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Citizen Forecasting: The 2022 French Presidential Electionsⁱ

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National elections in France have been an object of scientific forecasting efforts since the 1980s (for a review see Jérôme and Jérôme-Speziari 2010), with an initial deployment of political economy models based on regression analysis. Later, these models were rivaled by public opinion polling approaches that emphasized the use of vote intentions to foretell election outcomes (e.g., Jérôme, Jérôme, and Lewis-Beck 1999; Selb, Göbel, and Lachat 2020). Other theoretical efforts occasionally emerged (e.g., Nadeau, Bélanger, and Lewis-Beck 2012), but the dominant approaches have been structural models versus vote intention polls. We propose to try another approach, which has been newly tested in France—citizen forecasting.

The citizen forecast utilizes responses to voters' expectations (not voters' intentions), as expressed in answering questions of the form, "Who do you think will win the upcoming election?" We assemble citizen forecasting questions and embed them in national surveys of the French electorate before the 2022 presidential election. The French system represents a complex party system, as the surprising results from the 2017 Macron's triumph underline. Besides the large number of new (and changing) parties, the voting rules themselves generally involve two rounds of balloting. Below, we review the general literature on citizen forecasting of elections. Then, we focus on preliminary efforts in the French case, especially as applied to forecasting during the 2017 French presidential election campaign. This lays the groundwork for our current citizen forecasting surveys.

Citizen forecasting methodology

Among the various scientific approaches to predicting elections, citizen forecasting (CF) stands out. Before an election, we ask citizens who they think will win. As more people say, for example, party X, this party's likelihood of winning is considered higher. Such an approach has been frequently applied elsewhere, such as the United Kingdom and the United States and more recently to Canada (Temporão et al. 2019) and Germany (Murr and Lewis-Beck 2022). Thus, it does not seem unreasonable to imagine that it will work in France.

The advantage of vote expectations polls is that people are invited to think about the public's vote intention, and hence they may report, in addition to their own intention, the vote intentions of their family and friends (Leiter et al. 2018). Indeed, several papers show that vote expectations are more accurate than vote intention polls (e.g., Graefe 2014 and Murr, Stegmaier, and Lewis-Beck 2021). This said, a disadvantage of our approach is that we ask the likelihood for each candidate, and hence must have survey questions for each candidate instead of a single vote intention question. Compared to structural models, which are based on theories of elections, a disadvantage of citizen forecasting is that we learn less about the nature of elections. However, in citizen forecasting, we learn something about the practical political knowledge, and the psychological thinking, that citizens have. Another advantage is that in citizen forecasting, we do not need historical data to fit regression models as a single snapshot will do for each election.

Let us refresh ourselves on foundational questions of data and measures. Lewis-Beck and Skalaban (1989), who can be said to have initiated modern citizen forecasting, exercised the method on national probability samples of the American National Election Study (ANES). Those surveys consistently ask respondents, before the contest, “Who do you think will be elected President in November?” In the eight surveys they examined, from 1956 on, voters correctly predicted the winner 69% of the time (Lewis-Beck and Skalaban 1989, 148). This benchmark result has been repeated in later US studies (Graefe 2014; Lewis-Beck and Tien 1999; Murr 2015). Moreover, with respect to Europe, foremostly the United Kingdom, the finding has also sustained itself (Lewis-Beck and Stegmaier 2011; Murr 2011, 2016). Impressively, a contemporary work, drawing on 449 surveys from British elections (1950 to 2017), shows vote expectations sharply out-perform the more popular method—vote intention polls (Murr, Stegmaier, and Lewis-Beck 2021).

Germany, another multi-party, European case, has recently received a flurry of election forecasting attention (see in particular the symposium edited by Graefe and Jérôme, 2021). Moreover, some of this attention has gone to citizen forecasting. Lehrer, Juhl, and Gschwend (2019), in their investigation of the 2017 national election, report CF predicts the AfD vote, but in *ex post* fashion. Further, Graefe (2016), examining the 2013 election, questioned a non-probability sample of adults; they could predict 12 of 14 possible election outcomes. But, again, this was *ex post*. In a break from that strategy, Murr and Lewis-Beck (2022) followed an *ex ante* CF methodology, drawing on 2021 voter expectations.

We can summarize our two hypotheses as follows. First, our CF data will accurately forecast the eventual winner of the French presidential contest. The theory underlying CF, which draws on Condorcet’s Jury Theorem and the ‘wisdom of the crowds,’ argues that, as groups of voters grow larger, it becomes more likely that, as a collective, their expectation responses will not be random; rather, they will converge on the correct choice. Second, we hypothesize that, given the above theory, our CF forecasts will perform at least as well, if not better than, vote intention polls.

Citizen Forecasting in France

Over the years, core CF questions have, in fact, been posed by different French polling firms, to pre-election national samples of French voters, with results usually published beforehand in newspapers. The two standard questions asked have read either “According to you who is going to win the next presidential election?” or “According to you who is going to win at the second round?” Such items were fielded across presidential elections, 1965 to 2017, by at least seven survey companies: OpinionWay, Harris, IFOP, BVA, IPSOS, CSA, and Sofres.ⁱⁱⁱ

In general, the question was only asked for the two supposed leaders, e.g., de Gaulle versus Mitterrand in 1965. However, sometimes a third candidate was added as a possible choice, e.g., in 1995 Balladur was offered, along with Chirac and Jospin. In that last contest, the firm TNS Sofres asked respondents, before the second round, who they thought would win. Overwhelmingly, they accurately foresaw a Chirac victory (60 percent predicted the winner, only 19 percent predicted Jospin). Ambivalence in respondents’ forecasting can also indicate the closeness of races. For example, in the Harris Poll of 2012, 33 percent called a Sarkozy win, while 34 percent called a Hollande win. These overtime aggregate data, which we identified for 52 pre-presidential election polls, are suggestive of the possibilities CF offers. However, they are too scattered (or too missing) to enable systematic conclusions about the French CF choice process, e.g., usually the surveys were one-shot and focused on just two candidates. Fortunately,

these data limitations are markedly lessened when we turn to the recent extensive work done on the 2017 French elections.

The 2017 French Elections: Data and Methodology

During the 2017 French presidential election campaign, Vox Pop Labs, in collaboration with France 24, operated the interactive online voting application Vote Compass (In French, Boussole électorale). Vote Compass surveys online users about their views on various policies in order to evaluate their personal alignment with parties or candidates (van der Linden and Dufresne, 2017). The French Vote Compass ran continuously from April 5 to May 7, 2017, which allowed collection of over 140,000 responses to two sets of vote expectation questions.

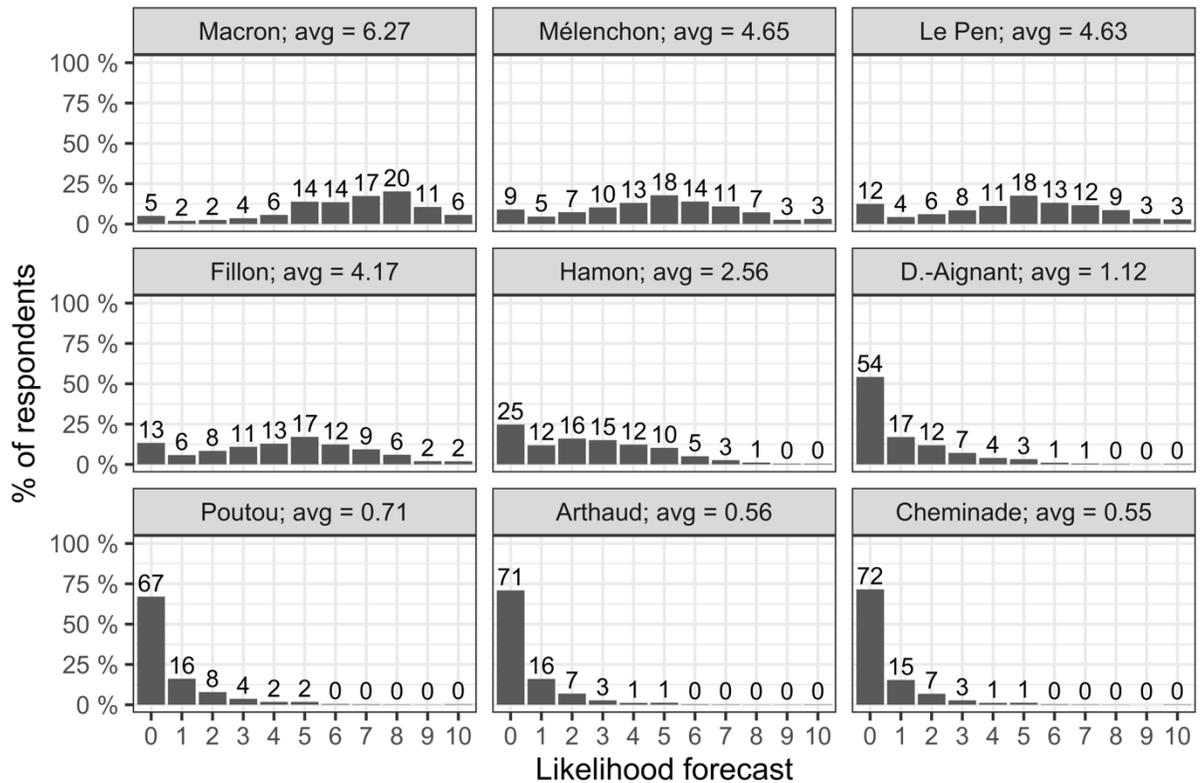
A first question set asked the respondent how likely it was on an 11-point scale that candidate X was going to win the presidential election. For the first round, the candidates included François Fillon, Benoît Hamon, Jean-Luc Mélenchon, Emmanuel Macron, Marine Le Pen, Nicolas Dupont-Aignan, Nathalie Arthaud, Jacques Cheminade, and Philippe Poutou. In the second round, answer choices were restricted to Le Pen and Macron.

An additional question asked respondents which one of these candidates they thought would win the most votes in their department or overseas territory in the first/second round of the presidential election. Because we do not have access to department level data in 2021, we focus here on the national level.

Results: The National Level

Figure 1 shows citizen forecasting results at the national level for the first round on 23 April 2017. For instance, 6% of the respondents answered ‘10 (Very Likely)’ when asked how likely it was for Macron to win the presidential election. The average (appearing in the second from bottom row) is simply the weighted sum over [0-10] of the percentage of respondents who answered using this value. Intuitively, one could say that, on average, respondents gave Macron a ‘likelihood’ of 6.3 / 10 of winning the election. Macron’s chances were much higher than those of any other candidate. The second place is tied between Mélenchon (at 4.65) and Le Pen (at 4.63), with Fillon not far behind (at 4.17). All other candidates do not appear viable. Of course, technically, these results are neither probabilities nor odds, and their correct ‘meaning’ certainly needs further discussion.

Figure 1. Distribution of citizen forecasts of the 2017 French Presidency at the national level in the first round.



Note: The numbers above the bars refer to the proportion of respondents that indicated each likelihood value for the candidate. Each candidate is a separate question, with n between 137,265 and 144,171.

Table A1 in the Online Appendix shows similar results for the second round held on May 7, 2017. It can simply be noted that, of all respondents, 15% indicated Macron was ‘10 (Very Likely)’ to win compared to 4% for Le Pen. The average score for Macron was 6.9, almost double that of Le Pen’s 3.8. The respondents overwhelmingly forecasted, correctly, that Macron would become President of the Republic.

How well did citizens forecast the vote share of each candidate in each round? To forecast vote shares, we simply divide the average likelihood for a candidate listed in Figures 1 and A1 by the sum of all likelihoods in a round. Figure 2 plots the actual vote share against the forecasted one for both rounds. Figure 2 shows that this simple forecasting rule is remarkably accurate by comparing its forecast with the actual vote shares. The points fall very close to the 45-degree line indicating a “perfect” forecast. As a result, the mean absolute error was 2 percentage points in the first round, and 1.5 in the second.

Figure 2. Actual and forecasted vote shares in the first and second rounds of the 2017 French presidential election. The dashed 45 degree line indicates a forecast without error.

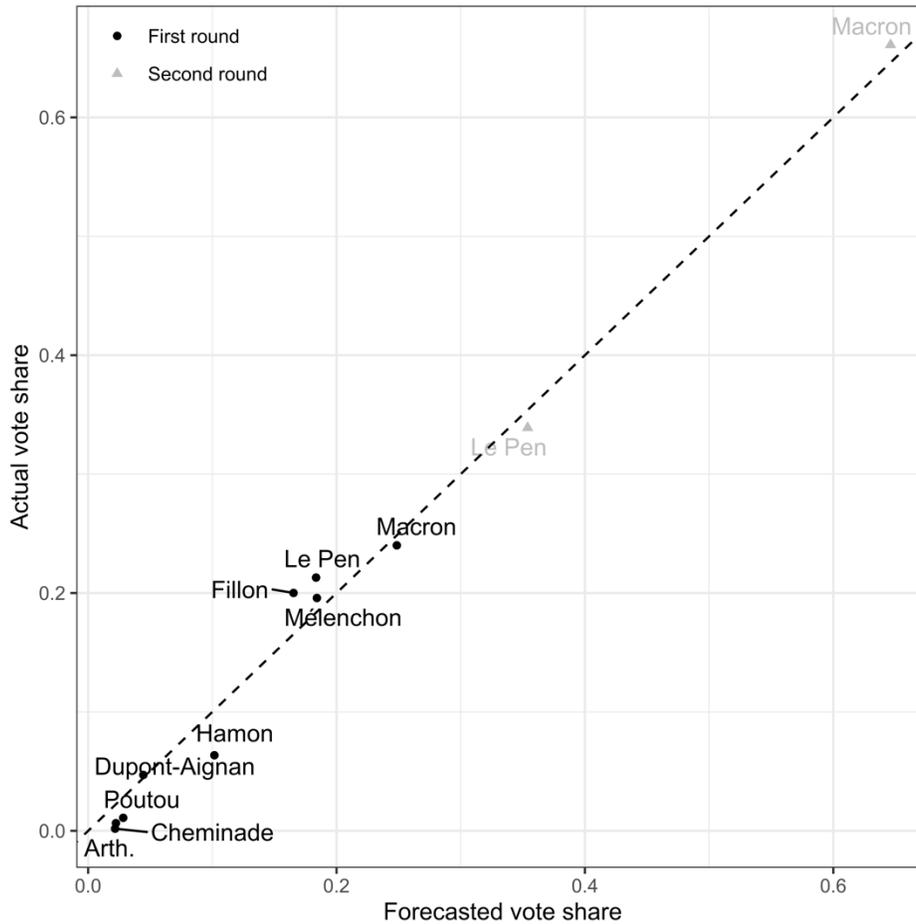


Figure A1 in the Online Appendix shows that the average scores remained mostly stable over time. For instance, in both rounds, citizens forecasts of the winner (Macron) were similar from one day to the next. The only exception is Fillon’s increase, starting approximately April 13. The key takeaway is that, in 2017, voting expectations were quite stable.

The 2022 French Presidential Election: Data and Methodology

Based on the analysis of the above 2017 French Vote Compass data, the use of CF as a forecasting strategy seems promising. Thus, we are conducting a national survey which queries voter expectations on that same question as in 2017 (before the first round and second round). For 2022, we have identified seven serious competitors (as of November 2021). They run the usual French ideological range, from extreme left to extreme right candidates:

Jean Luc Mélenchon (La France insoumise)

Anne Hidalgo (Parti socialiste)

Yannick Jadot (Les Verts)

Emmanuel Macron (La République en marche)

Valérie Pécresse (Les Républicains)

Marine Le Pen (Rassemblement national)

Eric Zemmour (Reconquête)

A quick primer for the reader unfamiliar with the candidates: Macron, the current centrist President, is the favorite. Le Pen, leader of the extreme-right Front National was the runner up in 2017. Pécresse leads the traditional French Right, Hidalgo the traditional left (in difficulty since the foundation of Macron's party in 2016). Zemmour is another extreme-right candidate, often depicted as an (intellectualist) agent provocateur trying to overtake the Rassemblement national on the right. Mélenchon is traditional far-left; Jadot a typical Green.

Because of the time dynamic that the round-system imposes, these candidates need to be evaluated over time, in waves. Thus, from OpinionWay, we have commissioned three national survey waves, with two in the first round (in November^{iv} and April) and one before the second round (in April). Each survey aims for a representative sample of 1,000 French respondents, and contains, in addition to our CF items, an SES battery, and political questions (including vote intention and left-right self-placement).^v

2021 Results and Discussion

While CF represents a new approach to election prediction in France, we are encouraged by its pioneering performance in the contentious 2017 presidential election. Therefore, we are pursuing it for the 2022 presidential contest, via our three national samples with voter expectation questions, in a continuous 11-point format, asked of all earnest contenders, from the extreme left to the extreme right. Recall our hypothesizes that (1) our CF data will accurately forecast the eventual winner of the French presidential contest and (2) our CF forecasts will perform at least as well, if not better than, vote intention polls. Table 1 summarizes findings from our first OpinionWay survey, fielded in late November. Vote intentions in that survey have the top four candidates in the first round in the following order: Macron, Le Pen, Zemmour, and Pécresse. By comparison, CF results from our first wave of round-one data shows similar results, with the important exception that Zemmour and Pécresse swap places. Still, generally, results from the likelihood forecast and vote intentions are similar.

Table 1. Forecasted vote share of candidates in the first round of the 2021 French presidential election based on citizen forecasts and vote intentions.

Candidate	Citizen forecast	Vote intention
Macron	25.4	24.3
Le Pen	18.7	21.6
Pécresse	14.3	10.3
Zemmour	12.4	11.8
Jadot	10.2	7.6
Mélenchon	10.1	7.6
Hidalgo	8.9	4.7
Montebourg	–	3.2
Dupont-Aignan	–	2.7
Roussel	–	2.3
Poutou	–	2.1
Arthaud	–	1.2
n	990	800

Conclusion

To forecast the upcoming French presidential election, we have not relied on a structural model or vote intention surveys. Instead, we have relied on the expectations of voters themselves. When asked, French citizens clearly expect Macron to become the next president. It remains to be seen how these rankings evolve over the second and third waves of our surveys. However, based on the 2017 experience, we anticipate his lead will hold.

A general takeaway, from the French case in 2017, is that citizen forecasting derived from a likelihood-to-win question picked the correct winner and produced precise vote share forecasts. For 2022, the CF methodology seems to provide a reasonable forecast. Time will tell whether it will be as accurate as in 2017.

DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the Harvard Dataverse at <https://doi.org/10.7910/DVN/MUXIKE>.

CONFLICTS OF INTEREST

The authors declare no ethical issues or conflicts of interest in this research.

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Endnotes

ⁱ Replication material available on the Harvard Dataverse: <https://doi.org/10.7910/DVN/MUXIKE>

ⁱⁱ The order of authorship of our paper is alphabetical, so underlining the equal contributions of each author.

ⁱⁱⁱ An effort was made to collect these data but they are scattered and not really comparable (e.g. questions changed over the years and pollsters). Hence, their use is essentially anecdotal.

^{iv} The first survey in November was fielded before Les Républicains chose their candidate. We included three top contenders (Bertrand, Pécresse, Barnier). On December 4, Pécresse was elected candidate of Les Républicains hence we only keep her.

^v The sample was interrogated online via a CAWi system (Computer Assisted Web Interview). OpinionWay carried out this survey by applying the procedures and rules of ISO 20252.