress turnout among those that vote out of a sense of social identity. In order to test such hypothesis, I will make use of the statistical software STATA, and proceed according to the following steps:

First, with regard to the Whole Sample, I will calculate the average likelihood of voting (on the 0-100 scale) for each of the three treatments described above. This will allow me to compare the reported average turnout of the two incentivized treatments to the control treatment. If the average turnout for the rewarded treatments is lower than the control one, turnout rates for the whole sample are depressed by financial incentives on voting. If there is no difference, rewards have no effect on turnout. Finally, if the reported average of b and c is higher than the control average, rewards do work in motivating the sampled population to vote. In a second instance, by comparing the reported average turnout of treatments b and c I will be able to draw conclusions about how turnout is correlated to the size of the reward. Since c provides the highest reward and b the lowest, if average sample turnout increases from b to c , it means that turnout is positively correlated to reward size. On the contrary, if turnout decreases from

b to *c*, it is negatively correlated to payment size. It is important to note that I can compare the means without controlling for confounders because the four treatments are randomly assigned within the sample. This implies that similar characteristics that might influence the result e.g. age, sex, income, should not be concentrated in one treatment group and should therefore not bias the results.

Secondly, I will calculate the reported turnout averages for registered Democrats and Republicans. I will compare these averages with the ones of the whole sample. If the turnout averages of Democrats and Republicans are lower than the sample ones, turnout for these groups is depressed more than for the rest of the sample and the hypothesis is confirmed. If the opposite is the case, the hypothesis that turnout will decrease for those that vote out of social identification does not hold.

Finally, I will analyse the reported average turnout for Often and Seldom. By comparing these results to the average sample turnout, I will again be able to confirm or reject the hypothesis. More interestingly, by comparing the average turnout of the different treatments for those who identify very strongly with a religious group and those who feel the group identity less strongly I can assess whether voting behaviour changes according to the strength of group identification. If turnout were to be more depressed for those that identify strongly, it would be further evidence in favour of the hypothesis that it is indeed social identification which determines the size of the effect that rewards on voting have on turnout.

Since the sub-group sample size is small (first row of Table 1 below) it is possible that the differences in average likelihood of voting between the different treatments will not be statistically significant. To check whether this is the case I've performed t-tests of statistical significance of the difference between the means among the different sub-groups.

Results

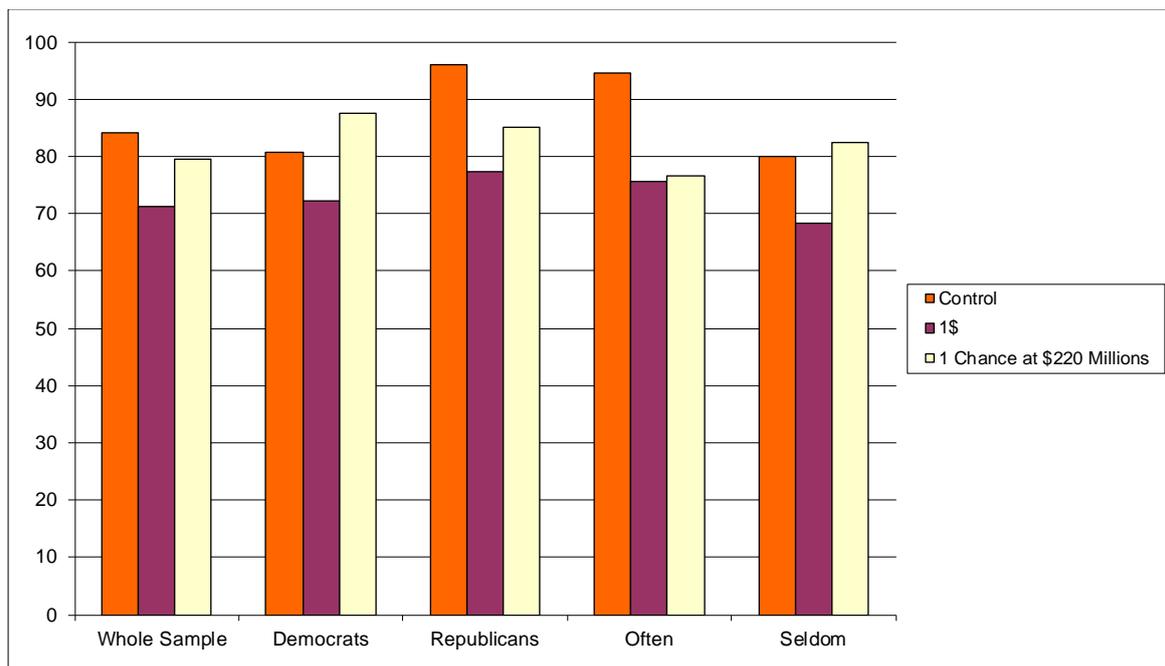
Table 1 below reports mean, minimum and maximum likelihood to vote under treatments *a* to *c*, distinguishing between the different groups considered: Whole sample, Democrats, Republicans, Often and Seldom.

TABLE 1: *statistical summary of analysed sample*

Whole sample	Obs	Mean	Min	Max
Control	175	84.22	1	100
\$1	188	71.22	0	100
1 chance at \$220 million	184	79.48	0	100
Democrats	Obs	Mean	Min	Max
Control	42	80.69	2	100
\$1	42	72.31	0	100
1 chance at \$220 million	30	87.60	2	100
Republicans	Obs	Mean	Min	Max
Control	34	95.91	51	100
\$1	29	77.28	2	100
1 chance at \$220 million	35	85.03	0	100
Often	Obs	Mean	Min	Max
Control	17	94.65	50	100
\$	20	75.55	2	100
1 chance at \$220 million	19	76.68	1	100
Seldom	Obs	Mean	Min	Max
Control	47	79.87	2	100
\$1	43	68.35	0	100
1 chance at \$220 million	45	82.31	2	100

Moreover, a graphical representation of the mean values of voting likelihood as reported by different groups' respondents is provided by the following graph.

FIGURE 1: *average reported turnout rates for Whole Sample and Sub-groups*



Let us first consider the control situation, identified by the colour green in the Figure 1 above. It is immediately evident that Republicans and Often are characterized by a higher likelihood to vote than the Whole sample's respondents, while the opposite is true for Democrats and Seldom. More precisely, as shown in Table 1, the Whole sample's mean turnout is 84, Republican and Often display mean values around 95, while Democrats and Seldom report average likelihood to vote around 80. Further notice that the minimum reported turnout for the Republicans and Often is 51/50, while members of the other groups report a much lower value of minimum likelihood to vote, 2. Considering that strong identifiers usually display higher propensity to vote, the results above seem to indicate that Republicans and Often are strong identifiers, while the same does not apply to Democrats and Seldom. While the difference in strength of social identification between Often and Seldom is reasonable, the results concerning Democrats are unexpected. Indeed, their low turnout rates suggest that they identify less strongly with their party than Republicans.

Let us now consider the effects on average turnout rates of introducing rewards on voting. As shown by Figure 1, all groups share an analogous pattern: turnout is evidently depressed by treatment *b*, the 1-dollar reward, (dark red columns) but rises again under treatment *c* (yellow columns). However, notice that while mean turnout is invariably depressed by the 1-dollar reward, the effect of the 2.2 million lottery is more ambiguous. For Republicans and Often average turnout rates are still depressed by *c* as compared to the control situation, while this is not the case for Democrats and Seldom. More precisely, as shown in Table 1, under treatment *c*, Democrats and Seldom respondents report a likelihood to vote higher than in the control situation. This could imply that for those that appear to identify less strongly with their group, high enough rewards on voting could very well stimulate turnout rates.

Further elements that may help interpreting these behavioural patterns are provided in the appendix, by Figures A 1 and 2, which represent, among the different subgroups, the

distribution of the respondents' answers on their likelihood to vote according to the different treatments. In both Figures, the upper two quadrants show the distribution of replies on voting-likelihood for the control treatment. It can be noticed that for all four groups (Democrats, Republicans, Seldom, Often) most replies are clustered on the right, indicating that their likelihood of voting is near 100. The middle two quadrants show that treatment *b* increases the number of people with very low likelihood of voting in all subgroups (even among strong identifiers) as well as the number of people that become uncertain on whether to vote or not (likelihood around 50). Rather, the impact of treatment *c* varies across subgroups: for example, the number of Democrats who report low or intermediate likelihood to vote decreases after the introduction of treatment *c*, whereas the opposite happens among Republicans.

The appendix also contains a graph for each considered group reporting the calculated means and the corresponding 95 per cent confidence interval (A3;A4,A5). The graphs show that the difference in average turnout between treatment *a* and *b* is statistically significant in the case of the Whole Sample, Republicans and Often, while it is not statistically significant for Seldom and Democrats. Regarding the differences between *a* and *c* they are not statistically significant for the Whole Sample, Democrats and Seldom while they are statistically significant for the other sub-groups. So, for Democrats and Seldom, there does not seem to be a statistically significant difference between turnout in the different treatments. For the Whole Sample, there is a statistically significant decrease in turnout only for treatment *b*. Finally, the difference in average turnout for Republicans and Often are always statistically significant. These results are also confirmed by the t-test, as shown by Table 2 below. Moreover, from the table it is possible to notice that the standard errors of the t-test are quite large. This might once again suggest that the non-significance of some results can be attributed to the small sample size rather than on the negligibility of the different treatments' effects on turnout.

TABLE 2: *T-test of statistical significance of the difference between the means for the different sub-groups*

Group	Treatments	Diff. Means	Std. Err.	t	P>t	[95% Conf. Interval]	
Whole sample	b vs a	-12.999	3.170	-4.10	0.000	-19.220	-6.778
	c vs a	-4.739	3.187	-1.49	0.137	-10.993	1.515
Democrats	b vs a	-8.381	6.747	-1.240	0.217	-21.750	4.988
	c vs a	6.910	7.391	0.930	0.352	-7.735	21.554
Republicans	b vs a	-18.636	5.765	-3.230	0.002	-30.082	-7.190
	c vs a	-10.883	5.492	-1.980	0.050	-21.787	0.020
Seldom	b vs a	-11.524	6.294	-1.830	0.069	-23.975	0.928
	c vs a	2.439	6.221	0.390	0.696	-9.867	14.744
Often	b vs a	-19.097	8.633	-2.210	0.031	-36.412	-1.782
	c vs a	-17.963	8.736	-2.060	0.045	-35.486	-0.440

In general, the observed patterns, according to which turnout drops after the introduction of treatment *b* and increases under condition *c*, could be explained by the existence of a threshold. In other words, when rewards are very low, as in situation *b*, social identification motives for voting are crowded out and are not substituted by a strong enough selfish motive to go to the polls and turnout is depressed. As rewards increase in treatment *c*, the crowding out effect is gradually counterbalanced by selfish motivation. I suggest that there could be a threshold where rewards become high enough for turnout to turn positive again. It is also reasonable to think that this threshold's magnitude depends on the extent to which motivation is crowded out by rewards. For Republicans and Often, who seem to identify very strongly with their group, *c* is not a high enough reward to make up for the lost internal motives. For Democrats and Seldom *c* might already represent an incentive, although the

observation that the difference in turnout between a and c is not statistically significant for these groups might cast some doubts on this result.

Having discussed some behavioural patterns exhibited by the considered sub-groups, it is possible to turn to a more detailed analysis of how the incentivized treatments *b* and *c* affect the voting behaviour of these groups. The following Table (2) reports the percentage change in the Whole Sample's and the sub-group's average turnout going from treatment *a* to *b* and from *a* to *c*. The comparison between these percentages is meant to further check whether the hypothesis that rewards on voting are negatively related to a feeling of social identification holds.

TABLE 3: *per cent change in average reported turnout for Whole Sample and Sub-Groups for treatments b and c with respect to a.*

Per cent change average turnout		
Group	Of <i>b</i> with respect to <i>a</i>	Of <i>c</i> with respect to <i>a</i>
Whole Sample	-15.4%	-5.6%
Republicans	-19.4%	-11.3%
Democrats	-10.4%	+8.6%
Often	-20.2%	-19.0%
Seldom	-14.4%	+3.0%

Let us first look at treatment *b*. It is possible to observe that Republicans' and Often's average turnout decreases the most with treatment *b*, by -19 per cent and -20 per cent respectively.

On the contrary, Democrats' and Seldom's mean turnout only decreases by 10 per cent and 14 per cent.

By comparing these results to the ones for the whole sample my hypothesis seems confirmed. Indeed, for Republicans and Often (the two strongest social identifiers), the depressing effect of treatment *b* is more pronounced than in the general sample. As for the impact of treatment *c*, once again Republicans and Often turnout rates are negatively affected by the introduction of a lottery on voting (-11 per cent and -19 per cent) while the other subgroups are not.

A further proof that social identification plays a central role in determining whether rewards will have a negative or positive effect on turnout is that *b* and *c* have different effects on Often and Seldom. As the strength of one's social identification with the religious community becomes stronger the depressing effect of financial incentives increases.

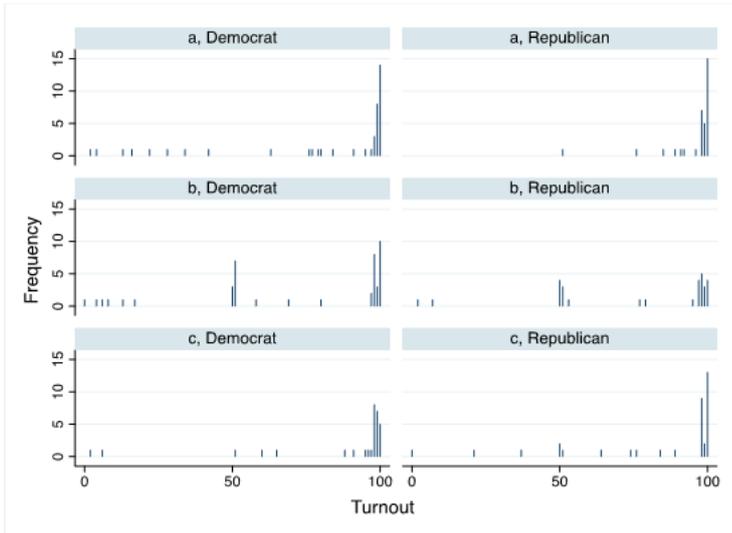
Conclusion

This paper tested for the hypothesis that financial incentives on voting depress turnout rates of those who vote out of a feeling of social identification. To my knowledge, never before had research on social identification motives for voting been combined with the one on external incentives to see which members of society might be most affected by the introduction of financial rewards. The results seem to confirm the paper's hypothesis. For strong social identifiers, turnout rates are greatly depressed by the introduction of a reward on voting. However, there seems to exist a threshold above which rewards make up for the lost internal motivation and turnout becomes positive again. Interestingly, the threshold level changes depending on the strength of the social identification. For weak identifiers, the lottery with high rewards might already be enough to stimulate turnout. Strong identifiers would probably need a much higher reward. These results have both theoretical and practical implications. From a theoretical standpoint, they help answering the question about the impact of financial rewards on turnout. Although previous literature has found that external incentives have a

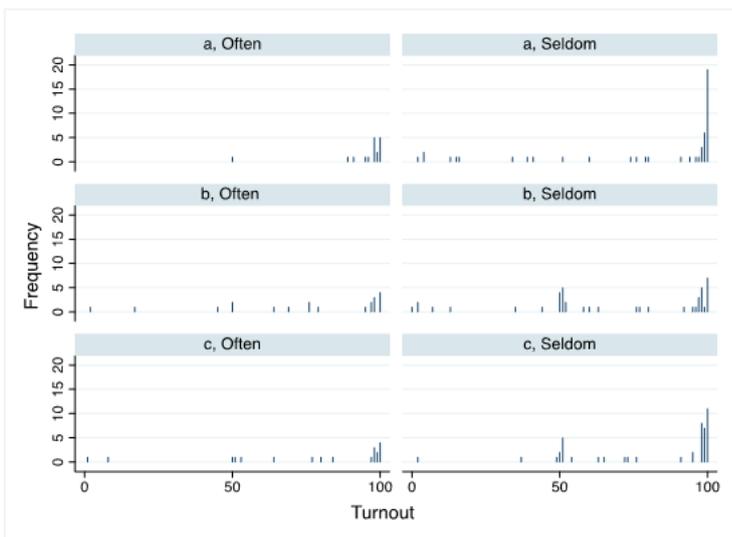
modest effect on overall turnout rates, this is not the case for those that vote out of social identification motives. This could imply that the debate on whether external incentives crowd out internal motivation or stimulate latent intentions to vote was mis-specified all along. The question should not be which one between the negative and the positive effect is greater for the general population, but rather for whom rewards stimulate turnout or crowd out internal motivation. On a practical ground, the results firstly suggest that rewards on voting could change the composition of those who are most involved in a country's political and social life. Secondly, financial incentives on voting might not solve the problem of low turnout rates in elections. A price might increase selfish motives to go to the polls but depress long-run autonomous motivations. Even if it could initially stimulate turnout, individuals might rely on it as their only source of motivation for voting. Thus, if it was ever going to be taken away, turnout rates might fall even further. Further research is still needed to achieve a more comprehensive understanding on the effects of rewards on turnout rates. A deeper analysis of the opposing effects of rewards on turnout for Republicans and Democrats might provide further information on which groups are positively and which negatively affected by financial incentives. These studies should be closely related to research on how external incentives crowd out other internal motives e.g. duty or desire to express a preference. Indeed, it is reasonable to think that depending on the internal motive which stimulates one to vote the introduction of financial rewards might crowd out motivation differently. Finally, the nature of this study makes it difficult to test the hypothesis outside of hypothetical surveys and nonpartisan elections (e.g. student elections), because payments might be seen as a bribe. However, a better understanding on how financial incentives could be used for mobilization policies could be obtained by analysing larger samples in partisan elections.

Appendix

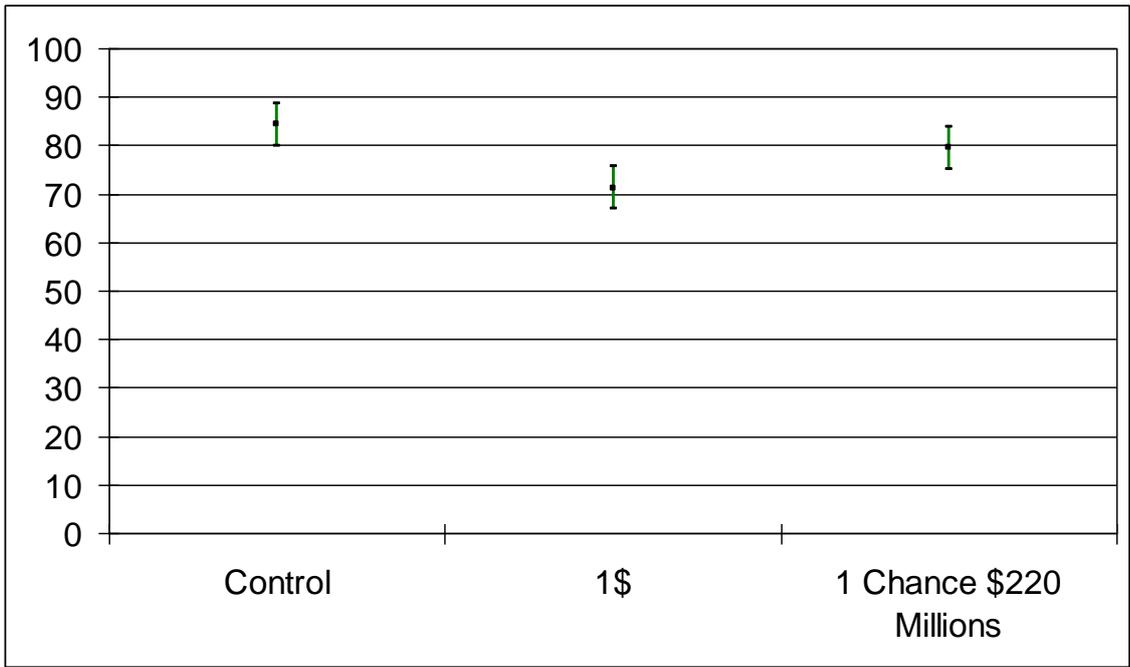
A1: Reported Turnout Distribution for Party Members



A2: Reported Turnout Distribution for Religious Community Members

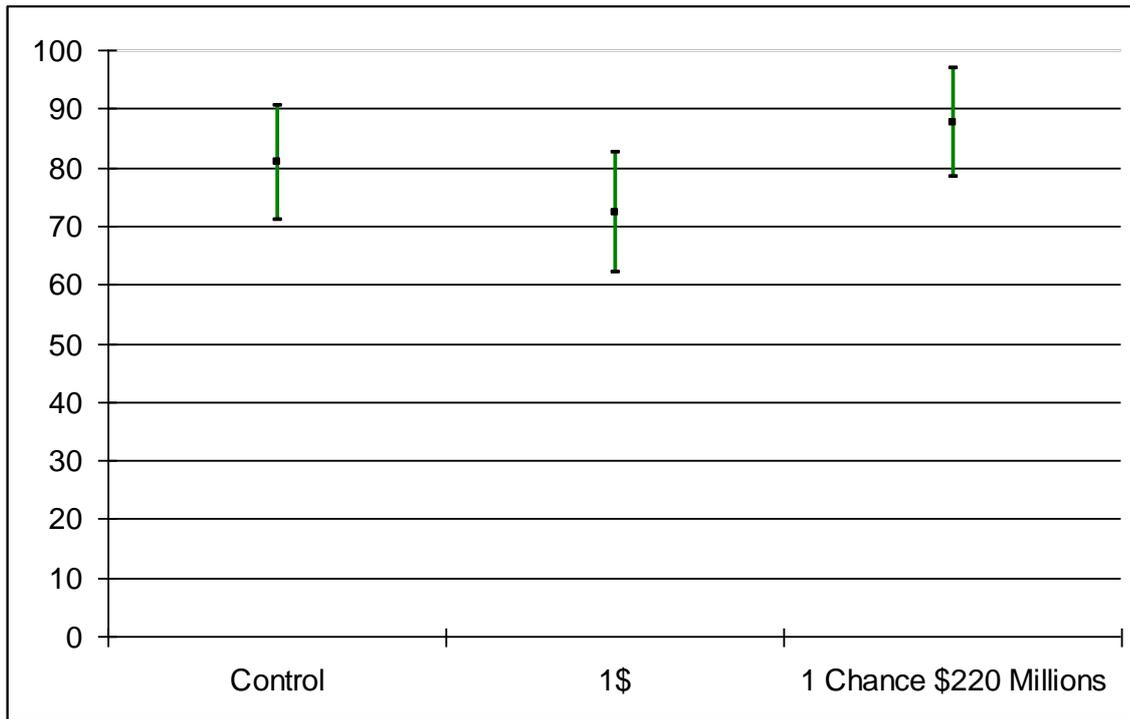


A3: Mean Turnout Confidence Intervals for Whole Sample

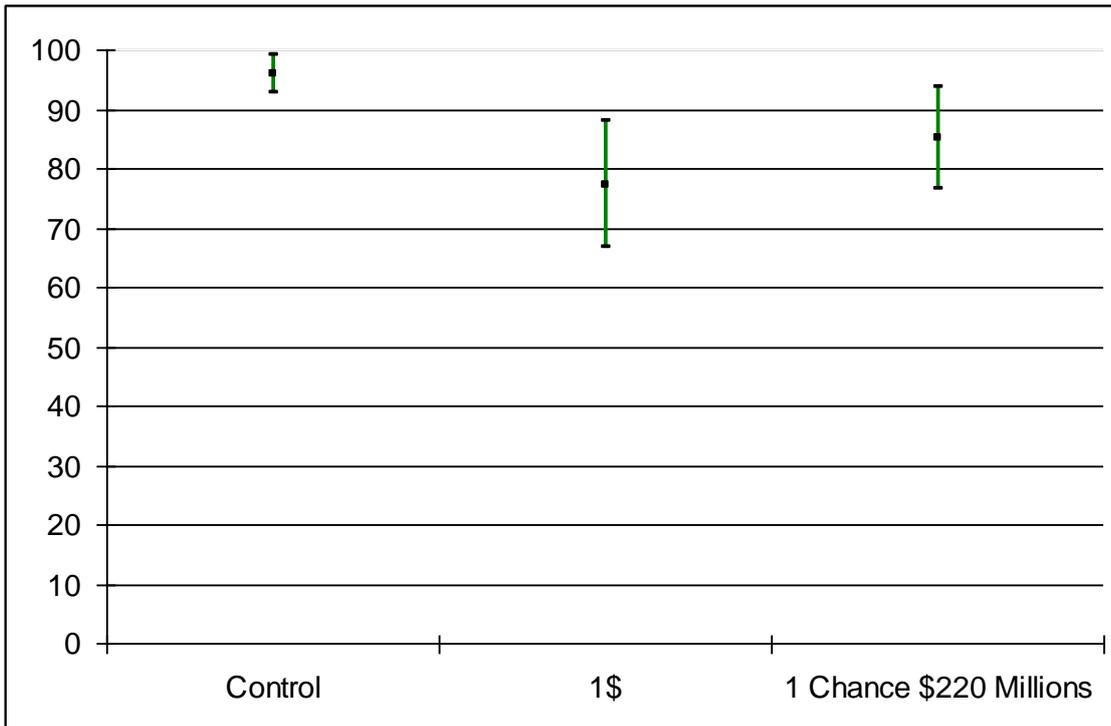


A4: Mean Turnout Confidence Intervals for Party Members

Democrats

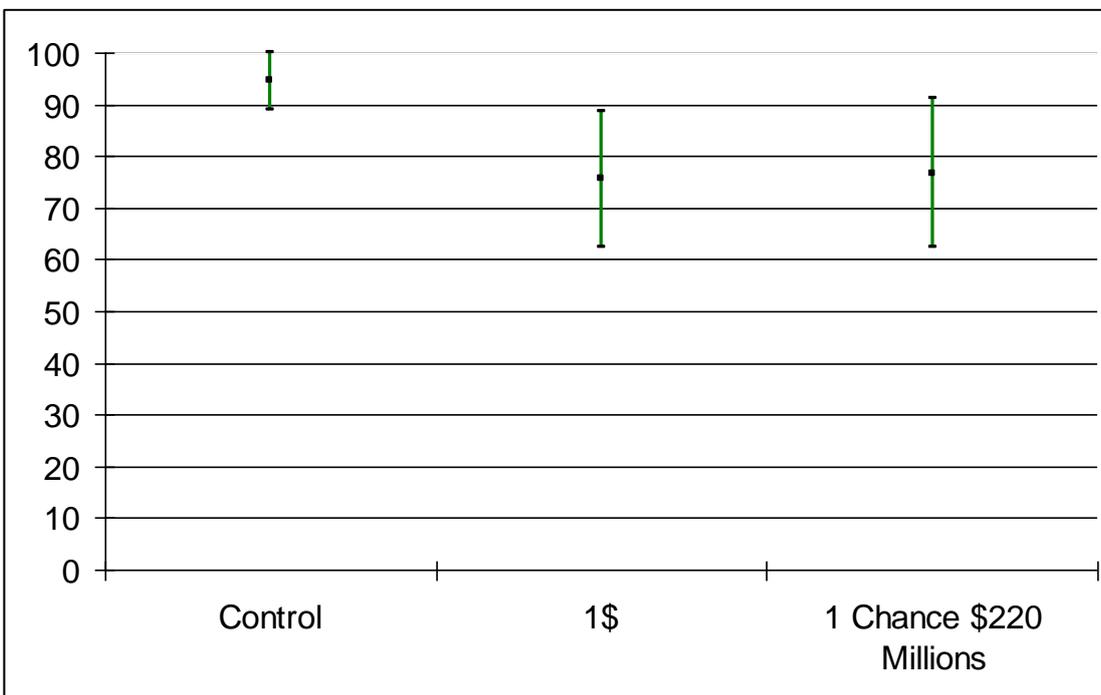


Republicans

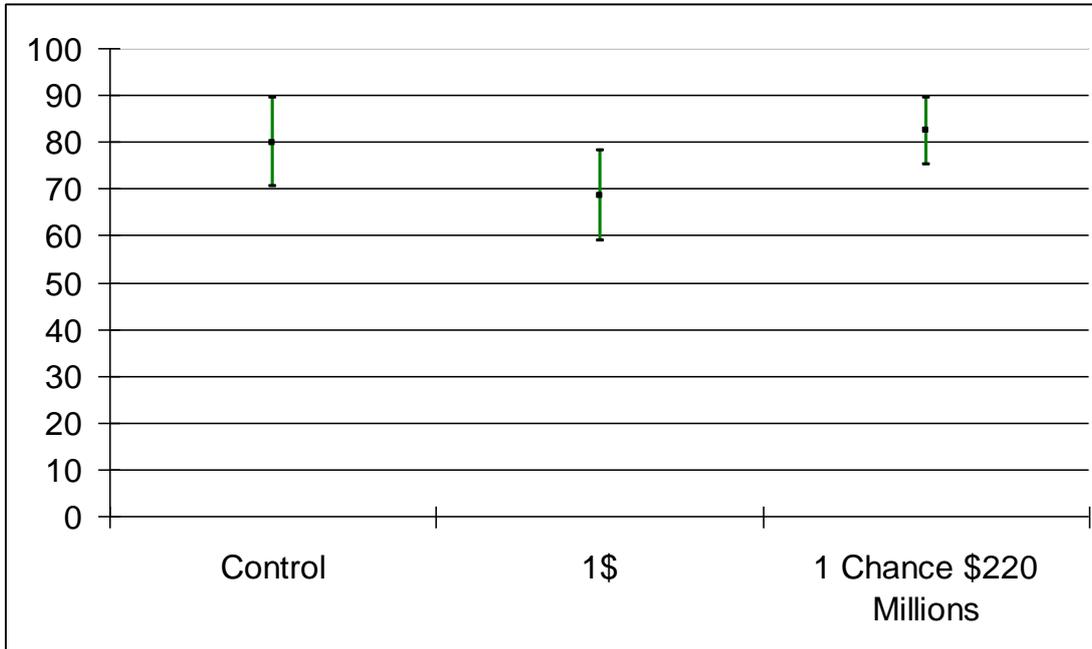


A5: Mean Turnout Confidence Intervals for Religious Community Members

Often



Seldom



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Tables

TABLE 1

Whole sample	Obs	Mean	Min	Max
Control	175	84.22	1	100
\$1	188	71.22	0	100
1 chance at \$220 million	184	79.48	0	100
Democrats	Obs	Mean	Min	Max
Control	42	80.69	2	100
\$1	42	72.31	0	100
1 chance at \$220 million	30	87.60	2	100
Republicans	Obs	Mean	Min	Max
Control	34	95.91	51	100
\$1	29	77.28	2	100
1 chance at \$220 million	35	85.03	0	100
Often	Obs	Mean	Min	Max
Control	17	94.65	50	100
\$	20	75.55	2	100
1 chance at \$220 million	19	76.68	1	100
Seldom	Obs	Mean	Min	Max
Control	47	79.87	2	100
\$1	43	68.35	0	100
1 chance at \$220 million	45	82.31	2	100

TABLE 2

Group	Treatments	Diff. Means	Std. Err.	t	P>t	[95% Conf. Interval]	
Whole sample	b vs a	-12.999	3.170	-4.10	0.000	-19.220	-6.778
	c vs a	-4.739	3.187	-1.49	0.137	-10.993	1.515
Democrats	b vs a	-8.381	6.747	-1.240	0.217	-21.750	4.988
	c vs a	6.910	7.391	0.930	0.352	-7.735	21.554
Republicans	b vs a	-18.636	5.765	-3.230	0.002	-30.082	-7.190
	c vs a	-10.883	5.492	-1.980	0.050	-21.787	0.020
Seldom	b vs a	-11.524	6.294	-1.830	0.069	-23.975	0.928
	c vs a	2.439	6.221	0.390	0.696	-9.867	14.744
Often	b vs a	-19.097	8.633	-2.210	0.031	-36.412	-1.782
	c vs a	-17.963	8.736	-2.060	0.045	-35.486	-0.440

TABLE 3

Per cent change average turnout Group	Of <i>b</i> with respect to <i>a</i>	Of <i>c</i> with respect to <i>a</i>
	Whole Sample	-15.4%
Republicans	-19.4%	-11.3%
Democrats	-10.4%	+8.6%
Often	-20.2%	-19.0%
Seldom	-14.4%	+3.0%

ⁱ For further details, see <https://cces.gov.harvard.edu/>

ⁱⁱ Where 0 corresponds to “I am certain I will not vote” and 100 to “I am certain I will vote”.