

# **Predicting in an (increasingly) unpredictable system? Forty years of election forecasting in France**

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## **Abstract**

In the last 40 years or so, scholars have proposed a vast array of models and approaches to predict election outcomes in a variety of democracies. Election forecasting has garnered increasing attention and has been the subject of multiple symposia and special issues in political science journals. This article reviews the forecasting efforts that have been deployed in the case of France since pioneering work in the late 1970s and early 1980s and discusses the peculiarities of the French political system and their consequences as well as the challenges they create for election forecasting.

**Keywords** elections, forecasting, France, Left–Right cleavage, multipartism, retrospective voting

## **Introduction**

A political history punctuated by ‘dramatic’ events and characterized by strong and highly personalized political rivalries, multiple constitutional changes, numerous parties competing on the Left and the Right of the political spectrum, an hybrid presidential/parliamentary political system, and an increasingly fragmented political scene with traditional party blocs being sidelined by candidates from the center and the far right (Evans and Ivaldi 2017; Grunberg and Schweisguth 2003; Rispin 2021) have had profound consequences for the stability of French politics. According to Gaffney (2010, 210), “one of the most predictable elements of the Fifth Republic from 1958 to the present has been its unpredictability.” The 2017 French presidential election has been particularly disruptive: for the first time since the establishment of the Fifth Republic, the candidate of the Center Right was unable to reach the second round. The runoff between centrist candidate Emmanuel Macron and far-right candidate Marine Le Pen in 2017 might signal a weakening of the Left–

Right divide and a realignment of the French political system around the issues of national identity, liberal economic policy, and European integration (Rispin 2021). As might already be clear, the case of France presents many challenges for election forecasters. Nonetheless, in the last 40 years, economists and political scientists have attempted to predict the outcome of French legislative and presidential contests.

As humorously mentioned by Mayer (2014, 329–331), “election forecasting at least serves the purpose of making political scientists more interesting conversationalists at cocktail parties [and] as cocktail party conversationalists, most political scientists need all the help they can get.” This is an enviable perk of the discipline, but obviously, and as Mayer (2014) recognizes, forecasting has produced multiple intellectual benefits. These benefits stem from the tension between generalizability and idiosyncrasy inherent to the task of model-building: on the one hand, predicting requires researchers to establish a theoretical framework that can be generalized to most, if not all, electoral competitions in modern (Western) democracies; on the other hand, forecasting also involves adjustments to specific political contexts which assist researchers in detecting national, regional, or local peculiarities. As Rosenstone (1983, 5) noted, “[t]he answer [about who will win] is not nearly as important as what the answering process leads us to think about.” Hence, prediction has scientific relevance only to the extent that it improves our understanding of the factors that influence voting (Campbell et al. 1960, 19; see also Kaplan 1940, 492). As Lewis-Beck and Bélanger (2012, 767) point out, forecasting “also enhances an appreciation of the impact of dynamic or uncertain factors, such as campaign characteristics and seemingly random events, which can explain why an outcome deviates from an otherwise well-grounded forecast.” I also like to think of election forecasting as a sort of litmus test for political and electoral studies *as a scientific endeavour* (see Mongrain 2018): if political scientists are unable to forecast election outcomes with a reasonable amount of success, who will? Testable predictions are not (and should not be) the only standard according to which ‘good’ science is judged, but it remains an important one.

This article provides a broad overview of the forecasting literature devoted to the case of France and addresses the different ways in which forecasters have dealt with the complexities of the French system.<sup>1</sup>

### **Bipartisan models in a multiparty system**

The origins of election forecasting can be found mostly in the development of popularity functions (see Auberger 2019) starting in the early 1970s. In the case of France, Lafay (1973) as well as Rosa and Amson (1976) can be credited to have given the *coup d'envoi* to such studies. Although most of the initial efforts remained at the stage of working papers, there was considerable interest in trying to explain support for the government as a function of macroeconomic variables in the early 1980s (for an early review, see Lafay 1985; for a more recent review see Dubois 2007). Development around the same time in American political science probably looms large over these first attempts: Mueller (1970) and Kramer (1971) were the first to introduce vote and popularity functions based on the 'downsian' idea of incumbent responsibility (see Nannestad and Paldam 1994) and there is little doubt that these first forays into the topic greatly influenced the work of French political scientists and economists.

#### *Responsibility attribution*

Vote-popularity (VP) functions have been the foundation of most work on election forecasting (Lewis-Beck and Stegmaier 2013). As such, a great number of predictive models take the government accountability hypothesis (Key 1966; Fiorina 1981) as their starting point: more specifically, incumbent vote shares are normally predicted using an objective indicator of economic conditions (e.g., unemployment or

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<sup>1</sup> Curiously, although research on election forecasting in France is now quite common, French political scientists have not played a leading role in the field—which is perhaps explained by the stronger valorisation of sociological/qualitative approaches in French political science compared to the discipline in the Anglo-Saxon academic world (Duchesne 2009; Grossman 2010). French economists are somewhat better represented in the field, thanks, in great part, to the contributions of Bruno Jérôme and Véronique Jérôme-Speziari. We can also note the work on election forecasting realized by the Laboratoire d'économie publique (LAEP) of Paris 1 Panthéon-Sorbonne (e.g., Dubois 2001; 2002; Jérôme et al. 1993). For a short and useful review of election forecasting in France, see Stegmaier and Adou 2022.

GDP growth) and a measure of incumbent support such as vote intentions or job approval rating. Evidently, in order to punish or reward the government for a faltering or booming economy and specific decisions or policies, voters must first be able to attribute responsibility to those in power. If voters believe that economic fluctuations and political events are caused by actors other than the government or by factors beyond its control, then the state of the economy and current affairs are not likely to guide their decisions. Responsibility attribution is one of the primary conditions for retrospective voting (Manin 1996, 231). When the government takes the form of a multiparty coalition, the attribution of blame or praise is less straightforward (Lewis-Beck 1986, 341; Lewis-Beck and Stegmaier 2013, 372; but see Dassonneville and Hooghe 2012). According to Anderson (2000, 168), “voters’ ability to express discontent with economic performance is enhanced when accountability is simple. Voters’ economic assessments have stronger effects on government support when it is clear who the target is, when the target is sizable, and when voters have only a limited number of viable alternatives to throw their support to.” To use Goldey and Williams’ (1983, 83) words, France could be described as a “multi-party country in bipolar disguise” (bipolarized pluralism) in which coalitions are normally formed on the basis of the Left–Right ideological divide. This means that responsibility is usually divided among multiple actors (that might even find themselves in open competition and disagreement during election campaigns) forming more or less temporary alliances. However, the confusion that could arise from coalition arrangements in the context of French politics should not be overstated: ultimately, the majoritarian system strongly limits coalition partners’ leverage. It is strongest before an election given the mainstream parties’ incentives to negotiate electoral agreements, but it immediately shrinks after coalition-building. As such, the main executive party is likely to be seen as the main responsible (Guinaudeau and Persico 2021).

The semi-presidential system of France also means that the executive power is shared between the president and the prime minister, which can further muddy the attribution of responsibility. This is particularly problematic in the context of ‘cohabitation’ when the offices of president and prime minister are

held by members of competing parties (Arzheimer and Evans 2010; Lewis-Beck 1997; Turgeon and Bélanger 2017). Power sharing between competing parties is, however, less likely since the adoption of the 'quinquennat' (i.e., the five-year presidential mandate) and the inversion of the electoral calendar (with legislative elections now being held only a few weeks after the presidential ones) in the early 2000s. Now that legislative and presidential elections are held concomitantly, the legislative contest tends to serve as a confirmation of the presidential outcome (Lewis-Beck et al. 2011, 8). The pre-eminence of presidential elections over legislative ones, which is part of a broader phenomenon of 'presidentialization' in France as well as several other European democracies (Poguntke and Webb 2005), has considerably strengthened the powers of the president. However, to use a slightly modified version of a well-known adage, "with great power comes great perceived responsibility." As stated by Grossman and Sauger (2017, 142—my translation), "[w]hen things go wrong, pointing the finger is easy! The president is clearly the only one to blame."

#### *Forecasting elections in France: the economy and the changing multipartism*

According to Lewis-Beck (2005, 159), "[o]utside of the US, forecasting from statistical models is most extensive in France." France is thus part of the very select club of countries (namely, the United States, Great Britain, and Germany) for which considerable efforts have been devoted to forecast election outcomes. To the best of my knowledge, Lewis-Beck (1985) is the first political scientist to have proposed a political-economy structural model to predict the results of French (legislative) elections under the Fifth Republic. This model was mostly an adaptation of the equations created by Lewis-Beck and Rice (1984a; 1984b) for American legislative and presidential elections in the early 1980s. Lewis-Beck's (1985) model included two variables, namely the president's approval rate measured by the French Institute of Public Opinion (IFOP) and the quarterly growth rate of the gross national product six months before the election. This two-variable equation was subsequently dubbed the "Iowa model" (see Cayrol et al. 1997). The Iowa

model—which is characterized by the juxtaposition of a popularity measure and an economic indicator—was then applied to several legislative and presidential elections in France (see, e.g., Bélanger et al. 2007; Fauvelle-Aymar and Lewis-Beck 1997; 2002; Lewis-Beck 1986; 1995; Lewis-Beck et al. 2008). However, it encountered mixed success. In 1993 and 1997, the Iowa model correctly predicted which of the two ideological branches—i.e., the Left or the Right—would prevail in the legislative contest, but proved unsuccessful at predicting the presidential winner. In 1995 and 2002, it wrongly predicted a narrow victory for the Socialist candidate Lionel Jospin and again overestimated the left-wing vote in 2007, giving Ségolène Royal the advantage over UMP candidate Nicolas Sarkozy.

French models, like models developed for other democracies, are greatly inspired by work on the American case. However, as mentioned by Bélanger and Trotter (2017, 820), “transferability of American forecasting models to apply to French elections has proven not to be so straightforward.” The semi-presidential system of France differs from the American political system in several respects (see Lewis-Beck 2005): among other things, one can note the existence of a varied partisan ‘supply’ that often leads to the formation of coalition governments, a multi-party system associated to a two-round first-past-the-post voting system, notable electoral and constitutional changes<sup>2</sup>, the possibility of “cohabitation” between a president and a prime minister from different parties as well as irregular election dates (at least for a time). The prevalence of strategic voting in the first round is a particularly interesting question for forecasters: for example, one candidate could receive more support than his or her record would lead us to expect (in other words, some voters might prefer that a candidate with an actual chance of winning reach the second round even though it is not their preferred choice to prevent another—less satisfying—candidate to win). However,

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<sup>2</sup> For example, these include: rules for accessing the second round of voting (revisions of the threshold), the abolishment of the electoral college after the 1958 presidential election, the use of a party-list proportional representation system for the 1986 legislative elections, the length of the presidential term (which was reduced from seven to five years starting in 2002), the inversion of the electoral calendar in 2002, and changes in the number of constituencies represented in Parliament.

strategic voting in two-round election systems has received little scholarly attention (see Blais and Loewen 2009).

At the beginning of the 1980s, Lewis-Beck and Bellucci (1982, 93) described research on economic voting in the United States as being “at flood tide,” given the abundance of studies on this topic. They noted, in contrast, the paucity of research on the subject outside the American context and therefore proposed to examine the impact of economic conditions on legislative contests in two multiparty systems, namely France and Italy. At this point, only one attempt (if we ignore Lafay’s 1973 working paper) had been made to study the relationship between the electoral performance of parties and the state of the economy in France. Largely inspired by Kramer’s (1971) pioneering work, this study, conducted by Rosa and Amson (1976), noted, among other things, the greater complexity of the French party system compared to that of the United States. The existence of a plurality of parties holding a diverse set of ideological positions not always easy to classify, as well as the more or less durable coalitions that resulted from the multipartisan nature of the system, made it less convenient to analyze the relationship between the economy and electoral support. Nevertheless, Rosa and Amson (1976, 1108—my translation) suggested that support for left-wing parties in legislative and constituent elections could be linked to “an attitude of distrust toward the economic management of incumbent governments.” Therefore, when the economy is doing well, the vote for left-wing parties should be *lower* and vice versa. Using data from 1920 to 1973, Rosa and Amson concluded that high inflation and unemployment rates tended to favour the Left, while an increase in real gross domestic product per capita had a detrimental impact on its electoral performance (Rosa and Amson 1976, 1110–1111). Following Rosa and Amson’s claim that the Left served as the rallying point for dissatisfied voters, Lewis-Beck and Bellucci (1982) hypothesized that the economic vote in favour of left-wing parties was in part a reflection of the French electorate’s belief in the greater competence of these parties to alleviate the burdens caused by the deterioration of the economy.

As in the United States, unfavorable economic conditions seemed to encourage French voters to cast a vote against the incumbents. In the case of France, however, the political offering is not limited to two parties. The French are governed by coalitions formed on the basis of ideological similarities. As Dubois (2007, 251) notes, the universe of French politics is divided in “two sensibilities” that took shape in the eighteenth century, the Left and the Right. Writing at a time when the Left tended to play the role of opposition while more centrist or conservative parties shared power, Lewis-Beck and Bellucci (1982, 104) observed that “French electors, when disgruntled over the economy, do not choose from six or seven equal, independent, ideologically indistinct political parties. Instead, the essential choice they face is a simple dichotomous one, between the coalition in power and the Left opposition.” However, the current situation is perhaps not as ‘simple’ anymore: the configuration of electoral competition has been described as increasingly “tripolar” or even “quadripolar” (Gougou and Persico 2017; Grunberg and Schweisguth 2003; Jérôme et al. 2022).

Between 1974 and 1981, bipolarisation in France reached its climax with a political configuration described by Duverger (1976) as a “bipolar quadrille” consisting of two roughly equal forces in opposition on the left (i.e., the Socialist Party and the Communist Party) and the right (i.e., the Gaullist RPR and the non-Gaullist UDF). The bipolar nature of the French political system has, however, been challenged since the 1980s. Institutional changes, the emergence of new issues, and electoral breakthroughs by smaller/marginal parties, such as Jean-Marie Le Pen’s National Front (FN), contributed to “a less symmetrical, more complex and fluid system” (Marthaler 2020, 84; see also Cole 2003). Grunberg and Schweisguth (2003) have made the argument that the far right, mainly represented by the *frontiste* movement, emerged as an ideologically distinct and pervasive force in French politics during the 1990s, which created a third pole (‘tripartition’) with its very own and well-defined electorate. Since Emmanuel Macron’s victory in the 2017 presidential election, the tripartition hypothesis has become difficult to defend for at least two reasons. First, the political center, a historically costly position in terms of electoral support,



has found a new and successful home in Macron's On the Move (*En Marche!*) party—although it remains to be seen if the 'rebirth' of the center will last. Second, the far-right candidate of the National Front (renamed National Rally in 2018) was able to reach the second round twice in the last two decades (in 2002 under the leadership of Jean-Marie Le Pen and in 2017 with its actual leader Marine Le Pen), a clear indication of the party's entrenchment and influence.

Traditional parties on the right and on the left are now faced with significant competition from the center and the far right: neither of the candidates of the two traditional governing parties gathered enough support to reach the second round of the 2017 presidential election, an unprecedented event that could indicate a complete or partial reshuffle of the French party system in the years to come (Durovic 2019). The National Rally, a populist, ethno-nationalist and anti-EU party, has grown from being a fringe formation to being a key and influential political actor, a development that can in part be attributed to the party's strategy of *dédiabolisation* ('de-demonisation') (Ivaldi 2016). The political center found a new leader in Emmanuel Macron whose middle-of-the-road program ("beyond left and right") convinced enough voters in 2017 to give him the presidency and a majority of seats in the National Assembly. The disruptive nature of the 2017 elections can also be seen in the very weak showing of the Socialist Party (which is currently trailing in vote intention polls of the upcoming 2022 election) and a very strong showing of the radical left (La France insoumise of Jean-Luc Mélenchon) as well as the enormous amount of abstentions and spoiled ballots, a clear sign of protest indicating that neither Le Pen nor Macron were perceived as viable options by a considerable proportion of the electorate (Hewlett 2017). It is still too soon, however, to sound the death knell of the Left–Right cleavage and it is anyway highly unlikely that this 'fracturing force' in the politics of France (as elsewhere) would simply vanish to be replaced by something entirely new (see Lewis-Beck et al. 2012; Nadeau et al. 2012). As mentioned by Nadeau et al. (2012, 142), "[t]he centrality and importance of [the Left–Right] ideology cannot be underestimated when it comes to understanding the political behaviour of French voters."

## Challenges

The existence of multiple political 'blocs' getting a significant amount of support during French elections means that the typical bipartisan models that have been created for American elections, in which Democrats and Republicans normally gather the vast majority of votes, are not necessarily the most appropriate to give a full picture of candidates' and parties' electoral performance during legislative and presidential contests in France. This organization of parties into blocs also has some methodological implications. As stated by Arzheimer and Evans (2010, 20), "[f]rom the Anglo-Saxon roots of vote forecasting, the zero-sum incumbent/opposition approach, which lends itself well to simple linear regression modelling, is inapplicable to a model which wishes to go beyond a simple bloc prediction or restrict itself to a single party prediction." Most of the previously discussed models produce forecasts for the Left and the Right or the opposition and the incumbent. However, approaches based upon the two-party adversarial models, which is certainly well-suited to the bipartisan nature of American politics, are not necessarily representative of the French party system. Estimations based on a two-bloc 'bipolar' strategy are perhaps even more problematic today as France has experienced a resurgence of the political center with the election of Emmanuel Macron, the candidate of *La République En Marche!*, a catch-all party created shortly before the 2017 campaign (Grossman and Guinaudeau 2022, 55). As stated by Arzheimer and Evans (2010, 19), "[m]ultiparty systems with more complex interrelationships between party vote shares have remained a minority field in forecasting work, and certainly theoretical and methodological advances in forecasting overall vote outcomes are much less common." For this reason, Arzheimer and Evans (2010) have proposed a seemingly unrelated regressions (SUR) model to predict the first-round vote share of five political groups in legislative elections (i.e., the Communists, the Moderate Left, the Moderate Right, the Extreme Right, and others) at the department level as well as the percentage of abstainers: this approach takes into account the fact that the vote for one party is not completely independent of the vote for other parties. The error terms in a set of equations predicting support for different parties in an election are almost

certainly correlated. The SUR method offers a worthy solution to the problems that would arise from the estimation of multiple and distinct equations. Since Arzheimer and Evans (2010), multiparty equation systems have also been proposed for British and German elections (see Jérôme et al. 2017; Mongrain 2021; Quinlan et al. 2022). Jérôme et al. (2022) as well as Jérôme-Speziari and Bélanger (2022) have recently applied this approach to the 2022 French presidential elections. Arzheimer and Evans' (2010) model also exposes one of the difficulties of the French system for forecasters, namely the organization of two rounds of elections. Forecasters can estimate the outcome of only one of the two rounds, create separate equations for each round, or use first-round estimates to obtain predictions for the second round through a swing ratio or transfer function (see Jérôme and Jérôme-Speziari 2012a for an example).

Another important problem for forecasters interested by the case of France is the small number of observation points available at the national level—a common issue for forecasters (see, e.g., Bellucci 2010; Turgeon and Rennó 2012). Since the establishment of the Fifth Republic in 1958, a very small number of elections have been contested (this is particularly true for presidential elections, which were held every seven years before 2002). To overcome this difficulty, a number of solutions have been proposed through the years. For example, Lewis-Beck and Rice (1992; see also Lewis-Beck 1991) combined presidential and legislative elections in a single model.<sup>3</sup> They argued that this was an appropriate strategy since voters' motivations would be similar for both types of elections. Other scholars have chosen to use pooled time-series or panel data, with French metropolitan areas, departments, or regions as their base units (Lafay et al. 2007). For example, Jérôme, Jérôme-Speziari, and Lewis-Beck, building on the work of Lafay (1993), have created predictive models with French metropolitan areas as their base units (see Jérôme and Jérôme-Speziari 2004a; Jérôme et al. 1999; 2003). Dubois (2002) has suggested a forecasting model by department for presidential elections, a practice that was later taken up by Auberger (2008a; 2010).

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<sup>3</sup> Unlike American equations, this model aimed to predict the opposition vote. Despite this important difference, the general structure of the model was not very innovative: it was a classic economic-popularity equation with the addition of a partisan/ideological dimension (Lewis-Beck and Rice 1992, 127–129).

Auberger and Dubois (2003; 2005) and Dubois and Fauvelle-Aymar (2004) have also experimented with departmental data for legislative elections. Some studies offer two or three different types of models side by side—national, regional, departmental (see, e.g., Dubois and Fauvelle-Aymar 2004; Jérôme and Jérôme-Speziari 2010; Lewis-Beck et al. 2008).

Among the most recent disaggregated models are those of Foucault (2012a; 2012b) and Foucault and Nadeau (2012) for the 2012 elections. Using the metropolitan department as the unit of analysis, Foucault (2012a, 70) had a total of 576 observations over the 1986–2007 period to create a predictive equation for the legislative vote—in comparison, even if one could assemble all of the national legislative elections that have taken place since the Second Republic (1848–), only about 40 cases would be available. Foucault and Nadeau (2012) used a similar approach for the 2012 presidential election. With 480 observations over the 1981–2007 period, they posited that the vote for the right-wing candidate in the second round was mainly a function of his popularity among the electorate and four measures recorded at the local level, namely the growth in the unemployment rate, the vote received in the last presidential election, and the difference between the level of support obtained in the second round in the department and the national score in the last and penultimate presidential elections.

Jérôme and Jérôme-Speziari (2012a; 2012b) have also created a predictive model for the 2012 French presidential election: unlike Foucault and Nadeau (2012), their model is built on regional rather than departmental data and is based on three distinct equations, one for the first round, one for the second round, and finally one for the far-right National Front. Jérôme and Jérôme-Speziari's (2012a) main equation provides an estimate of the score of candidates ideologically close to the parliamentary majority based on all presidential elections since 1974. This score is interpreted as the result of economic and institutional variables as well as medium- to long-term partisan trends. More specifically, the performance of the incumbents will depend on classic measures such as the evolution of unemployment, the president's popularity, performance in the last legislative election, the ideological affiliation of the parliamentary

majority, and the effect of cohabitation, but also on indicators related to the parties' (geographical) areas of influence or strength. The assessment of FN support is a legacy of the 2002 campaign. As Bélanger et al. (2007—my translation) point out, “[n]o one—the pollsters, the politicians, the modellers, the astrologers—had predicted that [FN leader] Jean-Marie Le Pen would be in the second round of the 2002 presidential election.” Puzzled by the unexpected performance of Le Pen in 2002 and aware of the “electoral nuisance” exercised by the extreme right (which appears to have progressively drifted into the political mainstream in the last two decades), some researchers have built specific equations for the National Front in order to reduce the uncertainty of their predictions (e.g., Auberger 2008b; Evans and Ivaldi 2008; 2012a; 2012b; Jérôme and Jérôme-Speziari 2003; 2004b; 2010).

It is also interesting to note that vote intention polls are not among the main features of French forecasting models. Availability issues are probably the main culprit. Several models for presidential and legislative contests rely on (parties' or leaders') popularity or approval ratings (see, e.g., Facchini 2022; Bélanger et al. 2022), but the inclusion of vote intentions is relatively rare. Vote intentions are a common ingredient of prediction models—models combining both vote intentions *and* economic or political data form their very own subtype of models, namely, ‘synthetic’ models (see, e.g., Lewis-Beck et al. 2015a; 2015b; Lewis-Beck and Dassonneville 2016)—but, above data availability issues, there is perhaps a desire to leave vote intentions out of political-economy models (see Mongrain 2019): horse-race polls come with their own error and may be of varying quality (not all polls are created equal) and, ultimately, they contribute little to the “explanation” part of the forecasting exercise.

Finally, taking into account the importance of candidates' character can also prove challenging. The political system of France has been described as highly personalized (Campus 2010; Gaffney 2010; Nadeau et al. 2012). Open primaries—a relatively new feature of the candidate selection process in France—contribute to the institutionalization of personalization (Lefebvre and Treille 2017; see also Rahat and Sheafer 2007). Leadership-oriented presidential campaigns have become the norm since the

replacement of indirect suffrage by the direct election of the president in 1962. Charles de Gaulle believed that the exercise of power required a strong personality, an individual of great character that would embody “the spirit of the nation” (Alibert-Fabre 1990; see also Clift 2008). The Gaullian conception of the president’s role has durably influenced how executive power is perceived by voters and candidates. The personality-centered aspect of French politics has led Nadeau et al. (2012) to propose a prospective-comparative approach based on candidates’ image, namely their perceived strength, honesty, empathy, competence, and ‘presidential character.’ However, citizens’ evaluations of presidential candidates were only used by Nadeau et al. (2012) to contextualize forecasts from a parsimonious retrospective equation based on voters’ assessments of the incumbent’s record. Building a model assembling information from candidates’ profiles over a sufficiently long period of time is probably not feasible in light of data availability issues.

## **Conclusion**

Election forecasting is a difficult endeavour. As we have seen, the bipolarized pluralism of the French political system has recently gave way to a more fragmented landscape with mainstream parties now sharing the electorate with a new political player, the LREM of incumbent President Emmanuel Macron, and the National Rally of Marine Le Pen, which has progressively strengthen its position as an unavoidable force in French politics. As mentioned by Evans (2020, 26), “[i]t is too early to say whether this renaissance of the centre represents a temporary realignment or a longer-lived realignment.” After all, the LREM has only competed in a single election. One thing is sure however, scholars can no longer take for granted the ‘hyper-alternance’ between the Left and the Right. Macron’s candidacy and victory represent a major disturbance that could usher in radical transformations and new polarizations, but its long-term impact remains uncertain. Uncertainty is the enemy of predictability and the task that lies ahead of forecasters is almost certainly complicated by the most recent developments in French politics.

Nevertheless, election forecasting in France could benefit from yet unexploited or rarely used approaches that have been tested elsewhere, namely citizens' forecasts (the 'wisdom of crowds' principle), election stock markets (for reviews, see Graefe 2017; Murr 2017), and the combination of various forecasting methods (see Graefe 2021). Citizen forecasting relies on the aggregation of voters' expectations about election outcomes. This approach has proven quite successful in the US and the UK (see, e.g., Boon 2012; Graefe 2014; Lewis-Beck and Stegmaier 2011; Murr 2011; 2015; 2016; Murr et al. 2021) and it will be formally put to the test for the 2022 French presidential election (see Dufresne et al. 2022). Most studies explain the quality of citizens' forecasts by the 'miracle of aggregation' theorem, which states that errors in individuals' judgments tend to cancel out in the aggregate. In election markets, such as the Iowa Electronic Markets (IEM), participants (traders) invest real money on candidates or parties according to their anticipated performance (Berg et al. 2008; Forsythe et al. 1992). The value of each competitor's share can then be converted into a vote or seat projection. Traders seek to predict how citizens will vote on election day and are motivated to make accurate forecasts due to a financial incentive. Their individual preferences are, at least in theory, irrelevant. Markets (ran for academic purposes) represent a future avenue of research for French elections although this approach is not without its challenges (see Berg et al. 2022). It is worth noting, however, that wagers on French election outcomes are not completely unheard of as private online bookmakers such as Betfair are already exploiting the election betting industry including bets on French elections. Finally, combining forecasts from multiple approaches (has is done by the PollyVote project) tend to demonstrate that the whole is greater than the sum of its parts (for the 2022 French presidential election, see Graefe 2022).

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