Expressive Voting and Fake Charity: Testing Two Models of Non-Instrumental Voting

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Abstract This paper explores the empirical support for two kinds of non-instrumental motivations of electoral turnout - expressing partisan preferences and warm glow voting. Using 19 (lab) experimental sessions we argue that there is some support for both these alternatives to the standard homo oeconomicus voting. Although most of the time rightist voters depict behavior that is more consistent with expressive voting, especially when they are not decisive, there is a significant proportion of the cases when behavior is more consistent with warm-glow voting. Moreover, as time goes by, support for expressive voting decreases more rapidly.

Keywords: voting paradox, expressive voting, warm-glow altruism

Introduction

In one of the first public choice accounts of voting behavior, Buchanan (1954) argued that there are several noticeable differences between the market and voting as methods of preference aggregation. For instance¹, in the market place there is a one-to-one correspondence between the act of choosing and its consequences. Voting lacks this correspondence, since no voter can be certain regarding the results of the collective choice. As a consequence, in voting the responsibility of making a collective decision is divided and individuals may face stronger incentives for abstention. In the same time, they may face stronger incentives to reveal social preferences (*i.e.* which accounts for the wellbeing of others). Later, Brennan and Lomasky (1997) labeled such differences as "*the two hats thesis*" arguing for behavioral non-neutrality. In modelling voting (as opposed to the market) one should not use the pure form of the neoclassical homo oeconomicus. Other things that personal wealth should enter as arguments in the utility function. Enriching voters' utility function, and consequently losing the homo oeconomicus assumption, as argued, (Brennan, 2008) should have the ability to safeguard more important aspects of public choice theory's endeavor to use neoclassical economics' methodology in explaining political institutions

¹ We omit some of Buchanan's (1958) differences because they are not relevant to our argument.

and behavior². This stand became the standard public choice answer to the problem posed by Downs' seminal paradox of voting³. Current public choice research display two dominant ways of modelling voting behavior which relinquished the use of the standard of homo oeconomicus: as a (genuine) concern for the social welfare or as a form of expressive behavior. In the first class fall all the models (Jankowski, 2002, 2007, Edlin et al 2006) which include the welfare of others in voter's utility function. In the second class fall all the models built on Riker and Ordeshook (1968) suggestion that voting is non-instrumentally motivated. As Kan and Yang (2001) and Mueller (2003) observed, there are at least two subclasses of this larger later class: voting as expressing partisan preferences (Fiorina, 1976; Brennan and Buchanan, 1984; Brennan and Hamlin, 1998; Kan and Yang, 2001; Brennan, 2008b) and voting as expressing moral sentiments (Buchanan, 1954; Tullock, 1971; Brennan and Lomasky, 1985, 1987, 1997). In the first view voters are conceived as spectators at a sports/political event (Brennan and Buchanan, 1984), supporting her team/party by cheering or booing/voting. In the second view, voting is a costless means to express charitable preferences. Talking and voting about charity (Tullock, 1971) is usually cheap, hence people will tend to buy it. It is worth mentioning that Hamlin and Jennings (2011: p.654) showed that this view on expressiveness is equivalent to Andreoni's warm-glow altruism⁴. Both these views on non-instrumental behavior retained the idea (Brennan and Lomasky, 1997: p.15-16) that voting reflects "ethical and ideological principles that are suppressed in the market settings". Both also imply several testable hypothesis. For instance expressive partisan voters should not be receptive to the chances of success of their preferred candidate (the booing and cheering hypothesis) and fake altruists should use their vote to "buy" altruism as long as it is cheap (the charity of the uncharitable hypothesis or the warm glow hypothesis). These hypotheses received a growing empirical consideration. The cheering and booing hypothesis was found to be strongly supported by Greene and Nelson (2002), Drinkwater and Jennings (2007), Laband et al. (2009). The warm glow hypothesis received a rather mixed support from Carter and Guerette (1992),

 $^{^{2}}$ Brennan (2008) argues that in explaining political institutions and political behavior, public choice theory face the choice between a core principle – rationality – (the expected utility maximization) and homo oeconomicus, an assumption which is less close to neoclassical economics' lakatosian core.

³ Starting from the standard neoclassical assumptions, Downs (1957) derived a puzzling result at odds with the observed facts of voting: selfish instrumental utility maximizers (homo oeconomicus) should not vote in mass elections.

⁴ As Andreoni (1990) argued, warm glow altruism it is actually a form of selfish behavior since it display no concern for what is received but only for what and by whom it is given.

Fischer (1996), Sobel and Wagner (2004), Tyran (2004), Fowler (2006), Crumpler and Grossman (2008), Federsen et al. (2009), Kamenica and Brad (2014)

The present paper is related to the above cited empirical literature in its effort to test the two noninstrumental voting hypothesis in Romanian context by means of several lab experiments. The paper is structured as follows: in section 1 we describe the experimental design, in section 2 we present the results of the data analysis and finally we discuss these findings.

1. Methods and Data

The design employed follows a standard practice within the experimental economic literature on electoral behaviour (e.g. van der Straeten et al: 2010; Blais et al: 2007; 2011; 2014), mapping out spatial positions for parties and voters in order to incentivize the formation of particular preference rankings. In our experiment we relied on a 100-points continuum, with the most left-wing position placed at 1 and the most right-wing position placed at 100. Participants would then receive the following payoff: $U_i(v_j) = 100 - |w_i - v_j| - C_v$, with U_i meaning the number of points gained by the individual at the *i*-th electoral round, w_i referring to the position of the winning candidate in electoral round *i*, v_j meaning the position of the participant and C_v representing the cost of voting. Each participant played the voting game for a number of 48 rounds⁵, receiving a lump sum payment at the end of the experimental session on a single randomly selected round, with amounts ranging from 10 RON for gaining between 0 and 25 points, 20 RON for gaining between 76 and 100 points⁶. To each of these amounts, 10 RON were also added as a participation fee.

Participants were asked to choose whether to vote, with the two competing parties being labelled A and B and placed at the positions of 25 and 75, respectively, for every voting game. In order to induce altruistic considerations for one of the alternatives, participants were told that if party A would win in the majority of voting games, a certain amount of money would be given to some students from the university who received social scholarships (and therefore were in a position of

⁵ Excluding 3 trial rounds at the beginning of each experimental session which were used in order to test the software and to accommodate participants with the game.

⁶ At the time when the experiment was conducted 1 euro was approximately equal to 4.5 RONs. For comparative purposes, the hourly rate for a minimum-wage earner at the respective time was less than 6 RONs.

economic disadvantage)⁷. The positions of participants on the continuum varied, with the placement on half the rounds following their responses to a pre-experimental questionnaire which required them to answer a number of policy-related questions and the placement in the other rounds being random. In order to simulate large-scale elections, participants were informed that they were part of a larger electorate, amounting to 1001 individuals. The distribution of votes in this electorate prior to the vote of the participant could then be on the following: (1) 900 people have voted with 101 votes remaining and the vote thus far has been 399 in favour of *A* and 501 in favour of *B*; (2) 900 people have voted with 101 votes remaining and the vote dwith 1 vote remaining and the vote thus far has been 425 in favour of A and 475 in favour of B; (3) 1000 people have voted with 1 vote remaining and the vote thus far has been 500 in favour of A and 500 in favour of B. Each distribution was played for 16 rounds, with the cost of participation also varying from 10 points in half of these rounds to 30 in the other half of the rounds.

The assumption is that expressive voting models would yield a strict preference for: (1) voting over abstaining, independently from the variation of the cost of voting and (2) voting for the party closest to the individual over the party placed on the other side of the ideological continuum, since the positions of the participants reflected their genuine policy orientation. By contrast, while the warm-glow altruistic voting account would also yield a strict preference for voting over not voting in all three distributions, it would require that all individuals vote for A (as the altruistic option) in the games where the probability of being decisive is either low or 0 (i.e. distributions 1 and 2) and vote for B in the games where the probability of being decisive is high (i.e. distribution 3), since voting for B in that case would maximize the monetary payoff received by the respective individual.

2. Main Findings

The purpose of this analysis is to determine de extent to which there is an empirical difference between what we have defined as expressing partisan preferences and warm-glow altruistic voting in the context of this paper. In order to do so, we have created two dummy variables, which indicate whether the participant has behaved in accordance with the predictions of the expressive/warmglow altruistic model. We then regress each of these dummies on the assigned position of the

⁷ A procedure also employed by Carter and Guerette (1992) and Tyran (2004) with the same purpose.

participant and on the probability of being decisive, determined by the vote distribution. Given that predictions for the first and second distributions are identical for both models, we collapse the two and create a dummy to indicate whether the participant is voting under one of these two or under the third, in which she is decisive.

If participants have behaved according to the expressive model, then we would expect that they vote for the nearest party regardless of the distribution. If, on the other hand, participants have behaved according to warm-glow voting, then we would expect that they be more inclined to vote for A when they are not decisive and for the nearest party when they are. Therefore, the two models produce similar results for the third distribution, but have different predictions for the other two, if they have also been assigned rightist positions. When they are not decisive, rightist voters are either expected to vote for the nearest party of to vote altruistically for A. Table 2.1 and Figure 2.1 below display the results obtained from a fixed effects logistic regression⁸.

Table 2.1.	The odds	of complying	with	expressive/warm	-glow	altruistic	voting	by	position
and distrib	ution								

	Expressive		Warm-glow altruism		
	OR	SE	OR	SE	
D3 (500-500)	5.87	0.76	2.31	0.31	
Assigned position	1.01	0.001	0.977	0.002	
D3 (500-500) * Assigned position	0.98	0.002	1.01	0.002	

⁸ This type of model accounts for the correlation between observations coming from the same participant, as it is often the case in our within subject experimental design.



Figure 2.1. Predicted probability of behaving according to expressive/ warm-glow altruistic voting by position and probability of being decisive

The results indicate a high compliance rate with both models when participants are decisive. Unfortunately, this is not very helpful when trying to distinguish between the two. Looking at the graph for expressive voting, we can notice that, when participants are not decisive there is a high probability of voting for the closest party. This probability ranges from about 50% for the far left to about 80% for the far right. Moreover, for rightist positions, the probability of voting for the nearest party if high regardless of the distribution. Thus, the probability of being decisive loses all significance for rightist positions and all decisions have on average a 75-80% chance of being in accordance with the predictions of the expressive voting model. Turning to the warm-glow altruistic voting graph, we can notice that the probability of voting for A when the voter is not decisive is declining as we move from left to right. If the probability is about 50% for the far left, it becomes only about 10% for the far right. Although small, there is a significant chance of voting for A when voters are not decisive.

Figure 2.2. Compliance rates in time⁹



Figure 2.2 above depicts the evolution of compliance rates for the two models in time, as participants become more accustomed with the experimental design. As the game progresses, the compliance rates with expressive voting tends to go down for rightist voters. There is a difference of almost 30% probability of compliance with expressive voting between the first periods and the last. On the other hand, the effect of time is quite small for warm-glow altruism, especially when voters are not decisive.

Conclusions

Thus, we could conclude that, there is some support for both expressive and warm-glow voting in the data. Although most of the time rightist voters depict behavior that is more consistent with expressive voting, especially when they are not decisive, there is a significant proportion of the cases when behavior is more consistent with warm-glow voting. Moreover, as time goes by, support for expressive voting decreases more rapidly.

⁹ The figure has been produced with the results of two fixed effects logistic regressions where time has been introduced as a regressor. It has had a significant effect in both cases, determining an odds ratio of 0.99 with a standard error of 0.003 in the case of warm-glow altruism and an odds ratio of 0.97 with a standard error of 0.003 in the case of expressive voting.

References

- Andreoni, J. (1990), "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving", *The Economic Journal*, 100(401), pp.464-477.
- Blais, A., Pilet, J-B., Straeten, K., Laslier, J-F., Heroux-Legault, M. (2014), "To Vote or to Abstain? An Experimental Test of Rational Calculus in First Past the Post and PR Elections", *Electoral Studies*, 36, pp.39-50.
- Blais, A., Labbé St-Vincent, S., Laslier, J.-F., Sauger, N., Van der Straeten, K. (2011), "Strategic Vote Choice in One-round and Two-round Elections: An Experimental Study", *Political Research Quarterly*, 64(3), pp.637-645.
- Blais, A., Laslier, J.-F., Laurent, A., Sauger, N., Van der Straeten, K. (2007), "One Round versus Two Round Elections: An Experimental Study", *French Politics*, 5, pp.278–286.
- Brennan, G., Buchanan, J.M. (1984), "Voter Choice: Evaluating Political Alternatives", *American Behavioral Scientist*, 28(2), pp.185-201.
- Brennan, G., Hamlin, A. (1998), "Expressive Voting and Electoral Equilibrium", *Public Choice*, 95, pp.149-175.
- Brennan, G., Lomasky, L.E. (1985), "The Impartial Spectator Goes to Washington: Toward a Smithian Theory of Electoral Behavior", *Economics and Philosophy*, 1, pp.189-211.
- Brennan, G., Lomasky, L.E. (1987), "The Logic of Electoral Preference: Response to Saraydar and Hudelson", *Economics and Philosophy*, 3, pp.131-138.
- Brennan, G., Lomasky, L.E. (1997), *Democracy and Decision: The Pure Theory of Electoral Preference*, Cambridge: Cambridge University Press.
- Brennan, G. (2008), "Homo Economicus and Homo Politicus: an Introduction", *Public Choice*, 137(3-4), pp.429-438.
- Buchanan, J.M. (1954), "Individual Choice in Voting and the Market", *Journal of Political Economy*, 62(4), pp.334-343.
- Carter, J.R., Guerette, S.D. (1992), "An Experimental Study of Expressive Voting", *Public Choice*, 73, pp.251-260.
- Crumpler, H., Grossman, P.J. (2008), "An experimental test of warm glow giving", *Journal of Public Economics*, vol.92, pp.1011-1021.
- Downs, A. (1957), An Economic Theory of Bureaucracy, New York: Harper & Row.
- Drinkwater, S., Jennings, C. (2007), "Who are the expressive voters?", Public Choice, 132, pp.179-189.
- Edlin, A., Gelman, A., Kaplan, N. (2007), "Voting as Rational Choice: Why and How People Vote To Improve the Well-Being of Others", *Rationality and Society*, 19(3), pp.293-314.
- Federsen, T., Gailmard, S., Sandroni, A. (2009), "Moral Bias in Large Elections: Theory and Experimental Evidence", *American Political Science Review*, 103(2), pp.175-192.
- Fiorina, M.P. (1976), "The Voting Decision: Instrumental and Expressive Aspects", *Journal of Politics*, 38(2), pp.390-413.
- Fischer, A.J. (1996), "A Further Experimental Study of Expressive Voting", *Public Choice*, 88, pp.171-184.
- Fowler, J.H. (2006), "Altruism and Turnout", Journal of Politics, 68(3), pp.674-683.
- Greene, K.V., Nelson, P.J. (2002), "If extremists vote how do they express themselves? An empirical test of an expressive theory of voting", *Public Choice*, 113, pp.425-436.
- Hamlin, A, Jennings, C. (2011), "Expressive Political Behaviour: Foundations, Scope and Implications", *British Journal of Political Science*, 44(3), pp.645-670.

- Jankowski, R. (2002), "Buying a Lottery Ticket to Help the Poor: Altruism, Civic Duty, and Self-interest in the Decision to Vote", *Rationality and Society*, 14(1), pp.55-77.
- Jankowski, R. (2007), "Altruism and the Decision to Vote: Explaining and Testing High Voter Turnout", *Rationality and Society*, 19(1), pp.5-34.
- Kamenica, E., Brad, L.E. (2014), "Voters, Dictators, and Peons: Expressive Voting and Pivotality", *Public Choice*, 159, pp.159-176.
- Kan, K., Yang, C.C. (2001), "On Expressive Voting: Evidence from the 1988 U.S. Presidential Election", *Public Choice*, 108, pp.295-312.
- Laband, D.N., Pandit, R., Sophocleus, J.P., Laband, A.M. (2009), "Patriotism, pigskins, and politics: an empirical examination of expressive behavior and voting", *Public Choice*, 138, pp.97-108.
- Mueller, D.C. (2003), Public Choice III. Cambridge: Cambridge University Press.
- Riker, W.H., Ordeshook, P.C. (1968), "A Theory of the Calculus of Voting", *The American Political Science Review*, 62(1), pp.25-42.
- Sobel, R., Wagner, G.A. (2004), "Expressive Voting and Government Redistribution: Testing Tullock's 'Charity of the Uncharitable'", *Public Choice*, 119, pp.143-159.
- Tullock, G. (1971), "The Charity of the Uncharitable", Western Economic Journal, 9, pp.379-392.
- Tyran, J-R. (2004), "Voting when money and morals conflict: an experimental test of expressive voting", *Journal of Public Economics*, 88, pp.1645-1664.
- Van der Straeten, K., Laslier, J.-F., Sauger, N., Blais, A. (2010), "Sincere, strategic, and heuristic voting under four election rules: an experimental study", *Social Choice and Welfare*, 35(3), pp.435-472.