# Citizens' Preferences about Voting Rules:

# Self-Interest, Ideology, and Sincerity

## Abstract:

The paper studies the determinants of citizens' preferences for different electoral systems. We use data collected through a large internet-based quasi-experiment during the 2012 French presidential election. A website provided information about four voting rules: two-round (the official system), one-round, alternative and approval, and people were invited to vote, for the real candidates, according to each of these rules. After voting with each of the four voting rules, the participants were asked to answer a short questionnaire, including a question asking them to report which system they liked the most.

The first hypothesis that we test is that people like systems that are beneficial to the candidate they prefer. In the French context, this means that citizens whose preferred candidate is a potential winner with the two-round system tend to like the status quo more than others. The second hypothesis is that people's preferences for the official two-round system also depend on how they actually use/vote under this system. Our expectation is that people who cast a non-sincere vote under the official two-round system are less likely to like it. The third hypothesis is of an ideological nature: we expect right-wing voters to be more supportive of voting rules in which one can vote for only one candidate (one-round and two-round). The first and third hypotheses are strongly confirmed and the second only weakly.

#### 1. Introduction

There is a vast literature in comparative political science on how voters and parties behave under different electoral systems (Cox, 1997; Blais and Carty 1991; Clark and Golder 2006; Golder 2006; Blais and Indridason 2007).

There are also many studies about which electoral systems parties prefer, mainly in relationship to the possible consequences on their relative success (Bawn 1993; Benoit 2004; Binder 2006; Blais and Shugart 2008; Blais et al. 2005; Boix 1999; Bowler et al. 2006; Fink 2000; Kaminski 1999; Katz 2005; Pilet 2007) but also in relationship to the values they support (Bol 2015; Bowler et al. 2006).

The question of how voters like/evaluate the different voting systems has been much less addressed. The main exceptions (to the best of our knowledge) are Aldrich et al. (2014), who study citizen preferences for Electoral College reform in the US, Bowler and Donovan (2007), who study whether electoral losers are less risk averse than electoral winners when reasoning about four proposals for changing the US electoral institutions, and Fournier et al. (2011), who examine the decisions made by "Citizen Assemblies on Electoral Reform" in British Columbia, Ontario and the Netherlands (more on this below).

We see this as a serious gap in the literature, which should be addressed for at least two reasons. First, from a normative point of view, it is interesting to compare the existing institutions against what citizens would consider as their preferred, ideal institutions. Second, from a positive point of view, understanding what shapes citizen preferences for voting systems is crucial in understanding what types of institutional reforms are likely to be implemented or not. It is true that there are only few situations where citizens are actually directly questioned about their preferences for institutions. Nevertheless, over the past twenty-five years, Qvortrup (2012) lists 20 examples of such electoral reform referenda, including referenda in British Columbia (2005 and 2009), Ontario (2007), New Zealand (1992, 1993) and the United Kingdom (2011). Bowler and Donovan (2013) list some examples from the US. Although political elites typically control whether potential electoral rule changes get put on the agenda, voters determine in the end whether the rules get changed or not. Understanding citizen preferences for electoral reforms is therefore needed to determine what kinds of proposals are likely to be successful. For example, in the cases of Bristish Columbia, Ontario and the UK mentioned above, the proposals failed to pass the popular vote step; whereas they were successful in New Zealand.

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<sup>&</sup>lt;sup>1</sup> For instance, Bowler et al. (2006) survey national level politicians (both candidates and MPs) at the time of general elections in Australia, the Netherlands and New Zealand, in order to explore their preferences for different electoral institutions. They show that self-interest (tapped by coding whether a candidate – and his/her party- won or lost in the general elections) is a key determinant in explaining whether a politician approves of electoral reforms. But that "there are sizeable independent effects of values and ideology" (page 443): candidates on the right are more supportive of the status quo, and less supportive of direct democracy.

This paper intends to help fill this gap in the literature, using data collected within a large internet-based quasi-experiment which took place at the time of the first round of the French 2012 presidential election.<sup>2</sup> On this occasion, we created a website (see <a href="www.voteaupluriel.org">www.voteaupluriel.org</a>) with:

- An information section providing detailed information about four voting systems: two-round (2R), which is the official system currently used in France, one-round (1R), alternative vote, and approval voting.
- An experiment section where people were invited to vote for the real candidates running for the presidency, according to each of the four rules. They were then invited to answer a short questionnaire. In particular, they were asked to report which system they liked the most, among the four systems they voted with.

Collecting data from over 5,150 participants, we observed that the alternative vote is the system which is preferred by the largest proportion of participants (around 40%), whereas the official 2R system is the preferred system of about one fourth.

The first hypothesis to be tested is that people like systems that are beneficial to the candidate they prefer. In particular, our expectation is that participants who prefer a candidate from one of the two largest parties in France (the two viable candidates under the current two-round system) are more likely to prefer the status quo. This hypothesis is clearly confirmed by our data. Controlling for socio-demographic variables, participants whose preferred candidate is one of the top two candidates (the most likely winners in this election) are about 20 percentage points more likely to prefer the status quo.

A second hypothesis is that preferences for the status quo (2R) are also affected by how people actually vote under this system. In particular, we expect people who cast a non-sincere vote under the two-round system to be less likely to like this system (controlling for other factors, such as their preferred candidate). This hypothesis is only weakly supported, and the size of the effect is small (about 5 percentage points).

The last determinant of preferences that we explore is of an ideological nature. The hypothesis is that right-wing voters are more supportive of single-vote systems (1R and 2R). The hypothesis is clearly confirmed: right-wing voters are about 10 percentage points more likely to prefer single-vote systems.

#### Related literature

As mentioned above, the related literature on citizens' preferences about electoral institutions is rather scarce. Aldrich et al. (2014) study citizen preferences for Electoral College reform in the US, after such a reform had been proposed to Colorado voters through a ballot initiative in 2004. In the 2004

<sup>&</sup>lt;sup>2</sup> Using an experimental approach too, Weber (2014) studies in the laboratory preferences for different apportionment rules behind the veil of ignorance.

Presidential election, 48 out of 50 US states used a winner-take-all allocation rule for their Electoral College votes: the party that gets the popular vote plurality in a state gets all the Electoral College votes. The proposed reform was to switch from this winner-take-all allocation rule to a proportional allocation rule. This proportional rule might be perceived as fairer, but depending on the state, it would induce winners and losers compared to the status quo. The authors show that self-interest is a strong determinant of support for the reform: citizens whose preferred party is likely to be a loser in their state are much more likely to support the reform than citizens whose preferred party is expected to win the plurality. Bowler and Donovan (2007) examine how the exact framing of four proposals (term limits for Congress, direct election of the president, proportional representation for Congress, and a national referendum process) affects support for the proposal. More specifically, they determine whether insisting on potential gains or insisting on risks/costs associated with the reforms differentially affects the support of voters, depending on whether they perceive themselves as electoral losers or winners under the status quo. Contrary to what our hypothesis about self-interest suggests, they only find mixed evidence that electoral losers (under the status quo) are systematically more supportive of reforms than winners (see Table 2 p.465). Interestingly, they show that winners and losers display different levels of risk aversion, the losers being ready to take more risks.

Other related research has been conducted in conjunction with deliberation exercises that took place to examine the desirability of electoral reforms in Canada and in the Netherlands. Fournier et al. (2011) examine the decisions made by "Citizen Assemblies on Electoral Reform" in British Columbia, Ontario and the Netherlands. In these three unprecedented large-scale democratic experiments, randomly selected citizens (forming the "Citizen Assemblies") were asked to design the 'best' electoral system for their country or province. In each case, the participants spent almost one year learning about electoral systems, deliberating, debating, and ultimately deciding what specific institution should be adopted. According to the authors of this study, the members of these assemblies came to their decisions on the basis of the principles of representative democracy that they deemed to be the most important, coupled with their evaluations of how the various options could foster or hinder the attainment of these principles. Narrow self-interest, such as partisanship, seemed to have no impact. Note, however, that the assemblies' proposals were turned down in the two cases (British Columbia and Ontario) where a referendum was held about the proposed reform, though again partisan considerations do not appear to have been a decisive consideration in voters' rejection of the proposals.

In this paper, we build on these pieces of research, since we are interested in exploring how self-interest (as emphasized by Aldrich et al. 2014) as well as ideology and values (as emphasized by Fournier et al. 2011) shape preferences about voting rules. To the best of our knowledge, our paper is the first one to discuss the potential impact of strategic voting on preferences for electoral rules (Hypothesis 2).

As Aldrich et al. (2014), we are interested in Presidential elections. Our selection of electoral rules to be tested and evaluated by respondents was based mostly on their practical relevance throughout the world. Indeed, out of 103 countries with direct presidential elections, 82 countries have a 2R system, 20 countries use the 1R (first past the post) system, and Ireland uses the Alternative Vote.<sup>3</sup> In addition to the three systems which are actually used in practice for direct presidential elections, we added Approval Voting.<sup>4</sup> Although this system is not currently used in any mass election (some scientific and engineering societies have adopted it though), it has been argued to have good theoretical properties in terms of preference aggregation (Brams and Fishburn 1982; Laslier and Sanver 2010).

Section 2 presents our hypotheses about preferences for the voting rules in more details. Section 3 describes the *Vote Au Pluriel* experiment. The hypotheses are tested in Section 4, and Section 5 concludes.

# 2. Self-interest, ideology and a taste for sincerity as determinants of preferences about electoral systems

Our first hypothesis is that preferences about voting rules are (at least partly) instrumentally based, that is, people tend to like systems that give the best chance to the candidate they prefer.

Since institutions, and voting rules in particular, are known to at least partially shape electoral outcomes (Cox 1997), it is expected that citizens' preferences *over electoral institutions* will somehow "inherit" some features of their preferences *over electoral outcomes*. If, as powerfully stated by Riker (1980), "Institutions are probably best seen as congealed tastes" (page 445), in the sense that institutions reflect the tastes for outcomes of the different players (politicians, citizens, ...) who were responsible for choosing these institutions, we expect to observe preferences for the different candidates to translate into preferences for the different electoral rules. Aldrich et al. (2014) provide strong evidence for this hypothesis in the case of the US Electoral College reform.<sup>5</sup>

Yet, for self-interest to shape preferences for electoral institutions, citizens need to be able to predict the consequences of different institutions. Predicting the consequences of totally new voting rules such as the alternative vote or approval voting might have been quite difficult for French citizens (see below). By contrast, our expectation is that people have a clear understanding of the viability and the relative chances of the different parties *under the status quo*. Indeed, since 1962, the constitution of the French

<sup>&</sup>lt;sup>3</sup> According to the Institute for Democratic and Electoral Assistance (http://www.idea.int/index.cfm).

<sup>&</sup>lt;sup>4</sup> As explained on the website, under approval voting, "Each voter indicates, for each candidate, if he or she approves the candidate. The candidate who is approved by the largest number of voters is elected."

<sup>&</sup>lt;sup>5</sup> Note that as in Aldrich et al. (2014), our definition of self-interest relates citizen preferences for candidates to their preferences over voting rules. We do not examine the sources of preferences over candidates.

<sup>&</sup>lt;sup>6</sup> For direct evidence pointing to the fact that citizens do have reliable political knowledge about current electoral rules, see Karp (2006). For indirect evidence that French voters have a good understanding of the status quo, one

5<sup>th</sup> Republic stipulates that the President of the Republic must be elected by direct universal suffrage, using the two-round system. Under this system, if a candidate receives an absolute majority of the votes (more than half of the votes) in the first round, he or she is elected. Otherwise, a second round takes place two weeks later to decide between the two leading candidates in the first round. In the second round (if held), the candidate with a simple majority is elected. In practice, a second round has always been necessary, as no candidate has ever exceeded 50% of the votes in the first round (Charles de Gaulle got 44.6% in the election of 1965, the maximum met until today). Note that this two-round voting rule (with slight amendments), is also used for electing the members of the National Assembly.

This system is well known to favor candidates of the two main parties (Moderate Left and Moderate Right), whose candidates for the 2012 election were François Hollande (who was indeed elected in 2012) and Nicolas Sarkozy (who was the incumbent at the time of the 2012 election), respectively. Although many candidates were present on the first round (10 in the 2012 election), their chances of making it to the run-off and being eventually elected were perceived as been close to zero (see in the Appendix a short description of each of the 10 candidates running in the 2012 election). Therefore, our expectation is that citizens whose preferred candidate is one of the two most serious candidates will tend to prefer the status quo.

Note that if one were to further pursue this self-interest hypothesis, one should expect to see self-interest not only shaping preferences for the status quo (as opposed to "any reform"), but also, more finely, to predict preferences among the three proposed reforms (1R, alternative vote, approval voting). But as noted above, this would require citizens to be able to ascertain how these different rules affect the prospects of different candidates. Anticipating the consequences of the other three systems might have been complicated. In the "information" section of the website, we explained in detail how ballots are counted under these three systems, but this was not necessarily sufficient to form an idea about which candidates would be privileged or disadvantaged. Given this intrinsic difficulty of predicting aggregate outcomes under new rules, we did not expect citizens to be able to make such correct predictions. Therefore our hypothesis about self-interest only translates into dichotomous preferences for or against the status quo. We will briefly come back to this point in the section where we test our hypotheses (Section 4).

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might refer to the substantial amount of strategic voting under this system documented, for example, by Blais (2003), and also to be found in our experimental data.

<sup>&</sup>lt;sup>7</sup> In particular, the participants were not given any information or feedback about the experimental electoral outcomes under the different systems, at the time they participated in the mock elections (the results were only made public after the second round of the election; see section 3 for a complete description of the protocol). By contrast, for the 2R system, many polls were of course available.

If self-interest shapes preferences about the status quo, our second hypothesis is that the way voters "use" the status quo in practice also affects their preferences.

To understand why the "use" of the 2R-system might not be straightforward to voters, and why it may affect their preferences for the status quo, note that it is not always easy for voters to figure out how they should cast their vote in the two-round system. Indeed, even if they have clear preferences over the candidates, it is not always in their best interest to vote for their preferred candidate. Our hypothesis is that people prefer to vote for the candidate that they like the best, and that they do not like being 'forced' to support another candidate for strategic reasons. We thus expect that voters who vote non-sincerely in the 2R system do not like this system as much as those who simply vote for their preferred candidate.

To make the argument more transparent, let us review some of the reasons which may lead a voter to cast a non-sincere vote under the 2R system. Consider first a voter whose preferred candidate has no chance of being part of the run-off. This voter may choose to desert this preferred candidate and instead vote for a candidate who has a serious chance of being elected, or at least to be part of the run-off. This is "standard" strategic voting (Cox 1997). But even a voter preferring a candidate who has some serious chances to be part of the run-off may have some incentives to vote for another candidate. Indeed, consider a voter whose preferred candidate has a non-zero chance to be part of the run-off, but who expects that, almost surely, this candidate will be defeated if he reached the run-off (some supporters of Marine Le Pen may have been in this situation). In that case, this voter should desert her preferred candidate, and instead vote for her second choice, if this second choice candidate has higher chances to be elected in a run-off.

How does this non-sincere voting relate to preferences for the voting rules? Our hypothesis is that voters who vote non-sincerely in the (official) 2R system dislike this system. The hypothesis derives naturally from the idea that individuals have an intrinsic preference for honesty (voting non-sincerely may be felt as a sort of lie) or simplicity (voting strategically implies some cognitively costly computation).

Our last hypothesis is about the role of values and ideology. The hypothesis is that right-wing voters prefer "single vote" systems (1R and 2R), whereas left-wing voters are more attracted by "multiple votes" systems, that is systems that, maybe at the cost of a more complex ballot structure, offer the possibility to cast multiple votes, or to rank-order several candidates (alternative and approval). Several ideas support this hypothesis.

First, preferences about voting systems are likely to be shaped by tastes or psychological traits. And these psychological traits themselves can be linked to ideology. For instance, the literature in political psychology has pointed to differences between left-wing and right-wing voters regarding their scores on "the big five" (Carney et al. 2008, Gerber et al. 2010) or their evaluation of risk (Schreiber et al. 2013). In particular, this literature tends to show that left-wing voters have on average higher scores on

"openness", and are slightly less risk averse than their right-wing counterparts. This should translate into their being more attracted by new voting rules, such as the alternative vote and approval voting. Indeed, the two-round system, as explained above, has been the status quo in France for the past 50 years. And the 1R system, even if it is not used for Presidential elections in France, is likely to be familiar to French citizens, if anything because the second round of a 2R election can be considered as close to a one-round vote. This bias in favor of the status quo would be compatible with the observation by Bowler et al. (2006) who find that politicians on the right are more supportive of status quo electoral systems.

A more speculative argument relates to the ideological content of democratic institutions. In such a presidential election, as in any election for that matter, the election is both a way to empower a person, who will become the leader of the country (or of the community), and the occasion for the voters to exert some power/control. Which facet of the election dominates in the voter's mind may shape his/her preferences about the voting rules. If right-wing political ideology tends to emphasize the importance of the leader, whereas left-wing voters are more sensitive to the notion of "voter choice" 9, right-wing voters may be more inclined to consider that elections are mostly about choosing one leader. Since single-vote ballots may be more in line with this conception of elections as empowering a leader, right-wing voters may be more inclined to like single-choice ballots.

We summarize this section by stating our three main hypotheses:

H1 (Self-interest): Self-interest at least partially shapes preferences for electoral rules. In the French context, citizens whose preferred candidate is a potential winner with the 2R system tend to like the status quo more than others.

H2 (Preference for Sincerity): Voting strategically under the status quo entails some cost to the voters. Citizens who vote non-sincerely in the (official) 2R system dislike this system more than those who cast a sincere vote.

<sup>&</sup>lt;sup>8</sup> Note that this left-wing bias in favor of new electoral systems would be consistent with the finding by Aldrich et al. (2014), who observe that Democrat voters are more likely to support reforms, controlling for the relative strength of the parties in their state (although the authors interpret this correlation by noting that a Republican candidate (Bush) won both the 2000 and 2004 US presidential elections, implying that Democrat voters in 2004 might have been more supportive of changing the system).

<sup>&</sup>lt;sup>9</sup> Fournier et al. (2011) identifies the notion of "Voter Choice" as one of the values at work when citizens evaluate voting rules. This notion refers to the possibility for the voter to really have a say and exert control in the electoral process. Typically, they observe that participants who highly value the notion of voter choice will like the possibilities offered by the alternative vote ballots to rank all the candidates, or by mixed member systems to cast two votes.

H3(Ideology) Right-wing voters tend to value less the notion of voter choice and are less open to new rules, therefore they are more favorable to single vote rules (1R and 2R) while other voters prefer the alternative vote and to approval voting.

## 3. Data: the *Vote au Pluriel* experiment

To test our hypotheses, we use data collected during the *Vote au Pluriel* experiment. <sup>10</sup>

## **Protocol**

This quasi-experiment took place right before the first round of the 2012 French presidential election (the first round was held on April 22). We created a website (<a href="www.voteaupluriel.org">www.voteaupluriel.org</a>)<sup>11</sup> with sections providing information about four voting systems: two-round (the official system in France), one-round, alternative and approval. For each system, visitors were provided with information about how the system works (format of the ballot and details of the vote count), as well as an example of a country where the system is used in practice for presidential elections. In another section of the website, people were invited to vote according to each of the four rules, for the "real" candidates running for the French Presidency. Voting rules were presented in random order. At the time they took part in these experimental elections, participants were not given any feedback about the votes cast by other participants; electoral outcomes under the different systems were only made public (posted on the website and reported in the media) after the second round of the election. Once they had experimentally voted with the four voting rules, the participants were asked to answer a short questionnaire, including a question asking them to report which system they liked the most. Voting under the four rules and answering the questionnaire took about 20 minutes.

The website was open to the public three weeks before the first-round of the election. It was advertised through many different routes: after a first phase of direct mailing in the academic world, the general media got involved and the website was widely advertised in the main French newspapers, on the internet and the radio. More than 20,000 people visited the website during this period.

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<sup>&</sup>lt;sup>10</sup> For more detailed information about the protocol and the electoral scores of the candidates under the four voting systems, see Van der Straeten et al. (2013).

<sup>&</sup>lt;sup>11</sup> The website is still active and open to the public (and will remain so). The interested reader can browse through the information sections, and take part in the experimental votes.

<sup>&</sup>lt;sup>12</sup> A similar internet-based quasi-experiment was conducted at the time of the 2011 election in the province of Ontario, Canada, by Blais *et al.* (2012), to study the effects of three voting systems: first past the post, alternative voting and proportional representation.

<sup>&</sup>lt;sup>13</sup> France was given as the example for the two-round system, Mexico for the one-round system, and Ireland for the alternative vote. No example was given for approval voting, since no country uses this system for presidential elections.

# Scores of the candidates under the different electoral systems

We briefly present here the electoral aggregate outcomes under the different voting rules. Among the 20,000 visitors, 10, 621 did cast their vote under each of the four rules. Among those participants, 8,044 reported having the right to vote in the election. He have 8,044 participants are not a representative sample of French voters. Those who are interested in politics, elections, and voting rules are probably over-represented. Additionally, we observed a strong left bias. The latter bias is particularly problematic since we are interested in predicting the aggregate effects of voting rules. Indeed, we need to be able to predict aggregate results under the different voting rules in order to test in more detail the self-interest hypothesis (which candidates benefit/lose in the different electoral systems?). We correct this bias by weighting the participants according to the experimental vote they cast in the first round of the two-round election. Weights are computed so that the weighted experimental scores in the first round of the two-round election in our sample exactly match the actual official scores in the presidential election nationwide. All the results presented in the article use these weights (the only two exceptions are Tables A2 and A3 in the appendix when we replicate the test of our hypotheses on unweighted data).

There were 10 candidates running for the presidency (see the Appendix for a short description of these candidates). The official results in the first round are presented in the second column of Table 1.

## [Insert Table 1 about here]

The top two candidates in the first round were François Hollande, with 29% of the vote, and Nicolas Sarkozy, with 27%. In the official election, Hollande was elected in the second round, with 52% of the votes.

Columns (2R) in Table 1 indicate the candidates' scores under 2R in our experiment. As explained above, observations are weighted so that the first round scores in the experiment exactly match the official results. As regards the second round, in the vote section of the website, we asked participants how they would vote in the second round of the election in the ten hypothetical cases where the five main candidates (Hollande, Sarkozy, Le Pen, Mélenchon and Bayrou) are present in the runoff. In case of a run-off between Hollande and Sarkozy, 56% of our respondents vote for Hollande.

<sup>&</sup>lt;sup>14</sup> In the questionnaire respondents were asked to fill once they had experimentally voted with the four rules, they were asked to answer the following question: "Do you have the right to vote in the 2012 French Presidential election?" Among the 10, 621 respondents who did cast their vote under each of the four rules, 2,277 did not answer this question about the right to vote, 158 answered that they did not have the right to vote because they were not French citizens, and 142 answered that they were French citizens but did not have the right to vote (over half of them because they were below the legal age requirement (18 years)).

<sup>&</sup>lt;sup>15</sup> Recall that the data were collected before the first round of the election.

<sup>&</sup>lt;sup>16</sup> As noted in the previous paragraph, the number in the official election is 52%, indicating that even after weighting the observations to match first-round scores, there still exists a bias in favor of the left in the sample.

Column (1R) in Table 1 gives the candidates' scores under the one-round system.

Results under the alternative vote are a bit more complex to describe since several steps of elimination can be necessary to get a candidate elected. In the experiment, nine steps were actually required to elect the President; the vote count is detailed under the "Alternative vote" columns.

The candidates' scores under approval voting<sup>17</sup> are shown in the last column.

From Table 1, we can observe that aggregate results under 1R, 2R and the alternative vote are very similar. Under approval voting, François Hollande is elected too, but the results go in the direction of strengthening the centrist candidate (Bayrou; 41% of approvals but only 9% of the votes in the official system).

The experimental aggregate results reported in Table 1 are based on the 8,044 visitors who cast a vote under the four experimental elections (and who reported having the right to vote). 18. We will further restrict the sample when studying preferences for the voting rules, since some of these respondents did not complete the questionnaire where the question about preferences for the voting rules was asked.

# Preferences for the voting rules: variables and first descriptive statistics

Preferences for the voting rules are tapped in the questionnaire respondents were asked to fill once they had experimentally voted with the four rules. They were asked to answer the following question: "What is your favorite voting rule?", with four possible answers corresponding to the four voting rules they had just tested in practice.

Hypothesis 1 states that preferences for the candidates affect preferences for the rules. These preferences over the candidates are elicited in the short questionnaire through a simple and direct question: "Which presidential candidate do you prefer?"

Some candidates, especially those who gathered less than 2% of the votes in the official election, have very few supporters in our sample (few participants reported having these candidates as their preferred option). Given these small numbers of observations in our sample, we restrict attention to the six candidates who gathered the most votes in the official election.<sup>19</sup>

To tap self-interest, we create the *PreferredCandidateViable*, which is a dummy variable equal to 1 if the respondent prefers one of the two main candidates in the current election (F. Hollande or N. Sarkozy),

<sup>18</sup> Those 8,044 respondents constitute the sample used in Van der Straeten *et al.* (2013).

<sup>&</sup>lt;sup>17</sup> The approval scores in Table 1 are the percentages of voters who approve the candidates, therefore they do not sum to 100.

<sup>&</sup>lt;sup>19</sup> Eva Joly, the Green candidate, received only 2% of the votes in the official election, but since many participants in our sample report having her as their preferred candidate, we kept her in the analysis.

Hypothesis 3 makes some predictions about the impact of right-wing ideology on preferences for voting rules. To construct our measure of ideology, we use the respondents' reported preferences for parties. These preferences over the political parties are elicited in the short questionnaire through the following question: "Which political party do you prefer?" The possible answers included ten political parties. We coded the possible answers into three categories: Left, Center and Right.<sup>20</sup>

Dropping respondents who did not answer the question about their preferred voting rules (1516 respondents), the question about their preferred candidate (370 additional respondents), who reported preferring one of the four weakest candidates (245 additional respondents), the question about their preferred political party (420 additional respondents), or the socio-demographic questions (education, age, gender: 339 additional respondents), we are left with 5,154 individuals. The remaining of our analysis will deal with these 5,154 individuals.

Table A1 in the appendix reports the summary statistics for our main variables (to be used either in the descriptive statistics or in the regressions).<sup>21, 22</sup>,

To study whether casting a non-since vote affects one's preference for the status quo (Hypothesis 2), we create a variable *VotesNonSincerely*, which is a dummy variable equal to 1 if the respondent votes in the experiment under the two-round system for a candidate different from the one she reports preferring. We observe in Table A1 that a substantial fraction of the respondents, around 15%, casts non-sincere votes under the 2R system.

Before formally testing our hypotheses, we first provide some descriptive statistics on the distribution of preferred voting rules. Table 2 reports the support for the various voting rule, for the whole sample, and by preferred candidate.

[Insert Table 2 about here]

populaire (UMP).

<sup>&</sup>lt;sup>20</sup> We coded as "Left" the respondents reporting preferring Europe Écologie Les Verts (EELV), Front de gauche (FDG), Lutte ouvrière (LO), Nouveau Parti anticapitaliste (NPA), Parti socialiste (PS), Solidarité et Progrès (S&P), as "Center" the respondents reporting preferring the Mouvement démocrate (MODEM), as "Right" the respondents reporting preferring Debout la République (DLR), Front national (FN), Union pour un mouvement

<sup>&</sup>lt;sup>21</sup> The summary statistics are based on weighted data. Sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

<sup>&</sup>lt;sup>22</sup> As regards the distribution of socio-demographic variables in our sample, we observe an under-representation of females and an over-representation of highly educated participants.

Looking at our whole sample (column "Whole sample" in Table 2), one observes a clear ranking of the voting rules: 41% of the sample prefer the alternative vote, 27% prefer approval voting, 24% the official two-round system, and last only 8% prefer the one-round system. Looking now at various groups of voters depending on their preferred candidate, the table shows that some patterns are shared across the different groups of voters. In particular, whatever the preferred candidate, the one-round system is the least preferred, and except for Sarkozy supporters, the alternative vote is the most preferred rule. But there are also some noticeable differences. One observes that the supporters of Hollande and Sarkozy are much more favourable to the two-round system than other participants. This lends support to our hypothesis of self-serving preferences (Hypothesis 1). To examine whether the raw data lend support to Hypothesis 2 (about the cost of non-sincere voting) and Hypothesis 3 (about ideology), Table 3 presents the distribution of preferences over the four voting rules by ideology (Left, Center, Right), and within each ideology category, by Sincere / Non sincere vote.

# [Insert Table 3 about here]

Hypothesis 2 about the relationship between non-sincere voting and opposition to the two-round system also seems to find some support in the data. As noted above, among left-wing voters voting sincerely, 22% prefer the two-round system, against only 11% among left-wing voters voting non-sincerely. Similarly, among right-wing voters voting sincerely, 34% prefer the Two-round system, against only 17% among right-wing voters voting non-sincerely. A t-test rejects the equality of the preference for the 2R system between individuals who vote sincerely and individuals who do not at the 1% level for individuals with left and right ideology (p-value=0.000 for each group). The equality of proportions is not rejected for individuals with centrist ideology (p-value=0.348).

Table 2 also lends some support to Hypothesis 3, stating that right wing subjects tend to be more supportive of the two-round system. Among left-wing voters, 19% prefer the 2R system and 5% the 1R system, meaning that 24% prefer a uninominal system. The proportion among centrist voters is 11+4=15%, and the proportion among right-wing subjects is 33+13=46%. A t-test rejects the equality of the preference for the uninominal systems (one-round and two-rounds) proportions between individuals who report a right-wing ideology and those who report either a centrist ideology or a left-wing ideology (p-value=0.000 for both tests).

We now proceed to a more formal testing of our hypotheses.

# 4. Test of the hypotheses

## Test of Hypotheses 1 and 2

We start with a test of hypotheses 1 and 2, which make predictions about whether a respondent prefers the status quo (against any reform). To test Hypotheses 1 and 2, we estimate the following model (Model 1):

$$\begin{split} \textit{PrefersStatusQuo} &= \beta_0 + \beta_1 \, \textit{PreferredCandidateViable} + \beta_2 \, \textit{VotesNonSincerely} \\ &+ \beta_3 \, \textit{RightWingIdeology} \, + \beta_4 \, \textit{Education} + \, \beta_5 \, \textit{Age} + \beta_6 \, \textit{Female} + \epsilon \end{split}$$

#### where

- *PrefersStatusQuo* is a dummy variable equal to 1 if the respondents prefers the two-round system (the current status quo in France),
- *PreferredCandidateViable* is a dummy variable equal to 1 if the respondents prefers one of the two main candidates in the current election (Hollande or Sarkozy),
- *VotesNonSincerely* is a dummy variable equal to 1 if the respondent votes in the experiment under the two-round system for a candidate different from the one she reports preferring,
- *RightWingIdeology* is a dummy equal to 1 if the respondent prefers a party located at the right-hand side of the political spectrum.<sup>23</sup>
- *Education*, *Age*, *Female* are standard control variables (see Table A1 in the Appendix for coding information about the *Education* variable).

Model 1 has been estimated using a binary logit model.<sup>24</sup> From the parameter estimates (not shown here), we have computed the marginal effects of the explanatory variables on the probability of preferring the status quo for each individual. Table 4 reports these average marginal effects in the sample, without the socio-demographic control variables (Column 1), and with these controls (Column 2).

# [Insert Table 4 about here]

Hypothesis 1 predicts the marginal effect of the *PreferredCandidateViable* variable to be positive, and Hypothesis 2 predicts that of the *VotesNonSincerely* variable to be negative.

<sup>&</sup>lt;sup>23</sup> See footnote 20 for the details on which parties are classified as right-wing.

<sup>&</sup>lt;sup>24</sup> The model is estimated by maximum likelihood, where sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

Hypothesis 1 is strongly supported by our data. Indeed, subjects preferring one of the two viable candidates are about 20 percentage points more likely to prefer the status quo 2R system (whether one controls or not for socio-demographic characteristics) than subjects preferring any other candidate.

Hypothesis 2 is also supported by our data. Individuals who cast a non-sincere vote in the experiment under the 2R system are 6 percentage points less likely to report preferring the 2R system, compared to voters who cast a sincere vote (whether one controls or not for socio-demographic characteristics).

Looking at the socio-demographic controls, we observe that subjects with an elite school degree or a PhD are 20 percentage points less likely to prefer the two-round system than subjects with no diploma, and that older subject also prefer the status quo (the effect of age is small though). This might be explained by the fact that the alternative vote and approval voting systems were likely totally new to the voters, and presumably more complicated than the 2R system.

So far, to measure whether the status quo was favourable to a voter, we used a dummy variable indicating whether the respondent preferred one of the two leading candidates (Hollande or Sarkozy). We think that this measure is the most relevant, but note that alternative measures could have been used to capture whether the status quo is beneficial to the respondent, such as the first-round score obtained in the election by the candidate preferred by the respondent. As a robustness check, we estimate the following model (Model 2):

$$\begin{split} \textit{PrefersStatusQuo} &= \beta_0 + \beta_1 \, \textit{PreferredCandidateScore} + \beta_2 \, \textit{VotesNonSincerely} \\ &+ \beta_3 \, \textit{RightWingIdeology} + \beta_4 \, \textit{Education} + \beta_5 \, \textit{Age} + \beta_6 \, \textit{Female} + \epsilon \end{split}$$

where *PreferredCandidateScore* is a continuous variable equal to the score obtained by the respondents' preferred candidate nationwide in the first round of the current election (these scores are shown in the second column on Table 1).

We estimate Model 2 using a binary Logit model. Table 4 reports the average marginal effects of the explanatory variables on the probabilities of preferring the status quo (Column 4), and Column 3 presents the marginal effects for the same model without the standard socio-demographic control variables. Qualitatively, the results regarding Hypothesis 1 are similar to those obtained with Model 1: when the score of the respondent's preferred candidate increases by one percentage point the probability of preferring the status quo increases by 1.3 percentage point. In Model 2, the variable *VotesNonSincerely* is not significant: Hypothesis 2 is not supported in this alternative specification.

We conclude that the impact of self-interest is quite large, if one compares it to the impact of other variables, and robust to various specifications. Evidence for Hypothesis 2 is weaker: the effect is smaller in magnitude, and not always significant.

So far, when studying the impact of self-interest, we have only considered preferences for the status quo (against any other voting rule). But as was mentioned when we presented Hypothesis 1 in Section 2, if one were to further pursue the logic of the self-interest hypothesis, one should expect to see self-interest not only shaping preferences for the status quo, but also, more finely, to predict preferences among the three proposed reforms (1R, alternative vote, approval voting). It would require participants to be able to predict the consequences of the different rules. What were the observed consequences in the experiment? As reported in Section 3, in the experiment, aggregate scores under 1R, 2R and alternative voting were very similar, whereas approval voting was extremely favourable to the centrist candidate (who gets squeezed between the left and right candidates in the actual run-off system). Therefore, if citizens were able to perfectly foresee the consequences of the different systems, citizens whose preferred candidate is one of these two most serious candidates should dislike approval voting.

We can see if this is the case by estimating a model similar to Model 1, but where the dependent variable is the preferred voting rule. We have estimated such a model using a multinomial logit, and from the parameter estimates (not shown here), we have computed the marginal effects of the explanatory variables on the probability of preferring each voting rule.<sup>25</sup> Table 5 reports these average marginal effects in the sample. For a given voting rule A, the marginal effect of a specific variable X should be interpreted as the marginal impact of X on the probability of preferring voting rule A, compared to all other voting rules.<sup>26</sup>

# [Insert Table 5 about here]

As explained above, if citizens were able to perfectly foresee the consequences of the different systems, self-interest would predict that a citizen whose preferred candidate is one of the two most serious candidates should dislike approval voting, but preferences over the remaining three voting rules should be similar. We observe in Column 4 of Table 3 that this prediction is not supported by our data. Indeed, the effect of the *PreferredCandidateViable* in Column 4 is not significant, and its size is small (3percentage points). Besides, the marginal effect for the alternative vote is much larger and significant than the one for approval voting: Subjects preferring one of the two viable candidates are 15 percentage

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<sup>&</sup>lt;sup>25</sup> A multinomial logit model assumes that the property of independence of irrelevant alternatives (IIA) holds. We performed a Hausman test, which failed to reject the null hypothesis that IIA holds.

<sup>&</sup>lt;sup>26</sup> This is the reason why the column referring to the two-round system is (almost) identical to the column 2 of Table 3.

points less likely to prefer the alternative vote, although this system is much more favorable to their preferred candidate than approval voting. We therefore conclude that self-interest is a good predictor of the support for the status quo, whose consequences are likely to be well understood by the French voters, but not at a finest degree of details a good predictor of support for the different proposed reforms.

## Test of Hypothesis 3

We now consider Hypothesis 3, regarding the impact of ideology on preferences about the voting rules. Our hypothesis is that right-wing voters do not value as much the notion of voter choice and are less open to new rules, therefore they are more favorable to single vote rules (1R and 2R).

The estimation of the multinomial logit model in Table 5 provides an appropriate way of testing this hypothesis. Table 5 shows a strong right-wing bias in favor of the one-round and two-round system, of about 10 percentage points.<sup>27</sup> This provides quite strong support for Hypothesis 3.

We thus find some support for our hypothesis that preferences over electoral systems are also affected by one's ideology. When stating our hypothesis, we argued that (at least) two channels would support this correlation: alternative and approval are the two rules which, at the same time, are the newest to the voters, and are giving the voters the largest freedom in expressing their preferences (inducing more "voter choice") - two characteristics which are likely to be palatable to left-wing voters. Unfortunately, given that we do not have questions that directly measure these different psychological traits, the data at hand do not allow us to determine precisely which of these channels (if any) is really operating. More research is definitely needed to further understand this impact of ideology on preferences for institutions.

The tests presented in Tables 4 and 5 use weighted data. To check whether our results are sensitive to our weighting scheme, we perform exactly the same estimations, using non weighted data (Tables A2 and A3 in the Appendix). We observe that the qualitative and substantive conclusions are very similar. One difference is worth being noted though: The negative effect of a non-sincere vote on preferences for the status quo is significant for both specifications of the self-interest variable

<sup>&</sup>lt;sup>27</sup> We only present here results based on a dichotomous variable measuring ideology: right-wing preferred party versus other preferred parties. We also studied other specifications of the model, where we used either a three-category variable to measure ideology (Left, Center, Right), or a five-category variable (Extreme-Left, Moderate Left, Center, Moderate Right, Extreme-Right). When estimating the model with the five-category variable, we found that, regarding these preferences for different electoral systems, there was no statistical difference between Moderate Right and Extreme Right voters. Besides, a Wald test rejected the equality of the marginal effects between Extreme Left and Moderate Left on the probability of preferring the 1-round system (p-value=0.0059), but for all the other options, the equality of the marginal effects between Extreme Left and Moderate Left was not rejected (p-value>0.10). For all the options, the equality of the marginal effects between Moderate Left and Center was not rejected (p-value>0.10). Although we allowed for a lot of flexibility in the way we modeled the impact of ideology (by having five dummies for the different ideological categories), results suggested that the main difference is between right-wing voters, and all others. We chose to present here the most parsimonious model.

in the unweighted data case (Models 1 and 2), and is only significant in Model 1 with weighted data (compare Tables 4 and A2).

#### 5. Conclusion

This paper is a first step towards eliciting citizens' preferences for different electoral institutions, in an experimental context where they have been given the opportunity to try in practice the different voting rules on "real" candidates.

There are few situations where citizens are actually directly questioned about their preferences for institutions. Examples include referenda in British Columbia (2005 and 2009), Ontario (2007) and the United Kingdom (2011). These referenda were about proposals to replace the current one-round (simple plurality) system for the parliamentary elections with the alternative vote system (UK), the single transferable vote (BC) or a mixed member proportional system (Ontario). All these proposals failed to pass the popular vote step.

The scarcity of real life examples of such consultations makes the experimental approach particularly appealing to study such issues. In particular, subjects in our experiment were given the opportunity to read about different rules, and then to actually test them, making it easier to understand how they worked.

In this study, we confirmed our hypothesis that citizens' preferences are partly self-serving: Subjects preferring one of the two viable candidates are about 20 percentage points more likely to prefer the status quo (the two-round system) than subjects supporting non-viable candidates.

Second, individuals who cast a non-sincere vote in the experiment under the 2R system are less likely to report preferring the 2R system, compared to voters who cast a sincere vote. This result sheds light on the fact that the way individuals "use" the system may also shape their preferences for the different electoral systems. There is a large literature on whether voters cast votes strategically or not, but much less is known about the potential psychological costs associated with strategic voting. Our results suggest that strategic voting might be psychologically costly. Some people like being able to support their preferred party/candidate, and as a consequence, they dislike systems that induce them not to do so. Note, however, that the size of the effect is smaller than that of self-interest, and not significant in some specifications.

Last, we found a strong right-wing bias in favor of single-vote systems, but still lack a definitive explanation for this effect. We leave to future research the task of determining whether this effect is observed in other contexts or types of elections, and elucidating the mechanism underlying it.

Compared to the previous literature on citizens' preferences about voting rules, we find more nuanced results than both Aldrich et al. (2014) and Fournier et al. (2011), in that we find that both self-interest and ideology/values matter (whereas the former only stressed self-interest, and the latter found that only values mattered). Compared to the results of Bowler *et al.* (2006) about politicians' preferences for voting rules, we find that citizens' and politicians' preferences share striking similarities: self-interest is indeed a key determinant, but ideology also strongly shapes these preferences.

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Table 1: Aggregate results in the *Vote au Pluriel* Experiment under the four voting rules (%, weighted sample)

	2	R	1R		Alternative Vote				Approval				
	Round	Round		Step	Step	Step	Step	Step	Step	Step	Step	Step	
Candidate	1	2		1	2	3	4	5	6	7	8	9	
F. Hollande	29	56	31	25	25	25	25	25	28	33	36	55	46
N. Sarkozy	27	44	28	27	27	27	27	28	28	32	42	45	36
M. Le Pen	18	/	16	15	15	15	15	16	17	17	/	/	23
JL. Mélenchon	11	/	10	12	12	12	13	14	16	18	21	/	36
F. Bayrou	9	/	9	11	11	11	11	11	12	/	/	/	41
E. Joly	2	/	2	6	6	6	6	6	/	/	/	/	33
N. Dupont-Aignan	2	/	2	3	3	3	3	/	/	/	/	/	15
P. Poutou	1	/	1	1	1	2	/	/	/	/	/	/	11
N. Arthaud	1	/	0	1	1	/	/	/	/	/	/	/	7
J. Cheminade	0	/	0	0	/	/	/	/	/	/	/	/	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	254

Note: Candidates are ranked by scores in the official (2R) election.

Total number of observations: 8,044.

Sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

The approval scores are the percentages of voters who approve the candidates, therefore they do not sum to 100.

**Table 2: Preferred voting Rule, by Preferred Candidate (weighted sample)** 

	Whole Sample	François Hollande (mean)	Nicolas Sarkozy (mean)	Marine <b>Le Pen</b> (mean)	JL. <b>Mélenchon</b> (mean)	François <b>Bayrou</b> (mean)	Eva <b>Joly</b> (mean)
Preferred Voting Rule: Two-round One-round Alternative Approval vote	0.240 0.083 0.407 0.270	0.283 0.059 0.382 0.276	0.409 0.104 0.273 0.214	0.186 0.188 0.390 0.236	0.122 0.037 0.514 0.326	0.093 0.040 0.543 0.323	0.033 0.052 0.587 0.329
Weighted total size in sample Observations	5154	0.255	0.267	0.141	0.161	0.110 726	0.066

Note: Candidates are ranked by scores in the official (2R) election.

Total number of observations: 5,154.

Sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

Table 3: Preferred Voting Rule, by Ideology and Sincere/Non Sincere Vote (weighted sample)

	Left			Center			Right		
	Votes	Votes	All	Votes	Votes	All	Votes	Votes	All
	non-	sincerely		non-	sincerely		non-	sincerely	
	sincerely			sincerely			sincerely		
Two-round	0.106	0.216	0.194	0.082	0.114	0.107	0.168	0.339	0.327
One-round	0.035	0.051	0.048	0.041	0.045	0.044	0.198	0.131	0.135
Alternative	0.479	0.443	0.451	0.527	0.517	0.519	0.484	0.314	0.326
Approval	0.380	0.289	0.307	0.350	0.325	0.330	0.150	0.216	0.212
Weighted total size in sample	0.097	0.388	0.486	0.022	0.081	0.103	0.029	0.382	0.411
Observations.	688	3311	3999	81	586	667	44	444	488

Note: Total number of observations: 5,154.

Sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

A t-test rejects the equality of the preference for the 2 rounds system proportions between individuals who vote sincerely and individuals who do not at the 1% level for individuals who prefer a left-wing or right-wing candidate (p-value=0.000 for each group). The equality of proportions is not rejected for individuals who prefer the center candidate (p-value=0.348).

A t-test rejects the equality of the preference for the uninominal systems (One-Round and Two-rounds) proportions between individuals who report a Right-wing ideology and those who report either a Center ideology or a Left-wing ideology (p-value=0.000 for both tests).

**Table 4: Binary Logit Results: Support for the Status Quo (Marginal effects, weighted sample)** 

	(1) Model 1 (No socio-dem. controls)	(2) Model 1 (Full model)	(3) Model 2 (No socio-dem. controls)	(4) Model 2 (Full model)
Self-Interest: Preferred candidate viable	0.1950*** (0.021)	0.2001*** (0.021)		
Score of preferred candidate			0.0127*** (0.001)	0.0127*** (0.001)
Votes Non Sincerely	-0.0627** (0.029)	-0.0585** (0.029)	-0.0334 (0.032)	-0.0313 (0.032)
Right-Wing Ideology	0.1015*** (0.022)	0.1027*** (0.022)	0.0884*** (0.021)	0.0906*** (0.021)
Education: No diploma		Ref.		Ref.
Secondary education		-0.1393 (0.086)		-0.1210 (0.085)
Bachelor		-0.1337 (0.082)		-0.1073 (0.081)
University graduate		-0.1381* (0.081)		-0.1117 (0.080)
Elite school, PhD		-0.2013** (0.080)		-0.1674** (0.079)
Age		0.0014** (0.001)		0.0013** (0.001)
Female		0.0124 (0.022)		0.0162 (0.022)
Observations	5154	5154	5154	5154

Note: The model is estimated by maximum likelihood, where sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote. Results presented in this table are the average marginal effects of the explanatory variables on the probability of preferring the status quo in the sample.

Standard errors in parentheses. Significance levels: \*p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01

Table 5: Multinomial Logit Results: Support for the different voting rules (Marginal effects, weighted sample)

	(1)	(2)	(3)	(4)
	2 round	1 round	Alternative	Approval
Preferred	0.1996***	-0.02285	-0.1471***	-0.0297
candidate	(0.021)	(0.016)	(0.024)	(0.022)
viable				
Votes Non	-0.0569*	0.0031	0.0108	0.0430*
Sincerely	(0.029)	(0.021)	(0.031)	(0.026)
RightWing	0.1032***	0.0905***	-0.1010***	-0.0926***
Ideology	(0.022)	(0.018)	(0.026)	(0.022)
<b>Education:</b>				
No diploma	Ref.	Ref.	Ref.	Ref.
Secondary	-0.1574*	0.0130	0.1038	0.0406
education	(0.088)	(0.058)	(0.080)	(0.097)
Bachelor	-0.1538*	-0.0187	0.1779**	-0.0054
	(0.084)	(0.054)	(0.074)	(0.091)
University	-0.1579*	-0.0271	0.2031***	-0.0186
graduate	(0.083)	(0.053)	(0.073)	(0.089)
Elite	-0.2215***	-0.0445	0.2590***	0.0071
school, PhD	(0.082)	(0.051)	(0.073)	(0.089)
Age	0.0016***	0.0028***	-0.0039***	-0.0005
	(0.001)	(0.000)	(0.001)	(0.001)
Female	0.0139	-0.0251*	-0.0209	0.0322
	(0.022)	(0.014)	(0.023)	(0.021)
Observations	5154	5154	5154	5154

Note: The model is estimated by maximum likelihood, where sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote. Results presented in a given column of this table are the average marginal effects of the explanatory variables on the probability of preferring a given voting rule, compared to all other voting rules. Standard errors in parentheses. Significance levels: \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01

#### **APPENDIX:**

## A short description of the candidates:<sup>28</sup>

- François **Hollande** (*Parti Socialiste*), was the main challenger to the incumbent Nicolas Sarkozy, and likely winner (after a runoff) according to the polls.
- Nicolas **Sarkozy** (UMP, *Union pour la Majorité Présidentielle*), moderate conservative, was the incumbent. According to the pre-election polls Sarkozy was very likely to go to the runoff.
- Marine **Le Pen** (FN, *Front National*), extreme right. According to the polls, she was ranked third, and it would have been a big surprise if she had made it to the second round. UMP and FN had proscribed any kind of alliance.
- Jean-Luc **Mélenchon** (*Front de Gauche*) led a coalition of extreme left parties. According to the polls it was close to impossible for Mélenchon to go to the runoff. As expected, Mélenchon invited his supporters to vote for Hollande at the second round even if he always maintained that he would not accept a position in a Hollande government.
- François **Bayrou** (*Mouvement pour la Démocratie*). This centrist candidate tried to maintain an independent position between the Left and the Right. According to the polls he had no chance of being one of the top two candidates. Before the second round, he declared that he would personally vote for Holland in the second round, but did not give any explicit recommendations to his first round voters regarding how they should vote in the run-off.
- Eva **Joly** (*Europe Ecologie Les Verts*). The Green candidate was allied with the socialist party and had signed an agreement for the coming legislative elections. She had very little support in the polls.
- Nicolas **Dupont-Aignan** is a dissident from the UMP. He had no chance to go to the runoff.
- Philippe Poutou and Nathalie Arthaud were two Trotskyist candidates, and Jacques
   Cheminade was an autonomous candidate. These last four candidates obtained very few votes.

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<sup>&</sup>lt;sup>28</sup> Borrowed from Van der Straeten *et al.* (2013).Candidates are ranked by scores in the official election.

**Table A1: Summary Statistics (weighted sample)** 

Preferred Voting Rule:	
Two-round <sup>d</sup>	0.240
One-round <sup>d</sup>	0.083
Alternative <sup>d</sup>	0.407
Approval vote <sup>d</sup>	0.270
Preferred Candidate:	
Hollande <sup>d</sup>	0.255
Sarkozy <sup>d</sup>	0.267
Le Pen <sup>d</sup>	0.141
Mélenchon <sup>d</sup>	0.161
Bayrou <sup>d</sup>	0.110
Joly <sup>d</sup>	0.066
Preferred Candidate Viable d	0.522
Votes non sincerely <sup>d</sup>	0.149
Idelology:	
Left <sup>d</sup>	0.486
Center <sup>d</sup>	0.103
Right <sup>d</sup>	0.411
<b>Education:</b>	
No diploma <sup>d</sup>	0.022
Secondary education <sup>d</sup>	0.093
Bachelor <sup>d</sup>	0.229
University graduate <sup>d</sup>	0.296
Elite school graduate, PhD <sup>d</sup>	0.359
Age	36.732
	(14.478)
Female <sup>d</sup>	0.271
Observations	5154

Note: Sampling weights are applied to each observation. For a given observation, the sampling weight is the ratio of the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in the population over the fraction of votes in favor of the candidate chosen in the first round of the two-round election observed in our sample, through the experimental vote.

<sup>&</sup>lt;sup>d</sup> signals dummy variables. For continuous variables, standard deviations are in parentheses.

Table A2: Binary Logit Results (Marginal effects): Support for the Status Quo (Unweighted sample

	(1) Model 1 (No socio-dem.	(2) Model 1 (Full model)	(3) Model 2 (No socio-dem.	(4) Model 2 (Full model)
	controls)	(Tun model)	controls)	(run moder)
Self-Interest: Preferred candidate viable	0.1907*** (0.012)	0.1832*** (0.012)		
Score of preferred candidate			0.0089*** (0.000)	0.0085*** (0.000)
Votes Non Sincerely	-0.0362*** (0.014)	-0.0347** (0.014)	-0.0298** (0.014)	-0.0289** (0.014)
Right-Wing Ideology	0.0898*** (0.018)	0.0919*** (0.018)	0.0833*** (0.017)	0.0846*** (0.017)
Education: No diploma		Ref.		Ref.
Secondary education		-0.0741 (0.048)		-0.0719 (0.047)
Bachelor		-0.1057** (0.045)		-0.0991** (0.044)
University graduate		-0.1331*** (0.045)		-0.1254*** (0.044)
Elite school, PhD		-0.1630*** (0.044)		-0.1541*** (0.043)
Age		0.0018*** (0.000)		0.0017*** (0.000)
Female		0.0097 (0.011)		0.0109 (0.011)
Observations	5154	5154	5154	5154

Note: The model is estimated by maximum likelihood, on unweighted data. Results presented in this table are the average marginal effects of the explanatory variables on the probability of preferring the status quo in the sample.

Standard errors in parentheses. Significance levels: \*p < 0.1, \*\*p < 0.05, \*\*\* p < 0.01

Table A3: Multinomial Logit Results (Marginal effects): Support for the different voting rules (Unweighted sample)

Preferred 0	rounds .1829***	1 round	Alternative	Approval
		0.0120*		
		$0.0138^*$	-0.1666***	-0.0383***
candidate (	(0.012)	(0.007)	(0.015)	(0.014)
viable				
	).0344**	0.0044	-0.0298	0.0587***
Sincerely	(0.014)	(0.009)	(0.019)	(0.018)
0	.0949***	0.0798***	-0.0951***	-0.0795***
Ideology	(0.018)	(0.016)	(0.025)	(0.022)
<b>Education:</b>				
No diploma	Ref.	Ref.	Ref.	Ref.
C 1	0.0002*	0.0262	0.0420	0.0026
J	0.0892*	-0.0363	0.0429	0.0826
education (	(0.050)	(0.032)	(0.058)	(0.053)
Bachelor -0	.1221***	-0.0608**	0.1288**	0.0540
	(0.047)	(0.030)	(0.054)	(0.050)
	(0.047)	(0.030)	(0.034)	(0.030)
University -0	.1493***	-0.0637**	0.1536***	0.0594
•	(0.046)	(0.030)	(0.054)	(0.049)
Studutte	(0.010)	(0.030)	(0.051)	(0.019)
Elite -0	.1793***	-0.0747**	0.1975***	0.0565
	(0.046)	(0.030)	(0.053)	(0.049)
,	,	(11111)	(3.33.7)	
Age 0	.0019***	0.0013***	-0.0036***	0.0005
0	(0.000)	(0.000)	(0.001)	(0.000)
Female	0.0100	-0.0005	-0.0367**	0.0272*
	(0.011)	(0.007)	(0.015)	(0.014)
Observations	5154	5154	5154	5154

Note: The model is estimated by maximum likelihood, on unweighted data. Results presented in a given column of this table are the average marginal effects of the explanatory variables on the probability of preferring a given voting rule, compared to all other voting rules.

Standard errors in parentheses. Significance levels: \*p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01