French Polls and the Aftermath of 2002

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In the recent presidential campaign of 2007, French pollsters were under close scrutiny. Their spectacular failure to predict the leading candidates in the first round of the presidential election of 2002 had been considered instrumental in the qualification of farright nationalist Jean-Marie Le Pen for the second round of the two-round election. According to results presented in Blais (2004), reverse strategic voting—based on the certainty that Lionel Jospin and Jacques Chirac would make it to the second round—cost Jospin about 18 percent of his support and Chirac about 15 percent, and was instrumental in allowing Le Pen make it to the second round.

How could such a situation occur? A number of reasons were brought forward in panels, conferences and articles (Durand, Blais and Larochelle, 2004). Estimating extremes, particularly the far right, has been difficult in many countries, especially in France. The samples showed a substantial underestimation of people who admitted having voted for the far right in previous elections. However, French pollsters were criticized for their practice of adjusting their estimates based on the "professional experience of the pollster." In short, they produced a number of estimates based on respondents' recall of vote in previous elections, likelihood of voting and certainty of choice. They then chose the most likely estimate for each candidate and would even modify the chosen estimates in order to smooth out the evolution of estimates when they felt there was too much movement. With such methods, it is likely that if estimates put LePen ahead of Jospin, they were deemed improbable and discarded or "smoothed out" accordingly.

What about 2007?

In the months preceding the first round of the election on April 22, the French press and pollsters' Web sites were full of articles explaining the survey method, the margin of error and warning people that polls were not predictions but mere portraits of the opinion at a single point in time. Articles also pointed to the impact on voters of the 2002 "catastrophe." But what about the impact of 2002 on pollsters? This article asks three questions. Did the pollsters fare better in 2007 than in 2002? Are there indications that at least some pollsters modified their methods following 2002? And what was the role of the Survey Commission (Commission des sondages), which has the legal mandate to scrutinize electoral polls in France?

Did the pollsters fare better in 2007 than in 2002?

A number of criteria can help determine how well pollsters fared. Table 1 shows different estimates of poll accuracy for the leading candidates (three in 2002 and four in 2007). If one first compares the mean estimates of the last poll conducted by the six different

pollsters, it may be concluded that 2007 was no better than 2002; on the contrary, in fact. While in 2002, only Le Pen's share was poorly estimated (minus 4 points), in 2007, two of the main candidates, Sarkozy and Le Pen, were poorly estimated, with Le Pen's share this time grossly overestimated (plus 3.8) and Sarkozy's underestimated by 3.3 points.

Table 1
Estimates of Poll Accuracy in the First Round of French Presidential Elections of 2002 and 2007

2007						
	Election Result	Last published poll - 6 pollsters				All polls from March 1
		Mean estimate (diff. with result)	Best poll estimate (diff. with result)	Worst poll estimate (diff. with result)	Number of similar estimates n (est.)	Difference between pollsters F(p)
Sarkozy	31.2	27.9 (-3.3)	30.0 (-1.2)	26.5 (-4.7)	3 (28)	18.5 (.00)
Royal	25.9	23.8 (-2.1)	25.5 (-0.4)	22.5 (-3.4)	2 (24)	4.4 (.00)
Bayrou	18.6	18.2 (-0.4)	19.0 (+0.4)	16.0 (-2.6)	0	0.8 (.54)
Le Pen	10.4	14.2 (+3.8)	13.0 (+2.6)	16.5 (+6.1)	3 (14)	9.4 (.00)
2002						
Chirac	19.9	19.7 (-0.2)	20.0 (+0.1)	19 (-0.9)	3 (20), 2 (19.5)	1.44 (.23)
Jospin	16.2	17.8 (+1.6)	16.5 (+0.3)	18 (+1.8)	5 (18)	0.92 (.48)
Le Pen	16.9	12.9 (-4.0)	14.0 (-2.9)	10 (-6.9)	3 (14)	1.2 (.33)

If one looks at the best and worst estimates among these last polls, a similar conclusion is reached. The best poll was 2.6 points away from the result for Le Pen in 2007 while it was 2.9 points away (in the opposite direction) in 2002. The worst poll was 6.1 points away from the results for Le Pen in 2007 and 6.9 points in 2002. Unlike 2002, however, the worst poll estimate for each of the other main candidates were also quite inaccurate (4.7 points for Sarkozy, 3.4 points for Royal and 2.6 points for Bayrou). Based on these figures, one must conclude that the main improvement in 2007 was the fact that five out of six pollsters correctly predicted the order of finish, contrary to 2002 where no pollster did so. However, this is closely linked to the fact that the differences in share of the vote between the leading candidate and the rest were larger. Le Pen was as badly estimated in 2007 as in 2002, but in the opposite direction—as if, shaken by their underestimation of 2002, the pollsters had this time used their highest figures for Le Pen.

As for the second round of the election, comparing it with 2002 is impossible, since at that time pollsters had only asked respondents their preference between Chirac and Jospin before the first round. Very few polls were published between the two rounds, and Chirac's lead was clear (around 80 percent). In 2007, learning from their mistake of 2002, and encouraged to do so by the Survey Commission, pollsters made sure to ask voter intention not only for the two leading candidates but also between Bayrou, the third candidate, and Sarkozy or Royal, when Bayrou was rather high in the polls.

Analysis of the polls carried from January 1 shows that there was no change in voter intention for the duo Sarkozy-Royal from the beginning of February. The time-series analysis projected Sarkozy at 53.4 percent, and he received 53.1 percent. In circumstances where there is no change, it seems rather easy to predict the results from a high number of polls. However, the two last polls published on the Internet on May 4, minutes before the midnight ban, put Sarkozy at 55 percent, leading voters to think that an upward trend for Sarkozy had occurred after the debate of May 2. These last polls proved to be inaccurate and were the worst of all the polls published between the two rounds.

Did the methods change?

After the catastrophe of 2002, it would be reasonable to think that, as was the case for the 1992 British election (Curtice, 1997), pollsters would adjust their methods, perhaps with the help of statisticians and academics. Many meetings and discussions were held, but did methods really change?

One way of looking at pollsters' methods is indirect. Since it is statistically impossible that estimates produced by surveys all be the same, variance in estimates can be considered a good indication that published figures are derived exclusively from the sampling process and have not been tempered with. Table 1 shows that in 2002, five out of six estimates for Jospin were the same at 18 percent; for Chirac, three were at 20 percent and two were at 19.5 percent; and for Le Pen, three were at 14 percent. In 2007, there was less unanimity, and yet three estimates were the same for Sarkozy and Le Pen, and two were the same for Royal.

The last column of Table 1 gives the value and significance of F tests of the difference between the pollsters' estimates from March 1 to the day before election. In 2002, there was no significant difference between the pollsters' estimates for the three main candidates (Anovas of 1.44, .92 and 1.2). On the other hand, in 2007, there was a significant difference between pollsters' estimates for three leading candidates: Sarkozy (F=18.5), Royal (F=4.4) and Le Pen (F=6.8). What does this mean? While one may think normal not to have significant differences between pollsters, in this case the difference is good news in a way because it could mean that pollsters were publishing their own figures without "aligning" with each other. It could also mean that their methods differ, since they produced different figures. For the second round, no significant differences appeared between pollsters except for one pollster, who tended to put Sarkozy systematically almost one point higher than the others.

Finally, since the French law makes it compulsory for pollsters to provide the Survey Commission with detailed information on how their polls are conducted and their estimates produced, it is also possible to examine what pollsters reveal about their methods. A comparison of the information provided by pollsters from 2002 and 2007 indicates that methods did not change much. The same pollsters used the same sentences to describe their methods and appeared to adjust the data in the same way. The main difference was that pollsters no longer said they made adjustments based on their "professional experience."

The methods used by pollsters seem to vary mostly in the number and type of previous elections they used to adjust and produce estimates. For the first round of the 2007 presidential election, while all the pollsters used the first round of the 2002 election, some also used the first round of the 2002 legislative election, the first or second round of the 2004 regional election, and the 2005 referendum. For the second round, obviously, first-round "recall" (i.e., voters' recollection of how they voted in the first round) allowed for a good adjustment. Only one pollster also used other elections, and two used likelihood of vote and certainty of choice.

An idea of the difficulty faced by French pollsters can be gained by looking at how close recollection of vote for previous elections was to the actual vote. The best recall should be the one taken on election day; people should recall well how they voted a few hours before. However, the recollection of LePen's vote—his actual election result was 10.5 percent—varied from 4.5 percent to 7.1 percent for three pollsters for which data is available, and the weights applied to these respondents varied between 1.37 and 2.31. One week later, recollections varied from 3.3 percent to 5.6 percent. This indicates that the problem is not so much with reliable recollection but most likely either with sampling (probability sampling with quotas, polls carried over only one to two days), with non-response (samples appear to substantially under-represent the less educated), or with concealment of far-right vote.

What about the Survey Commission?

The Survey Commission is an interesting feature of French law governing political polls. The Commission can intervene whenever it deems it is relevant to do so. It may issue warnings concerning specific published polls, it must quickly examine and respond to complaints about polls, and its external experts examine all information filed by pollsters to see if their methods and published estimates are correct.

The Commission issued a number of press releases regarding its role, and warning about margin of error and using necessary caution to when interpreting results. It also required pollsters to keep their published figures within the range of the different estimates produced by the adjustments they were using.

For the first time since its establishment, the Commission issued a public warning regarding the figures published by one pollster on March 8 and March 15, stating that it had reservations about the way the adjustments were made and about the stated significance of the one-point differences in voter intention obtained by the leading candidates. However, the Commission did not provide specifics about what was problematic in the adjustments used by the pollster and about the figures for which it had reservations. This warning likely had an impact, however, sending a clear message to pollsters that "messing with data" would not be accepted.

Conclusion

The shock of 2002 may have caused French pollsters to question their methods, but apparently not seriously enough for them to make substantial changes. As a result, they did not fare better in 2007 than in 2002; however, since the consequences were much less catastrophic, the media did not raise the issue. Varying the basis used to produce estimates from poll to poll is not an acceptable scientific method and prevents anybody, including the pollsters themselves, from improving and systematizing their methods.

However, it is somewhat easier to determine how French pollsters work because French law requires them to file methodological information that is, in part, publicly available and scrutinized by experts. In a context of increasing globalization, where at least some French pollsters are members of international groups, it is unlikely that similar methods are not be used elsewhere.

Finally, pollsters are under great pressure by the public and the media to produce reliable and accurate figures within hours. Furthermore, they compete with each other on who will have "the" best figures, even though this notion is nonsense given existing margins of error and the conditions under which such polls are conducted. At the same time, conducting reliable surveys appears to be increasingly difficult, with technological change—mobile and IP phones—and the rise of non response.

It is tempting to suggest that specific sessions in Wapor, Aapor and other organizations interested in methodology address the problem of estimating voter intention in different situations. Researchers tend to criticize the methods used by pollsters but abandon them in the search for solutions. Advances in this field requires good cooperation between pollsters and academics.

References:

¹ One interesting exception is a recent article by Bachelet (2007), who devised a new method to estimate the vote for far-right candidates in France using the recall of preceding vote and estimates of the behavior of non-responders and concealment of respondents. This method gives almost perfect estimates of the vote for LePen in 2002 and 2007. An attempt to use it for the Quebec election of 2007, however, did not bring satisfactory results. This points to the need for further refinement.

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