

# Polls at the subnational level: The Canadian case

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# Plan

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- Specificities relative to the subnational level
- Specificities of the Canadian situation
- What polls tell us about the interinfluences of events at the subnational level and related methodological considerations
  - ▶ Canadian federal elections
  - ▶ Quebec provincial elections
- Discussion
- Conclusion



# Polls at the subnational level

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- Participation in elections may differ by level in terms of
  - ▶ Level of participation
  - ▶ Composition of the electorate
- The smaller the population, the less money available for polls, which often means
  - ▶ Less polls overall
  - ▶ A less rigorous methodology
  - ▶ Small sample sizes, particularly in the subnational part of national polls and therefore a large margin of error (when it is appropriate to calculate one).



# Specificities of the Canadian case

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- The relative force of the **five** different parties varies substantially by region.
- One party is present only in a part of the country (Bloc québécois in Quebec).
- Three parties present in most regions.
- One-round multinominal plurality mode means that substantial strategic voting may be at play in some regions.
- The language question.



# Data

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- Polls conducted by private pollsters in the 3 Canadian and 3 Quebec most recent elections:
  - ▶ Canada: 2005-2006, 2008, 2011
  - ▶ Quebec: 2003, 2007, 2008
- Time-series arima models of voting intention when the number of polls is sufficient, or else regression models.



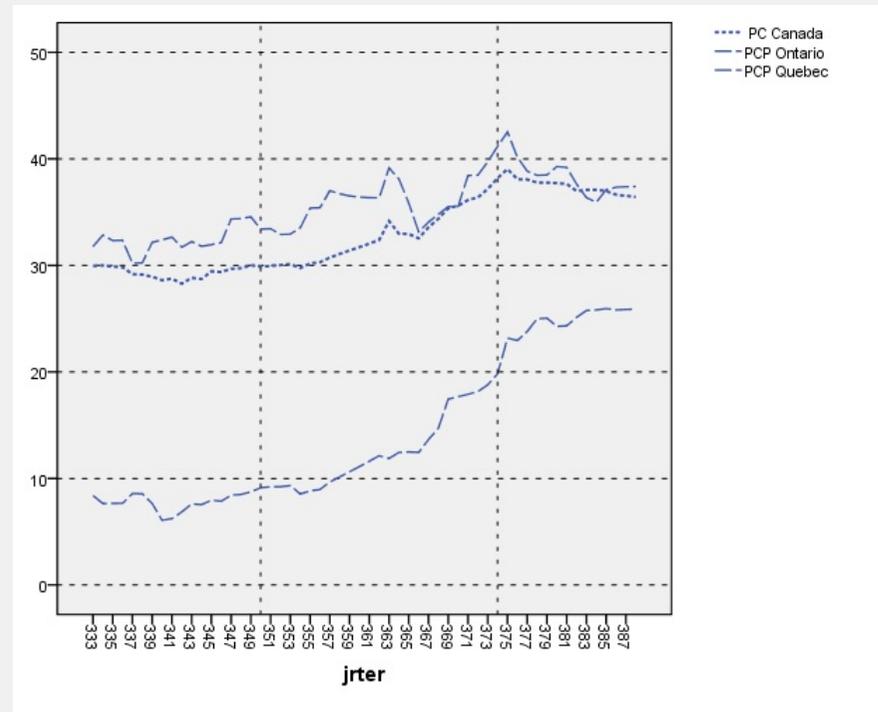
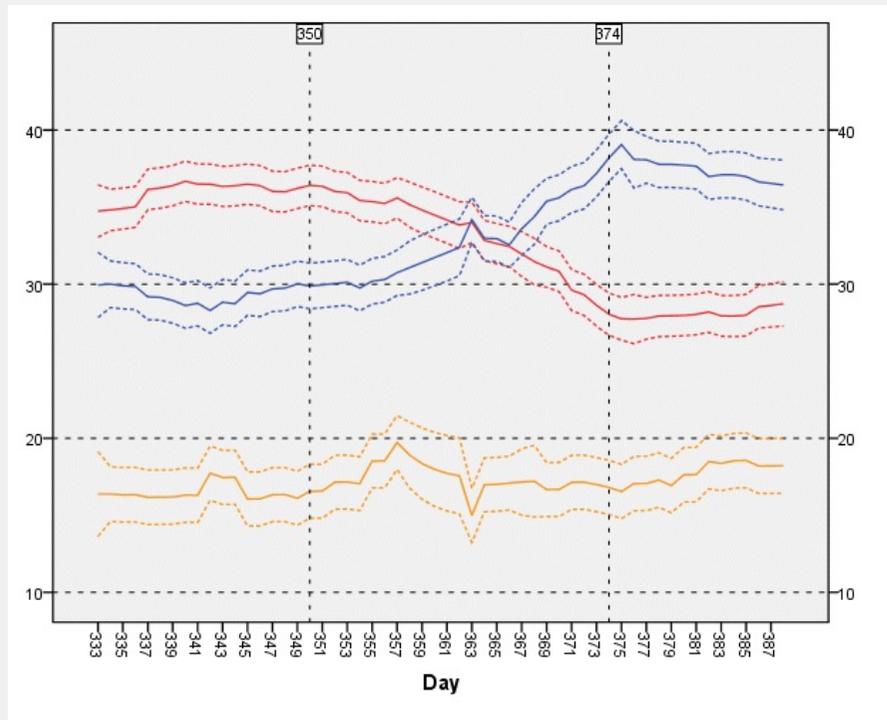
# Research questions

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- What do polls at the subnational level tell us about the evolution of voting intentions AND the possible influence of polls.
- What are the specific methodological problems that we face when using polls at the subnational level? Are there ways to improve the situation?



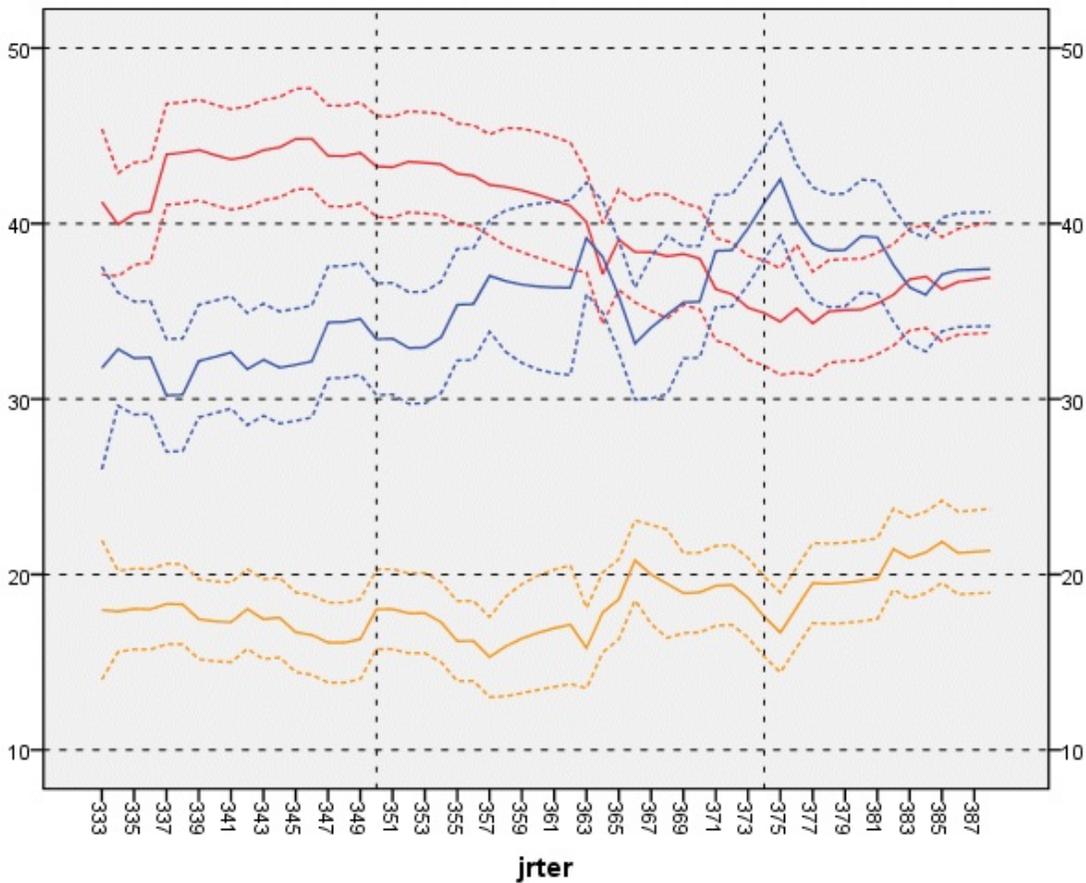
# Canada 2005-2006 (Jan. 23)



Results: CP: 37.6%;  
LPC: 26.3%; NDP: 18.2%



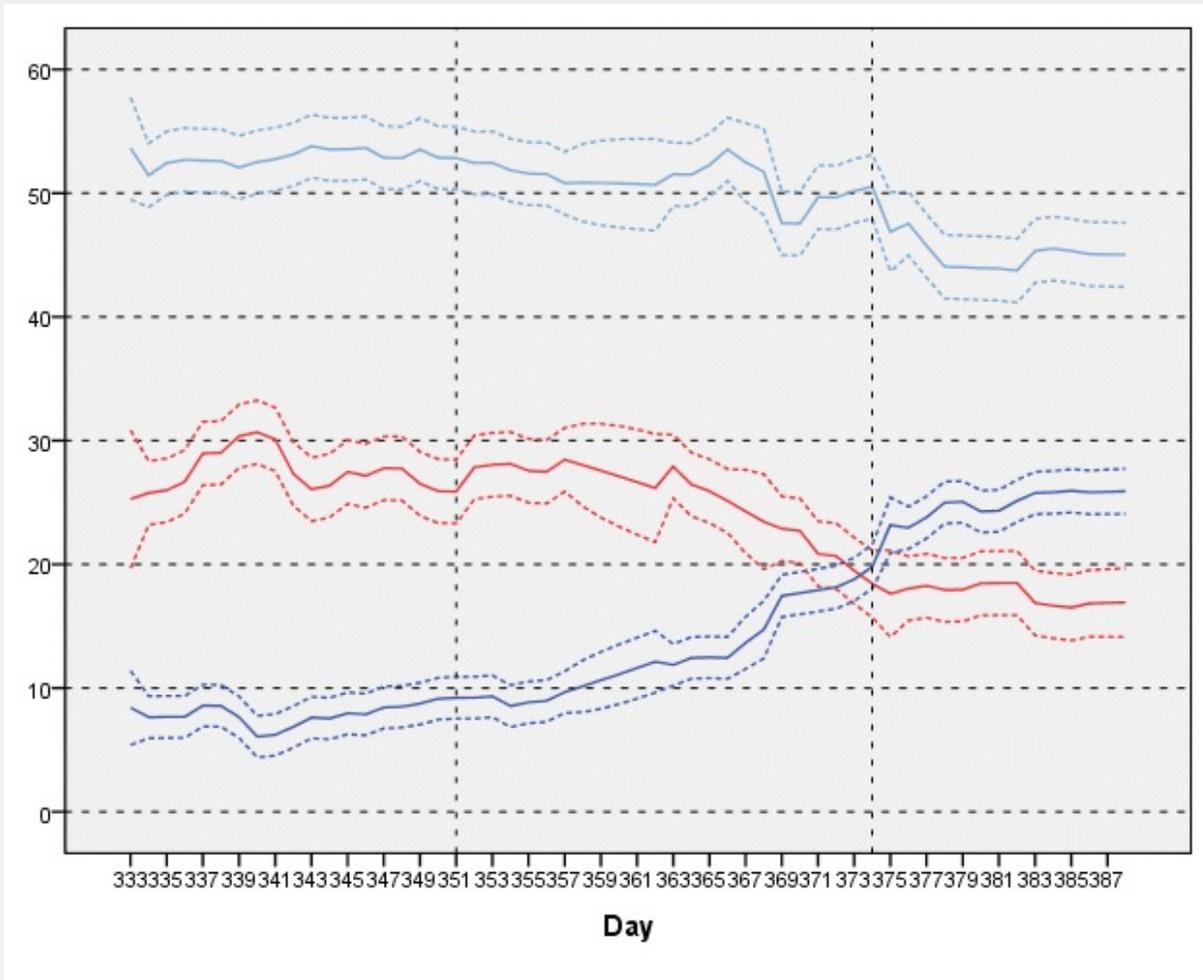
# Ontario 2005-2006 (Jan 23)



Results:  
CP: 35.1%  
**LPC: 39.9%**  
NDP: 19.4%



# Quebec 2005-2006 (Jan 23)



Results:  
BQ: 42%  
CP: 25%  
LPC: 21%



# Which means...

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- The polls of the Canadian election of 2005-2006 tell a story where:
  - ▶ Change in voting intentions in Quebec follows changes that started in Ontario. It is only when it became possible that the Conservative be elected that Quebec voting intentions started to move towards the Conservatives.
  - ▶ There is a possible influence of polls at the national level on voting intentions at the subnational level or across subnational levels.



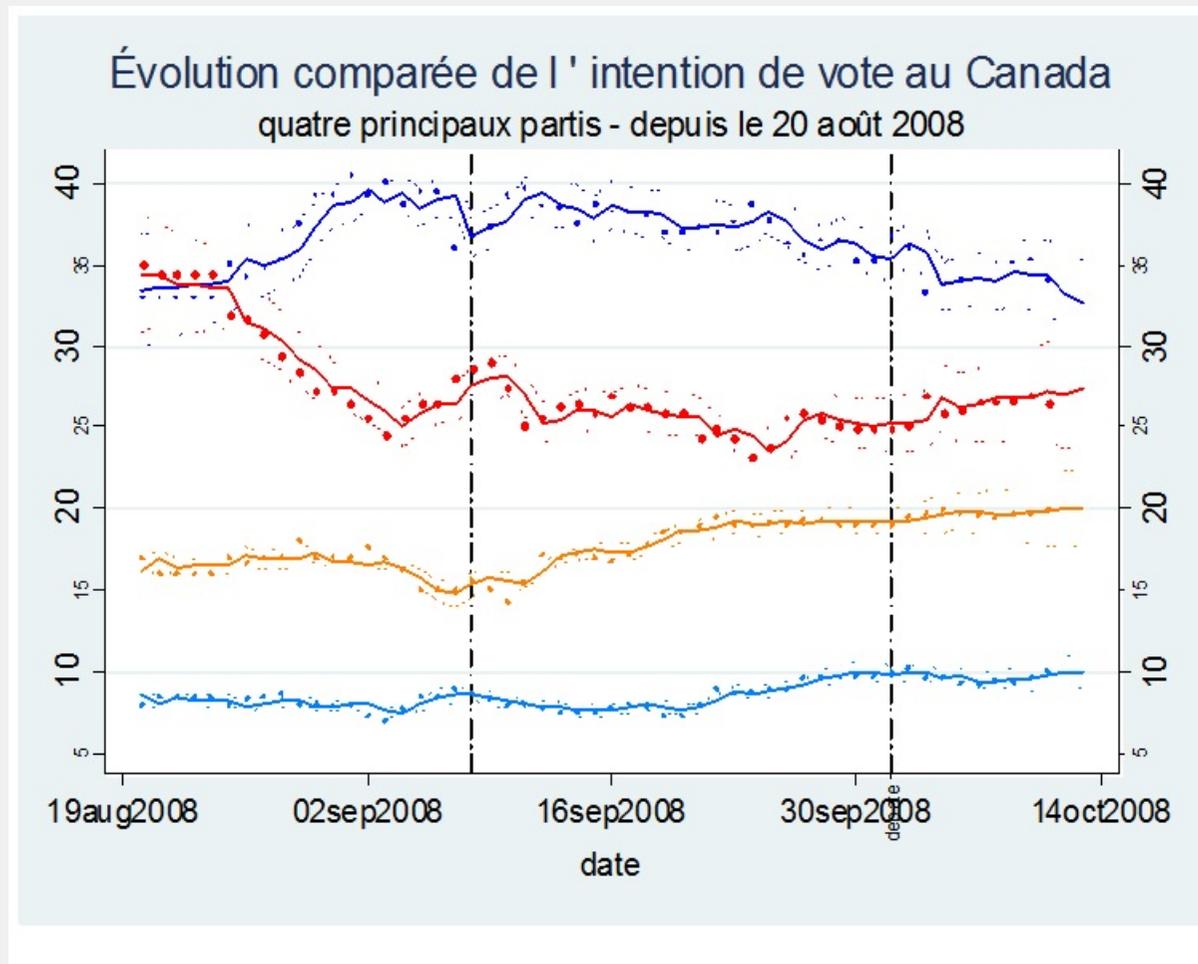
# At the methodological level

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- One pollster differed from all the others with a better estimation of vote intention for the Liberal party. He used an open-ended preference question.
- The time-series are weighted by sample size.
  - ▶ They underestimate the Liberals at all three levels.
  - ▶ They overestimate the Bloc québécois in Quebec.



# Canada 2008 (Oct. 14)

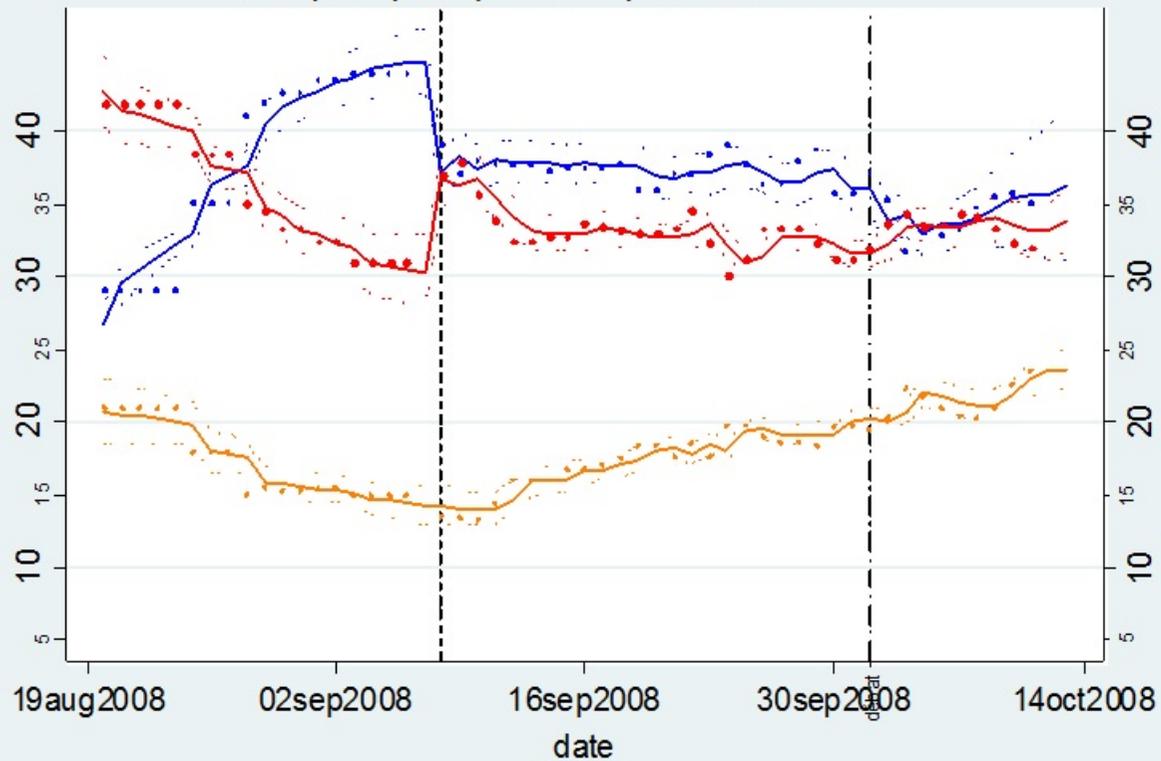


Results:  
**CP: 37.6%**  
LPC: 26.2%  
NDP: 18.2%  
BQ: 10.0%



# Ontario 2008 (Oct. 14)

Évolution comparée de l'intention de vote en Ontario  
trois principaux partis - depuis le 20 août 2008

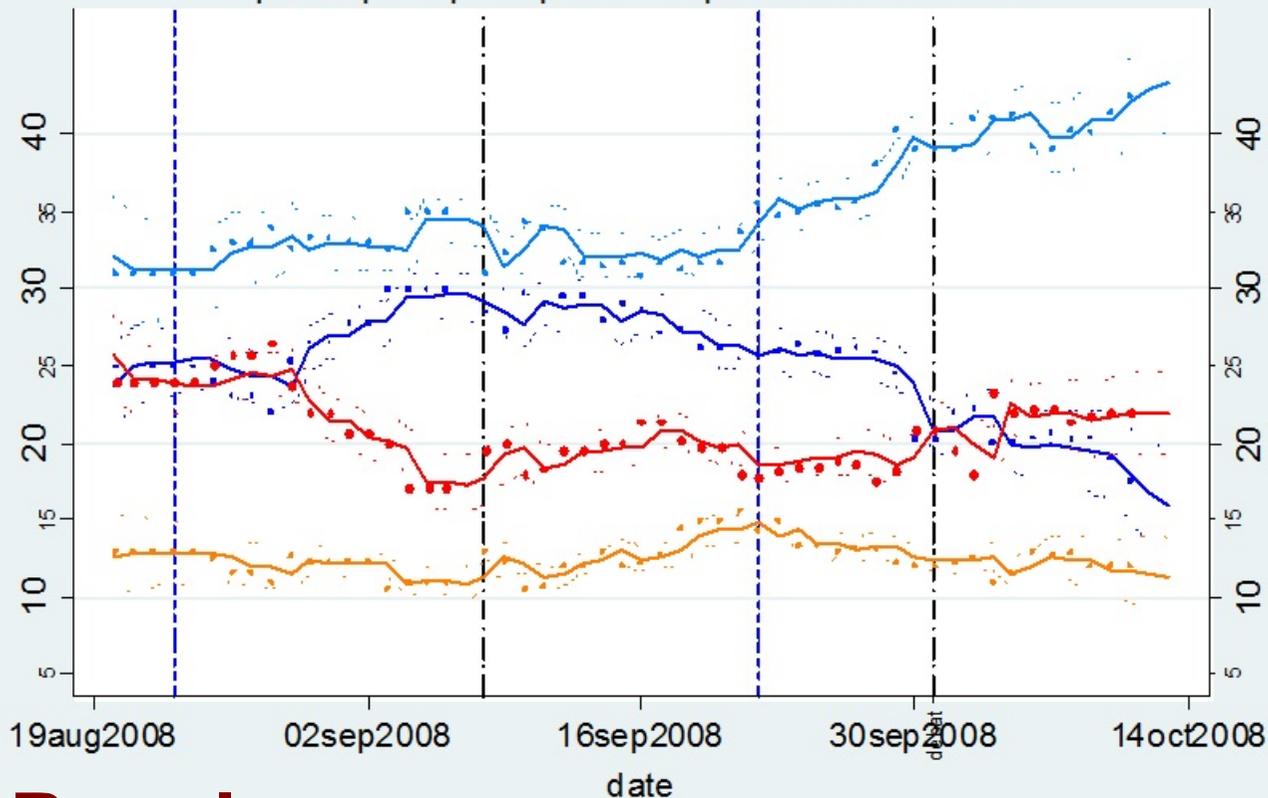


Results:  
CP: 39.2%  
CLP: 33.8%  
NDP: 18.2%



# Quebec 2008 (Oct. 14)

Évolution comparée de l'intention de vote au Québec  
quatre principaux partis - depuis le 20 août 2008



Results:

**BQ: 38.1%**

**LPC: 23.7%**

**CP: 21.7%**

**NDP: 12.2%**

**Panel:**

**BQ: 40.5%; LPC: 22.6%; CP: 19.4%; NDP: 13.7%**



# Which means...

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- There is substantial movement in Quebec, but almost no serious movement in Ontario after the start of the campaign, except for the rise of the NDP.
- Voting intention at the national level are somewhat dependent upon movement in Quebec.



# At the methodological level...

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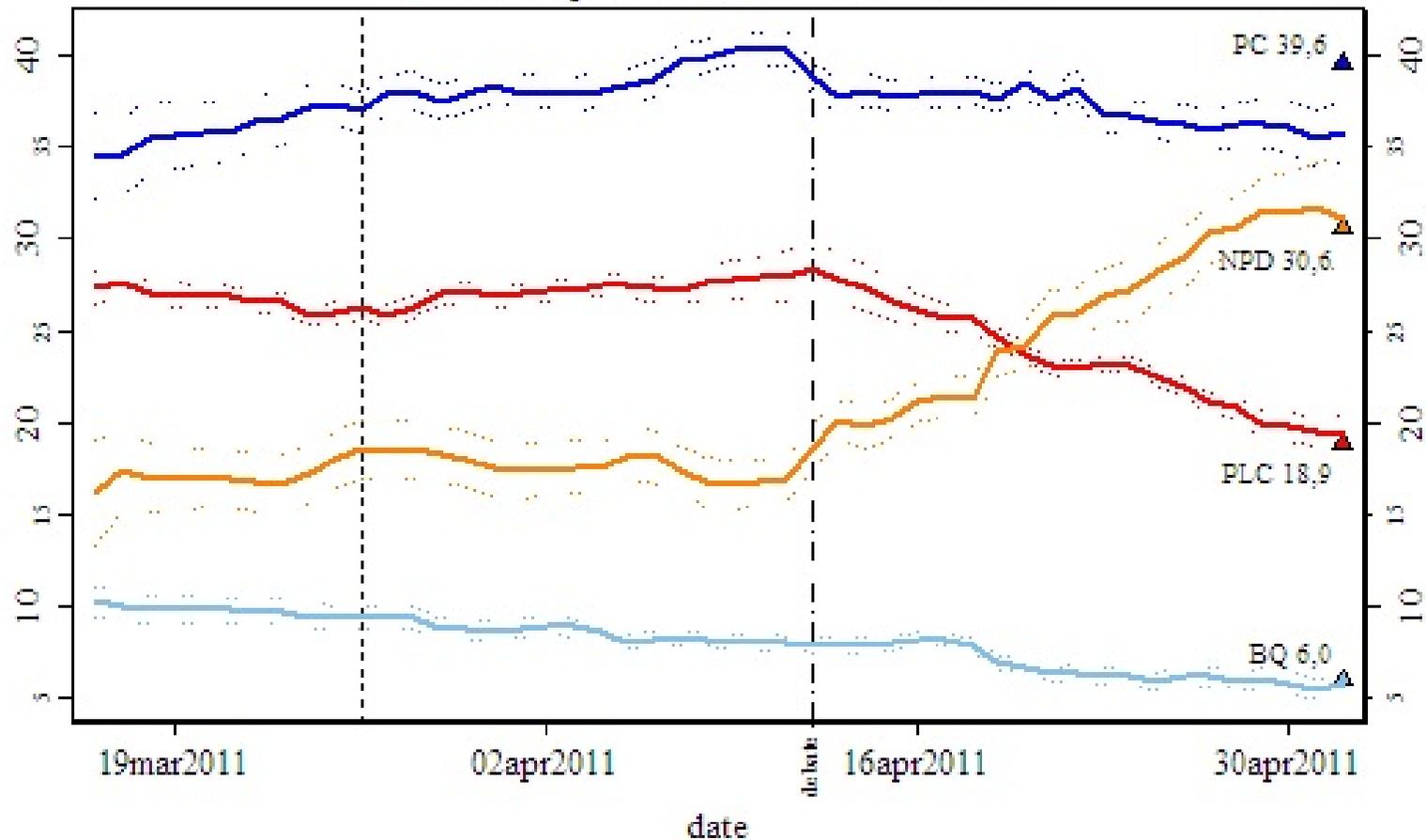
- For Canada as a whole, the Conservative vote was underestimated by the polls.
  - ▶ In Quebec, the Conservative vote was underestimated and the Bloc Québécois vote was overestimated.
    - In the latter case, it is generally attributed to the *absence of adjustment according to mother tongue by pollsters outside Quebec.*
  - ▶ The NDP (left wing) was overestimated in Ontario (polls or a late campaign swing?)
- There was no difference between the polls conducted using IVR or Internet and the other polls.
- We ran a *panel survey* among respondents to a poll conducted at the beginning of the campaign (Quebec only).
  - ▶ That poll gave an estimate within the margin of error for the 4 main parties, i.e. better than the estimates from the time-series of all the polls.



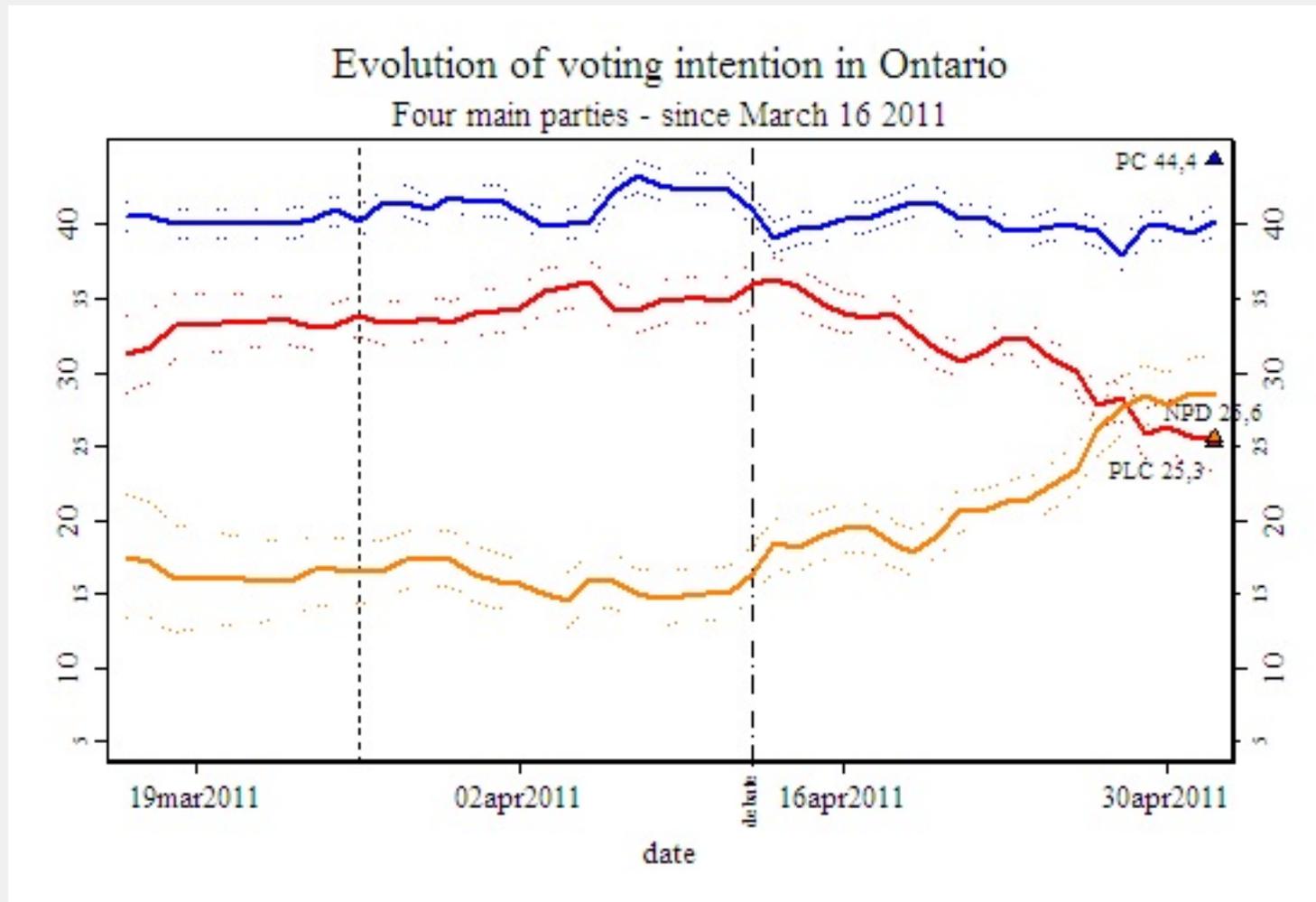
# Canada 2011 (May 2)

## Evolution of voting intention in Canada

Four main parties - since March 16 2011

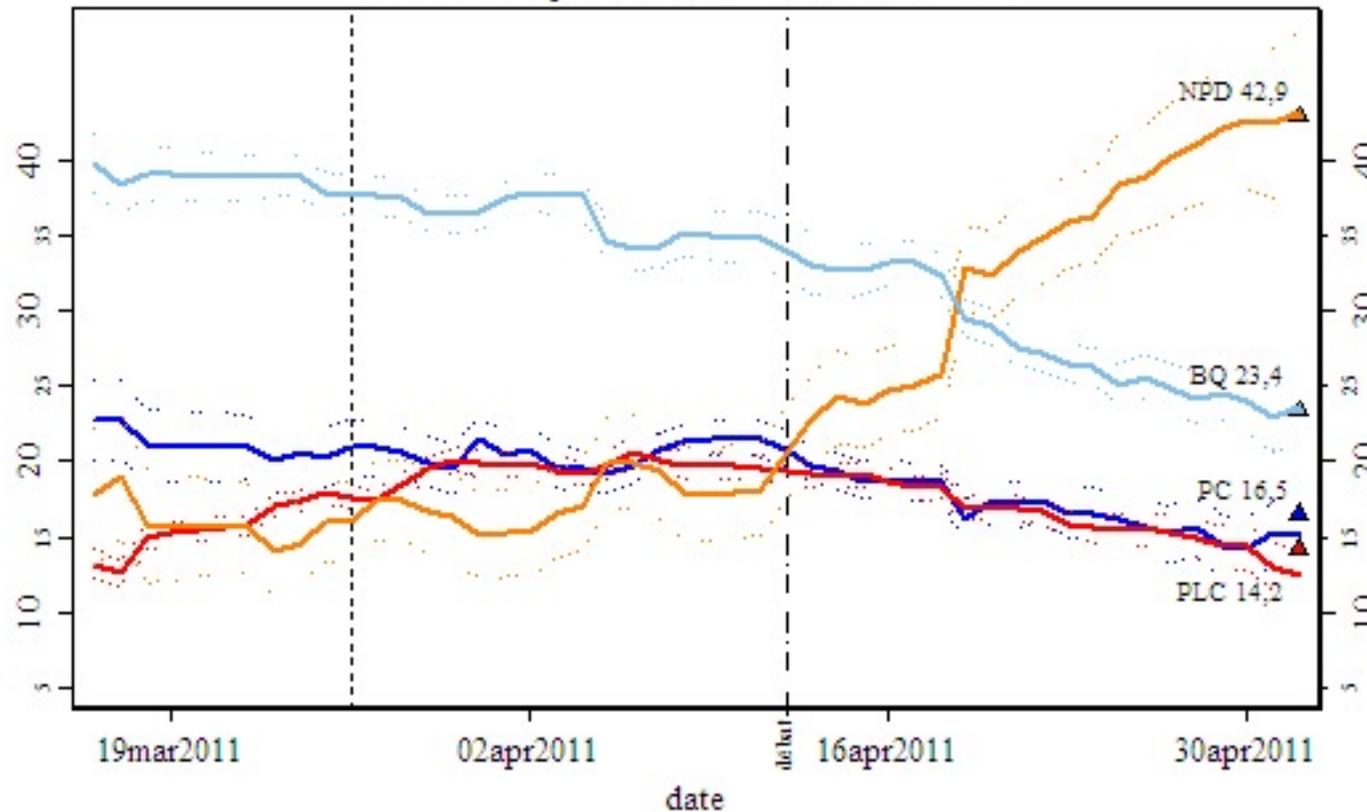


# Ontario 2011 (May 2)



# Québec 2011 (May 2)

Evolution of voting intention in Quebec  
Four main parties - Since March 16 2011



NDP went from 15% to 43% during the campaign, BQ from 40% to 23%



# Which means?

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- The drop in voting intention for the Liberal party in Canada as a whole is mostly due to movements in Ontario.
- The rise in voting intention for the New Democratic Party (NDP) in Canada is largely due to movements in Quebec.



# At the methodological level...

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- The Conservative vote is underestimated by the polls for Canada as a whole while the other parties are well estimated.
  - ▶ This is solely due to Ontario and not to Quebec
- For Canada as a whole, Internet polls (1.5 points) and IVR polls (3 points) underestimated the conservative vote more than telephone polls.
  - ▶ These methodologies contributed to the underestimation of the Conservatives.
- At the subnational level,
  - ▶ In Ontario, one firm using an open-ended question for vote intention differ from the others, giving 3.2 points more to the Liberal party and 2 points more to the Conservative party.
  - ▶ In Quebec, IVR polls gave 2.8 points less on average to the Bloc Québécois (Note: language problem?).

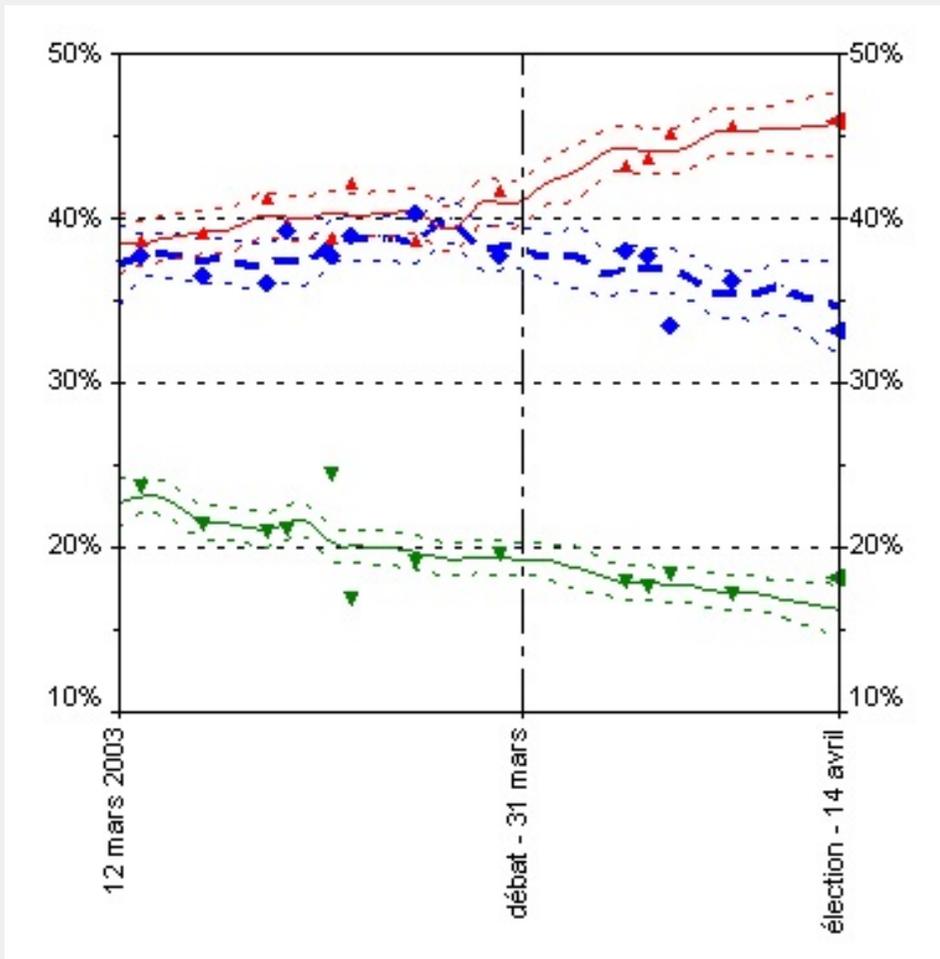


# Now, Quebec elections

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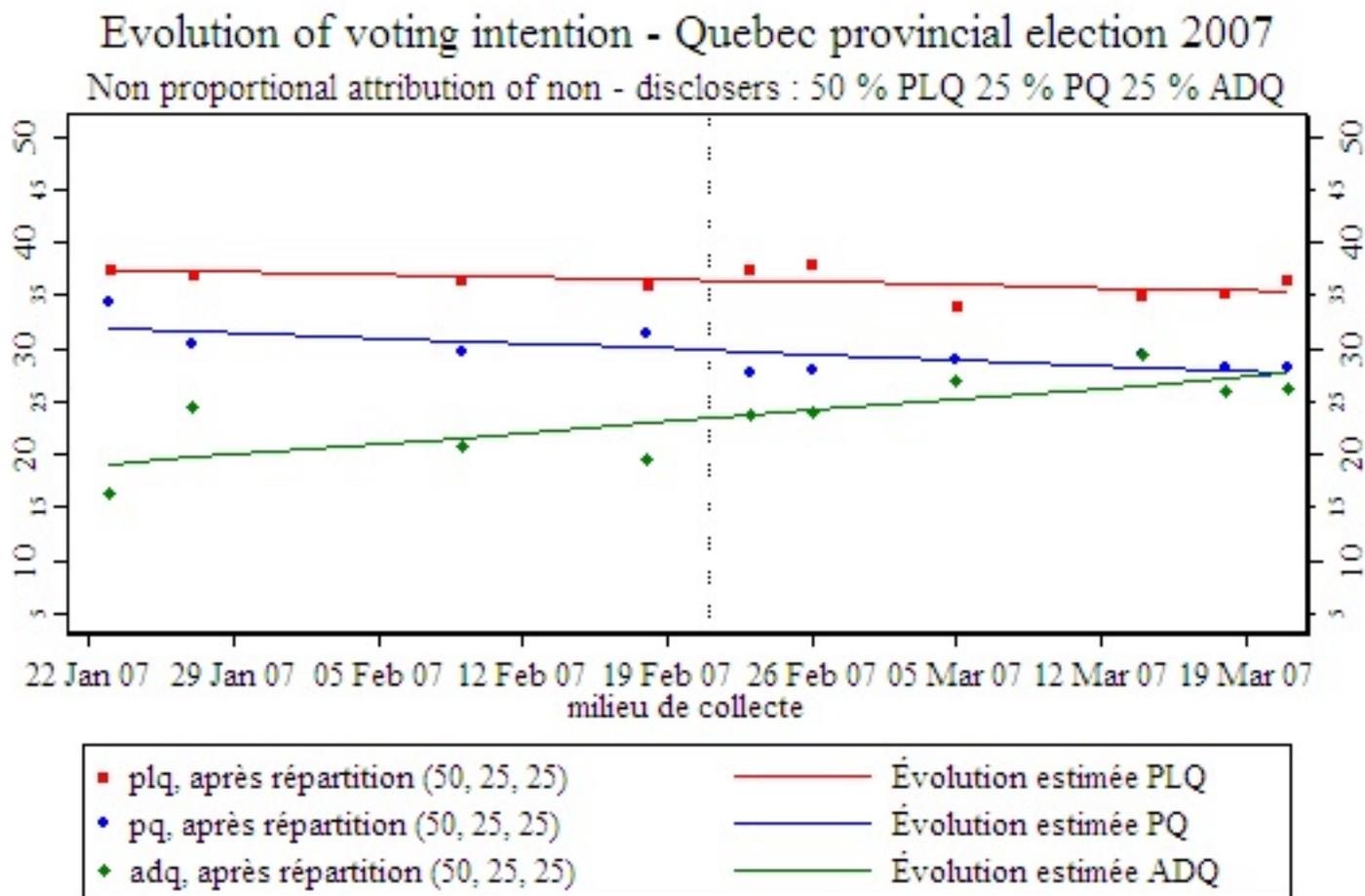
# Quebec provincial election 2003 (April 14)



Results:  
Small under-  
estimation of ADQ  
(right-wing)



# Quebec provincial election 2007 (March 26)

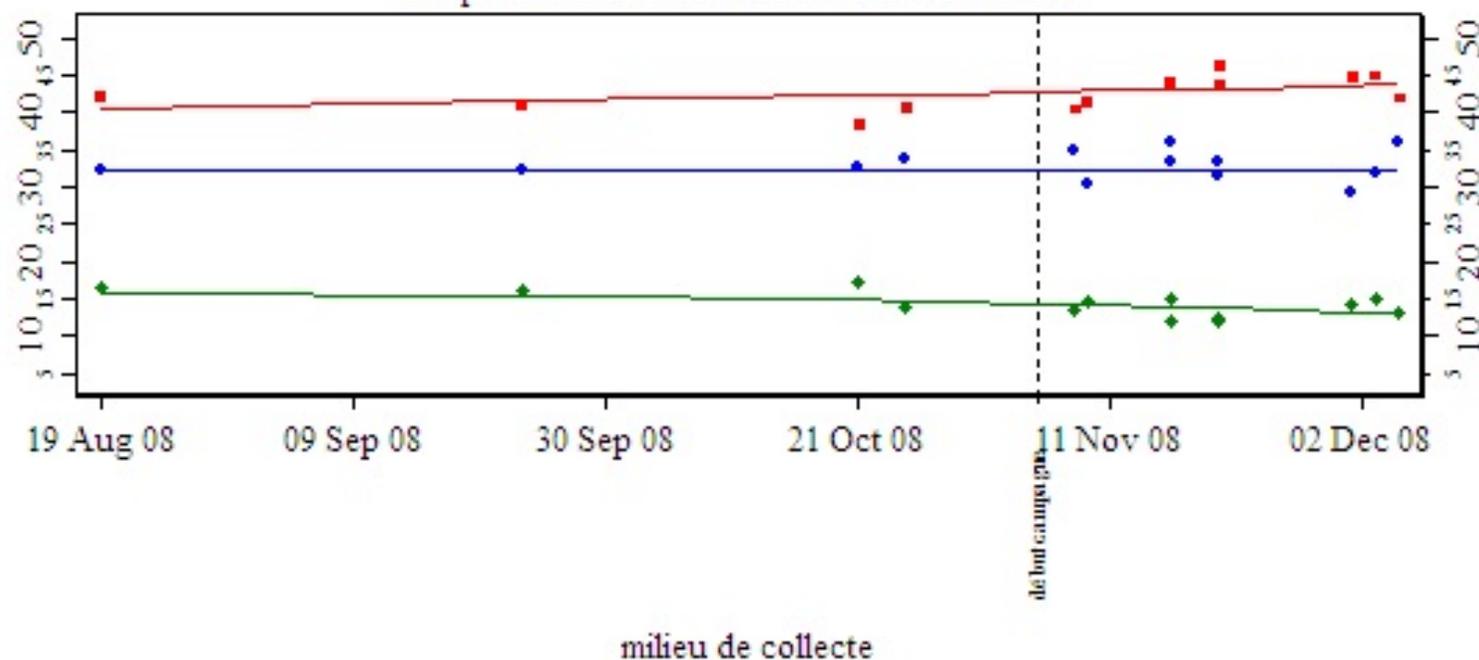


Results:  
Small  
under-  
estimation  
of ADQ.



# Quebec provincial election 2008 (Dec 8)

Evolution of voting intention - Quebec provincial election 2008 - since August  
Proportional attribution of non-disclosers



Results: All parties estimated within classical m.o.e



# Quebec only

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- For the three provincial elections
  - ▶ A lot less polls were conducted.
  - ▶ In last election, many polls conducted using opt-in panels.
  - ▶ As of now, only opt-in panels conducted by Quebec pollsters.
  - ▶ Prediction not bad but will it always be reliable?
- For the municipal election - Montreal november 2008
  - ▶ Only opt-in panels, one pollster.
  - ▶ 7 point difference between results and vote.  
Order of arrival not predicted correctly.



# A word on Ontario

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- In actual campaign, 3 polls that give very different results.
- New “creative” methodology.



# Influence of polls?

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- Other research has shown that
  - ▶ Polls are more likely to influence
    - People who are interested in politics.
    - And who think about casting a strategic vote.
- Polls may also influence voters in other subnational regions.
- Polls at the subnational level may be less reliable.



# Discussion

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- The accuracy of polls at the subnational level may become an important problem.
- In the Canadian case:
  - ▶ Rather systematic underestimation of the right.
  - ▶ Overestimation of the left is common.
  - ▶ Internet opt-in polls and IVR polls give a different picture of public opinion than telephone polls.
  - ▶ There is a language issue with IVR.
  - ▶ There is a weighting/ adjustment issue in Quebec.
  - ▶ There is a weighting issue with sample sizes of polls used for the time-series analyses.
- Would telephone panels be part of the solution?



# Conclusion

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- We may be entering a period of turmoil for polls and pollsters. Internet opt-in polls are not expensive and many new players are coming into the field.
- It is very hard to get the media to understand that non reliable polls may influence the vote and that they should act responsively.

