

**The Economy and Party Preferences in Multi-Level Systems:
The Influence of Economic Perceptions and Partisan Congruence in Six Regions**

Abstract

How does the economy influence party preferences in multi-level states? Using regional-level survey data from Canada, Germany and Spain, we show that there is a ‘cross-level’ effect of economic evaluations. Citizens thus take into consideration both the regional *and* the national economy when determining their support for incumbents at either level. However, the way in which they do so depends on whether the same party is in office at two levels or not. If so, standard reward-punishment patterns apply. If different parties are in office at the two levels, incumbents at one level are rewarded for bad and punished for good economic outcomes at the other level. Overall, the influence of cross-level economic perceptions is about half as large as that of same-level economic perceptions. Our findings have important normative implications for the signalling function of elections.

Keywords: economic voting, accountability, responsibility attribution, federalism, partisan congruence

Introduction

The influence of the state of economy on the outcome of elections is a staple topic of political science. A voluminous literature examining the presence of economic voting during presidential and congressional elections in the USA has shown that strong macro-economic conditions are likely to improve an incumbent's prospects of re-election (Erikson 1989, 1990; Fiorina 1991; Nadeau and Lewis-Beck 2001), a relationship that was also found to hold in other western democracies (Lewis-Beck 1988).

In multi-level states, understanding how the economy influences voter preferences is more complex. On the one hand, regional-level incumbents may be evaluated based on their performance in managing the regional economy. This was exemplified in the defeat of the Conservative Party of Canada in its stronghold of Alberta after the provincial elections of May 2015. The incumbent Jim Prentice was sanctioned for exacerbating the provincial economy's dependence on the oil sector and for responding inadequately to the collapsing price of oil (Globe and Mail 2015). But, given the limited ability of regional governments to fully control economic conditions, regional elections are also susceptible to being swayed by swings in the national economy. For instance, the Spanish regional elections of May 2015 dislodged the PP from power in six of the thirteen regions, when voters voiced their discontent with the *Partido Popular* (PP) government's management of the country's economic crisis. These examples show that the state of the economy matters in shaping election outcomes in multi-level systems. But, we may ask: the economy at what level and during which elections?

This concern has become more topical in the aftermath of the Global Financial Crisis and Great Recession because of the significant territorial variation in the severity of this crisis in federal countries, which compounded long-standing historic differences in the economic trajectory of regions. The question that follows is whether citizens perceived this and what difference it made to their evaluations of regional and national governments. This is what we address in this article.

Examining the influence of economic perceptions in multi-level states is important because it helps us understand the effects of complex institutional arrangements on retrospective accountability. The decentralisation of authority to regional governments has conventionally been seen in normative political theory and the theory of fiscal federalism as enhancing the quality of decision-making and the accountability of rulers. In theory, the separation of policy competences to different tiers of authority allows regional and federal governments to align policy outputs with the preferences of their respective electorates and to be held accountable for their decisions during regional and federal elections (Treisman 2007).

However, multi-level systems make the task of holding incumbents accountable quite onerous for voters because the allocation of powers to different tiers of government is rarely clear-cut, especially in economic matters. Both federal and regional governments have a role to play in shaping economic conditions in their jurisdictions. Central governments tend to control most of the tools of the macro-economy that can affect national levels of income, employment, the currency value and the balance of trade; regional governments often control many economic tools that affect the economic wealth and well-being of citizens, such as public investment in infrastructure, education and training, and welfare. So, both levels are sources of policy that can influence economic outcomes.

This renders quite complex the task of holding incumbents accountable (Anderson 2006). Because lines of responsibility are blurred, decentralisation might hamper the ability of citizens to assign responsibility for the state of the economy. There is the added danger that voters will hold rulers accountable for developments they could not influence (Achen and Bartels 2016), for instance if regional governments are rewarded or punished for the actions of national policy makers. This is made more complicated if the same party governs at different levels (Brown 2010). So, we may ask to what extent economic voting in multi-level states conforms to the normative ideal of democratic accountability.

We study this matter by evaluating the influence of *perceptions* of regional and national economic conditions on incumbent support in regional and national elections. The standard hypothesis on the influence of the economy is that perceptions of economic conditions at one tier of authority should affect incumbent support at the same level of government. Using regional-level election survey data for both regional and national elections from six regions in Canada, Germany and Spain data provided by the Making Electoral Democracy Work (MEDW) project, we find evidence in favour of this, across dual and cooperative federal systems, irrespective of their ‘clarity of responsibility’ (CoR) (Anderson 2006).

We also examine the presence of a ‘cross-level’ effect of economic perceptions, i.e. how perceptions of economic conditions at one level of authority affect incumbent support at the other level of government. We show that this occurs in settings with vertical partisan congruence: when the same party is in office at both levels, support for regional incumbents reflects the perceived state of the national economy, while the fate of national incumbents is also tied to how well the regional economy appears to be doing. In addition, in settings with vertical partisan *in*-congruence, the opposite effect holds: support for regional and national incumbents is inversely associated with the perceived state of the national and regional economy, respectively. We find that part of the mechanism underlying this result is the support given to regional and national incumbents that are in opposition at the other level.

This evidence offers a more nuanced and positive picture of how well accountability works in multi-level settings than has so far been portrayed in the literature. We show that voters can use multi-level elections both to hold rulers accountable for the way in which they have governed the economy and to signal their support to incumbent parties at different tiers of government. The ‘cross-level’ effects of economic perceptions can legitimately be viewed as evidence of an imperfect accountability relationship. However, we show that this influence is not as important as ‘same-level’ effects; voters still assess regional and national incumbents according to how well they think incumbents have managed the economy of their respective

jurisdictions. Moreover, instead of interpreting these ‘cross-level’ effects as solely injurious to the proper working of accountability, we show that they are in fact also evidence of voters’ willingness to use elections to signal their support to the parties that govern at different levels.

In the next section, we place our research goals within the literature on economic voting. We then elaborate a framework that spells out our expectations, focusing on the conditional effect of vertical partisan (in) congruence on incumbent support. We then present the results of our analyses. In the conclusion, we summarize our results and tease out their implications for democratic accountability in multi-level systems.

The influence of economic perceptions in multi-level states: mixed evidence

Existing research on economic voting in multi-level states has produced mixed evidence for how voters take economic conditions into account when deciding their support for ruling parties. So far, evidence has been presented in three types of studies.

The first type of study examines the effect of national economic conditions on the re-election of national incumbents. The key finding here is that the weaker ‘clarity of responsibility’ (CoR) in federal systems – in contrast to unitary states – mitigates the extent of national-level economic voting (Anderson 2006). Moreover, it is the division of *fiscal* responsibility among different tiers of authority that weakens economic voting, rather than just the existence of multi-level democratic institutions (Anderson 2006: 455). This implies that federations featuring a ‘dual model’ of authority like Canada are more conducive to proper responsibility assignment than ‘cooperative’ federal systems like Germany, because the jurisdictional (rather than functional) division of competences fosters a greater CoR.

The second type of study examines the influence of regional economic conditions on the re-election of incumbents in regional government. This has yielded mixed results (Brown 2010). Some studies on the elections of US governors find that the vote share of the governor’s party is essentially impervious to state economic conditions (Chubb 1988; Peltzman 1987),

while others show that it is not (Atkeson and Partin 1995; Hansen 1999; Niemi et al. 2015). This contradiction could be explained by the diminishing effect of geography in shaping the fortunes of state economies (Ebeid and Rodden 2006) and by the insufficient acknowledgement of the role of partisanship (Brown 2010; Crew and Weiher 1996a). The findings for the US thus remain contradictory. Similar inconsistent patterns have been found for Spain (Queralt 2012; Riba and Díaz 2002) and Canada (Anderson 2008; Gélinau and Bélanger 2005). Recent research on Spain has leveraged the asymmetric allocation of authority across Autonomous Communities (ACs) to show that the extent of regional economic voting is conditional on the CoR in each AC (Leon and Orriols 2016).

The third type of study examines the influence of economic conditions on incumbent support ‘across’ levels of government. Carsey and Wright (1998) examine both national and state-level election results and find that voters appear to distinguish between the responsibilities of state and federal officials and cast their vote in function of regional and national economic conditions. But, a number of other studies show that the outcome of sub-national elections is determined by national economic conditions in Argentina (Remmer and Gélinau 2003), Canada (Gélinau and Bélanger 2005) and the USA (Crew and Weiher 1996b; Atkeson and Parkin 1995; Stein 1990). The evidence for the opposite effect is sparse and contradictory: US voters consider the regional economy when casting their national vote (Orth 2001), while Canadian voters do not (Gélinau and Bélanger 2005).

A separate strand of research has focused on the question of whether citizens of multi-level states correctly assign responsibility for economic outcomes in multi-level states: are voters capable of clearly deciding ‘whodunnit’ (Cutler 2008)? This question is important because it relates to voters’ ability to correctly hold incumbents accountable for the state of the economy. Moreover, mistakes or bias in responsibility attribution may provide one explanation for the contradictory results described above (Brown 2010). Obtaining information about where power lies in a multi-level system and which level of government is responsible for different

economic outcomes is an arduous task that requires certain cognitive abilities and a basic level of political awareness. As a result, research on responsibility attribution has shown that correct perceptions vary according to individuals: citizens that are better educated, have greater access to information, and that participate in politics are more likely to accurately assign responsibility (Cutler 2008; Johns 2011; Leon 2010, 2011).

But the institutional context matters as well. Confirming Anderson's (2006) argument, a comparative study of public attitudes in two regions featuring a 'dual' allocation of powers (Ontario and Scotland) finds that citizens' attribution of responsibility across policy areas matches constitutional reality (Johns 2011). Similarly, a comparison of Spanish ACs with variable degrees of autonomy shows that citizens living in ACs with high or low autonomy, i.e. where one level of government predominates over the other, will tend to have a more accurate assignment of responsibility than citizens living in ACs where power is instead shared with the central government (Leon 2010, 2011). It is essential to consider the political context if we are to understand economic voting in multi-level states. However, while research has so far focused on the effects of institutional arrangements on CoR, it has not discerned the effect of the partisan make-up of governments at different levels.

The presence of governing parties of different labels can lead to the effective decentralization of constitutional structures and to the 'disharmony' of inter-governmental relations (Riker and Schaps 1957), since it allows regional governments to pursue their own distinct economic and fiscal policy agendas. Conversely, the presence of co-partisans at the sub-national level allows the central government to pursue a more coherent national economy policy (Rodden and Wibbels 2002). The resulting consequence for political accountability, in cases of partisan congruence, is that sub-national incumbents tend to experience a similar electoral fate to their national co-partisans, in function of national economic conditions (Rodden and Wibbels 2010; Crew and Weiher 2006). There is however limited empirical evidence that national governments reap rewards for the economic performance of their regional counterparts

(Gelineau and Belanger 2005). A further implication is that, in cases of partisan in-congruence, voters should accurately divide responsibility for economic conditions, with incumbents at different levels judged according to their respective performances. However, in a context where incumbents claim credit for good economic outcomes, voters may not only wish to reward the incumbent for their good performance, but also to punish the opposition party that rules at the other level (see Brown 2010). But this kind of behaviour has yet to be systematically examined or uncovered in multi-level elections. Therefore, we study in this article whether and how the vertical (in)congruence of government partisanship conditions the influence of perceived economic conditions.

Perceptions of economic conditions and partisan (in) congruence

Our theoretical approach has three components:

- (1) ‘Same-level’ effects: the influence of the regional and national economic perceptions on incumbent support during regional and national elections
- (2) ‘Cross-level’ effects: the influence of national economic perceptions on regional incumbent support and regional perceptions on national incumbent support; and
- (3) Partisan (in)congruence: the effect of vertically divided or unified government on the presence of ‘cross-level’ effects of economic perceptions.

Our hypotheses constructed based on these components is presented in Figure 1.

‘Same-Level’ effects of economic perceptions

Our starting premise is that, on average, voters have some information and understanding about the assignment of economic policy-making responsibility to different tiers of authority in multi-level systems. Put simply, they know that the national and regional governments can both shape economic outcomes at their respective level of government. Accordingly, our baseline expectation is that voters will support the incumbent in national and regional government

depending on their *perceptions* of the economic conditions prevailing at the same national or regional level, respectively (Quadrants I and II in Figure 1). The logic underpinning this expectation is premised on a simple model of retrospective voting in which: the economy is a salient issue of debate in national and regional elections; the state of the economy is a valence issue in which party competition is about which party is best at managing the economy; voters punish or reward an incumbent party based on their perception of how well they think this party has managed the economy (Fiorina 1981). Thus, the basic micro-level ‘mechanism’ underpinning the relationship between perceptions of the economy and incumbent support is one in which each citizen will tend to favour an incumbent if he or she believes the economy is doing well, and vice versa if it is perceived to be doing badly.

Figure 1. Relationship between perception of economic conditions and support for the incumbent at two levels

	<i>Support for national incumbent in national elections</i>	<i>Support for regional incumbent in regional elections</i>
<i>National economic conditions</i>	I Same-level effect: National economic conditions affect support for national incumbent in national elections	III Cross-level effect: National economic conditions affect support for regional incumbent in regional elections, depending on vertical congruence (H1a, H1b)
<i>Regional economic conditions</i>	IV Cross-level effect: Regional economic conditions affect support for national incumbent in national elections, depending on vertical congruence (H2a, H2b)	II Same-level effect: Regional economic conditions affect support for regional incumbent in regional elections

Cross-level effect of economic perceptions

This standard model does not take into consideration the possibility of a ‘cross-level’ effect in the influence of economic conditions on regional and federal elections: the two scenarios depicted in Quadrants III and IV in Figure 1.

Here, the basic expectation is that voters use perceptions of economic conditions from the other level in determining their support for incumbent parties. The first possibility is that

voters simply punish *all* incumbents for bad economic conditions and reward them for good ones. Such a decision rule – a kind of ‘blind retrospection’ (Achen and Bartels 2016) – is simple; it may even be efficient, especially if voters have little way of knowing whether the economic conditions that their region is experiencing are the result of the actions taken by the regional or the national government. However, such a simple decision rule is unlikely. Instead, how voters consider economic perceptions will depend on the label of the party in office at both the national *and* regional levels. The reason for this, as Brown (2010) notes, is that there is a constant tussle between governments at different levels, as each will tend to compete in claiming credit for positive outcomes and will, conversely, attempt to shift blame when faced with negative outcomes. This is especially common when different parties govern at different levels. But, when the same party is in office at both levels, claiming credit for good outcomes is easier, while shifting blame for bad outcomes becomes more difficult. So, voters will likely assign joint responsibility for poor and good economic conditions, adopting a ‘top-down’ direction, where national economic perceptions shape support for regional-level incumbents, and a ‘bottom-up’ direction, where regional economic perceptions shape support for national-level incumbents.¹ We look at each of these in turn.

‘Top-down’ cross-level effects of economic perceptions

The reason to expect a ‘top-down’ cross-level effect of national economic perceptions on support for regional incumbent (Quadrant III in Figure 1) is based on the ‘second-order election’ phenomenon, first identified in European Parliamentary elections (Reif and Schmitt 1980). This phenomenon is similar to that of ‘midterm punishment’ in US State elections (Tufte 1975), in which voters use elections to ‘signal’ their discontent with the performance of the national

¹ The presence of ‘cross-level’ voting depends on the fact that the mainstream parties that govern and compete at two levels have integrated organizations and share common party labels, since this should facilitate a common identification by voters, which ultimately is what will guide their partisan preference.

incumbent and to support national opposition parties (Kselman 2011). Comparable evidence from the study of regional elections in Germany, Spain and Canada suggests that they also tend to be subordinate to national-level politics and electoral cycles, confirming the ‘second-order’ nature of these contests, especially in those contexts that lack deep territorial cleavages (Hough and Jeffery 2006). More recent evidence from Spain finds that the importance of national considerations during regional elections is higher among voters with a weak attachment to the region and if there is vertical partisan congruence (Lineira 2016).

The extension of the ‘second-order election’ or ‘midterm punishment’ phenomenon to the influence of economic perceptions on party preferences in multi-level states should hold when there is vertical partisan congruence. Indeed, studies that focus on the effect of economic conditions find that the presence of a vertically unified government leads voters to punish regional incumbents for a deterioration of national economic conditions in both Canada (Gélineau and Bélanger 2005) and Argentina (Remmer and Gélineau 2003). For example, if a Social Democratic party holds office in national and regional government and the national economy is doing particularly badly, then voters’ support for regional incumbent will weaken as they voice their displeasure about the poor state of the national economy. Conversely, if the national economy is buoyant, a regional incumbent of the same party may come to enjoy the benefits of a ‘halo effect’. Therefore, when there is partisan congruence, support for the national incumbent based on national economic conditions is transferred to the regional incumbent.

However, the inverse will occur in cases of incongruence, when there are different parties in office at the two levels. In this case, we would expect ‘top-down’ cross-level effects of economic perceptions to function in the *opposite* direction. For example, if the national economy is doing poorly, but a Conservative party holds office in regional government while a Social Democratic party rules at the national level, then voters will support the regional incumbent. If the national economy is doing well, the inverse pattern will hold, with the regional incumbent suffering. The motivation of voters is the same, namely to reward or punish the

national incumbent party, but the way this affects support for the regional incumbent depends on partisan congruence. This yields the following hypotheses:

H1a: If there is vertical partisan congruence, voters who evaluate the national economic situation more positively (negatively) than the regional economic situation will support (punish) the regional incumbent.

H1b: If there is vertical partisan incongruence, voters who evaluate the national economic situation more positively (negatively) than the regional economic situation will punish (support) the regional incumbent.

'Bottom-up' cross-level effects of economic perceptions

Perceptions of regional economic conditions may also matter for national elections in a type of 'bottom-up' process. The intuition for this effect is that it is driven by a form of regional 'socio-tropic' voting. When making a judgement about the state of the economy and the responsibility of national incumbents in shaping these outcomes, voters may take into consideration what they can observe in their everyday life, something which is limited to the immediate spaces in which they work and live and in which they interact with family, friends and colleagues (Ansolabehere et al. 2014). Since voters use local and regional economic perceptions to supplement national economic perceptions (e.g. Johnston et al. 2000), voters may attribute blame and credit to the national government for these regional conditions.

However, such regional 'socio-tropic' effects may not always exist, especially if there is vertical partisan incongruence. Hence, we expect a type of relationship similar to H1a and H1b to hold for voters who take into consideration the state of their regional economy when deciding how much to support the national incumbent (Quadrant IV). Consider a Social Democratic party that governs in the region at a time of regional economic growth. If the same party is in office at the national level, then regional voters will likely reward the national incumbent on the basis of good regional economic results, implying that there are some strong

'bottom-up' effects of regional prosperity on national elections. However, if a national government is occupied by a Conservative party, then the positive economic results that are attributed by the Social Democratic party in regional government should translate into loss of support for the national incumbent. Therefore, two additional hypotheses are:

H2a: If there is vertical partisan congruence, voters who evaluate the regional economic situation more positively (negatively) than the national economic situation will support (punish) the national incumbent.

H2b: If there is vertical partisan incongruence, voters who evaluate the regional economic situation more positively (negatively) than the national economic situation will punish (support) the national incumbent.

Mechanism of cross-level voting

A corollary question that we wish to explore is: what mechanism underlies the contrasting fates of national and regional incumbents in incongruent settings? To answer this, we must verify the possibility that the support afforded to a regional incumbent during national elections for a positive regional economic performance will result, not simply in lower support for the national incumbent of a different label, but in higher support of the regional incumbent's co-partisan in opposition at the national level (and vice-versa for a poor economic performance). That is, if the national government is occupied by a Conservative party, then a positive perception of regional economic conditions fostered by a Social Democratic regional incumbent should result in greater support for the Social Democratic party at the national level, not simply the punishment of the Conservative national government. Similarly, we should also expect the same type of effect operating on the 'top-down' influence of national economic perceptions on regional elections: a buoyant national economy will result in greater support for the national incumbent party in regional elections, not simply punishment for the regional incumbent. This yields two final hypotheses:

H3a: In national elections, if voters evaluate the regional economic conditions more positively (negatively) than the national economic conditions, voters will support (punish) the regional incumbent's national co-partisans.

H3b: In regional elections, if voters evaluate the national economic conditions more positively (negatively) than the regional economic conditions, voters will reward (punish) the national incumbent's regional co-partisans.

Data and models

To test our hypotheses, we need survey data for national and regional elections that contain questions about perceptions of national and regional economic conditions. Such data has been collected by the 'Making Electoral Democracy Work' (MEDW) project.² We use regional-level pre-election surveys carried out during national and regional elections in three countries: Canada, Spain and Germany. This source of data and sample of countries offers the possibility of providing a unique insight to studies on economic voting in multi-level states.

Many existing studies that rely on individual-level surveys are dependent on data on elections at a single level. While they can examine variations in the prevalence of economic voting at the national level across countries (Anderson 2006) or the regional level within a country (Alonso 2011; Leon and Orriols 2016), they are not able to assess comprehensively how accountability works in a multi-level system. This requires, rather, comparing data on how voters in the same region hold both their regional and national rulers accountable for economic outcomes prevailing at those respective levels (standard economic voting), but also at different levels ('cross-level' economic voting).³

² We would like to thank the project for kindly agreeing to share their data with us.

³ The only other study that does this explicitly (Gelineau and Belanger 2005) relies on economic and electoral aggregate results, rather than survey responses.

Moreover, these three countries allow us to have a remarkably broad representation of federal systems with different levels of CoR: from a dual-federation (Canada) to a cooperative federation (Germany), to a system with an intermediate degree of inter-dependence (Spain). Adapting Elazar's (1987) distinction between self-rule as the territorial autonomy of regional governments and shared-rule as their involvement in federal policy, we expect the CoR to be highest (weakest), in systems where self-rule is high and shared rule is low (high). Scores on each of these dimensions from Hooghe et al. (2016) are presented in the table below.⁴

Table 1. Self-Rule and Shared-Rule Scores for three federations

<i>Country</i>	<i>Self-Rule (out of 15)</i>	<i>Shared-Rule (out of 9)</i>
Canada (Provinces)	15.0	5.0
Spain (Autonomous Communities)	13.0	1.5
Germany (Länder)	12.0	9.0

Source: Hooghe et al (2016)

We have not put forward an explicit hypothesis about the influence of CoR on economic voting, but with this sample, we are nevertheless in a position to evaluate the effect of institutional arrangements by studying whether or not regional economic voting takes place where it is least expected, i.e. in cooperative systems where the power of regional governments to shape economic outcomes is circumscribed (Germany), compared to where it is most expected, i.e. in dual federal systems where voters can distinguish the responsibilities of rulers at different levels (Canada). If we find that all these systems show signs of regional economic voting and are prone to cross-level economic voting, we will have produced some evidence that durable institutional arrangements are potentially less significant than temporary party-political constellations in shaping the way accountability works in practice in multi-level systems.

⁴ The differences extend to the organizational integration of parties. Parties in Spain and Germany are vertically integrated, while in Canada they tend to be stratarchal organizations (Carty 2004), with few organizational linkages and different policy positions (Thorlakson 2009, 2011). This is especially true in Quebec, where parties are effectively provincial-level organizations that are 'truncated' from their federal counterparts. The implication is that we expect weaker cross-level voting in Canada, and especially Quebec.

Table 2. Partisan (in) congruence and expected effect of national/regional economy

<i>Elections</i>	<i>Year</i>	<i>National incumbent</i>	<i>Regional incumbent</i>	<i>Expected effect of national economy</i>	<i>Expected effect of regional economy</i>
<i>National</i>					
Catalonia	2011	PSOE	CiU	+ (H1a)	- (H3b)
Madrid	2011	PSOE	PP	+ (H1a)	- (H3b)
L.Saxony	2013	CDU/CSU/FDP	SPD/Green	+ (H1a)	- (H3b)
Bavaria	2013	CDU/CSU/FDP	CSU/FDP	+ (H1a)	+ (H3a)
Quebec	2015	Conservative	Liberal	+ (H1a)	- (H3b)
Ontario	2015	Conservative	Liberal	+ (H1a)	- (H3b)
<i>Regional</i>					
Catalonia	2012	PP	CiU	- (H2b)	+ (H1b)
L.Saxony	2013	CDU/CSU/FDP	CDU/FDP	+ (H2a)	+ (H1b)
Bavaria	2013	CDU/CSU/FDP	CSU/FDP	+ (H2a)	+ (H1b)
Ontario	2011	Conservative	Liberal	- (H2b)	+ (H1b)
Quebec	2012	Conservative	Liberal	- (H2b)	+ (H1b)

Table 2 above summarizes the units (region and election year) for which we have survey data, the party label of the national and regional incumbents and the direction of the effect of partisan (in)congruence on the associated hypotheses. For national elections, we have data from two regions in Spain (Madrid and Catalonia, 2011), two regions in Germany (Lower Saxony and Bavaria, 2013) and two regions in Canada (Quebec and Ontario, 2015).⁵ In Spain, there was vertical incongruence: the PSOE was in power nationally, while the PP was in government in Madrid and the CiU in Catalonia. In Germany, there was also incongruence in Lower Saxony as the regional government was SPD/Green and the national government CDU/CSU/FDP. In Bavaria, there was congruence, with a CSU/FDP government regionally. In Canada, there was incongruence as the federal government was occupied by the Conservative party in 2015, while the provincial governments of Ontario and Quebec were both ruled by the Liberal party, elected in 2013 and 2014 respectively. For regional elections, we have data from pre-election surveys

⁵ Sample sizes: Madrid, n=976; Catalonia, n=951; Lower Saxony, n=975; Bavaria, n=4691; Ontario, n=1856; Quebec, n=1853. The surveys are pre and post election two-panel surveys, with the exception of Bavaria (five-wave panel). Surveys were carried out online with representative samples. We only use questions from the pre-election panel wave in our analysis. For more information, see: <http://electoraldemocracy.com/voter-behaviour>.

from one region in Spain (Catalonia, 2012), two regions in Germany (Lower Saxony and Bavaria, 2013) and one regions in Canada (Quebec 2012).⁶ There was congruence in Lower Saxony and Bavaria (CDU/CSU/FDP governments) and incongruence in Catalonia (PP nationally, CiU regionally) and Quebec (Conservative nationally, Liberal regionally).

Outcome and predictor variables

The outcome variable in the core models is the like-dislike score for the governing party at the national and the regional level. When more than one party was the incumbent, we took the highest score among all government parties.⁷ We chose like-dislike scores for two reasons: first, like-dislike scores are more responsive to voter perceptions than vote choice, making effects of economic perceptions easier to detect; second, using like-dislike scores enables us to include as a predictor variables capturing party identification, which are often perfectly correlated with vote choice; third, the effects of perceptions on like-dislike scores are more comparable across contexts than the effects on vote choice probabilities. We present models using vote choice as the outcome variable in the Appendix.

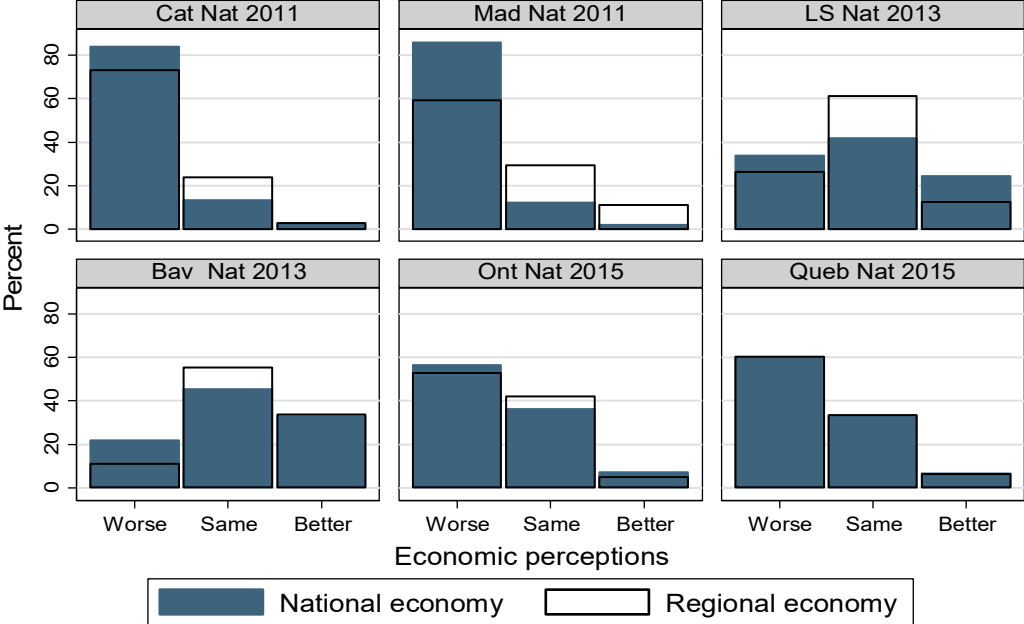
The key independent variables are the *perceptions* of national and regional economic conditions. In the surveys, economic perceptions were measured by asking respondents whether economic conditions had improved nationally and regionally over the last twelve months. Since just three response options were provided (better/about the same/worse), we treat this variable

⁶ Sample sizes: Catalonia, n=993; Lower Saxony, n=983; Bavaria, n=5906; Ontario, n=2616; Quebec, n=990.

⁷ Results are unchanged if we only take the main governing party for the dependent variable, which is in any case only relevant in Germany (Bavaria and Lower Saxony).

as categorical.⁸ The distribution of perceptions is presented in Figure 2 for national elections and Figure 3 for regional elections.⁹

Figure 2. Perceived economic conditions, national elections



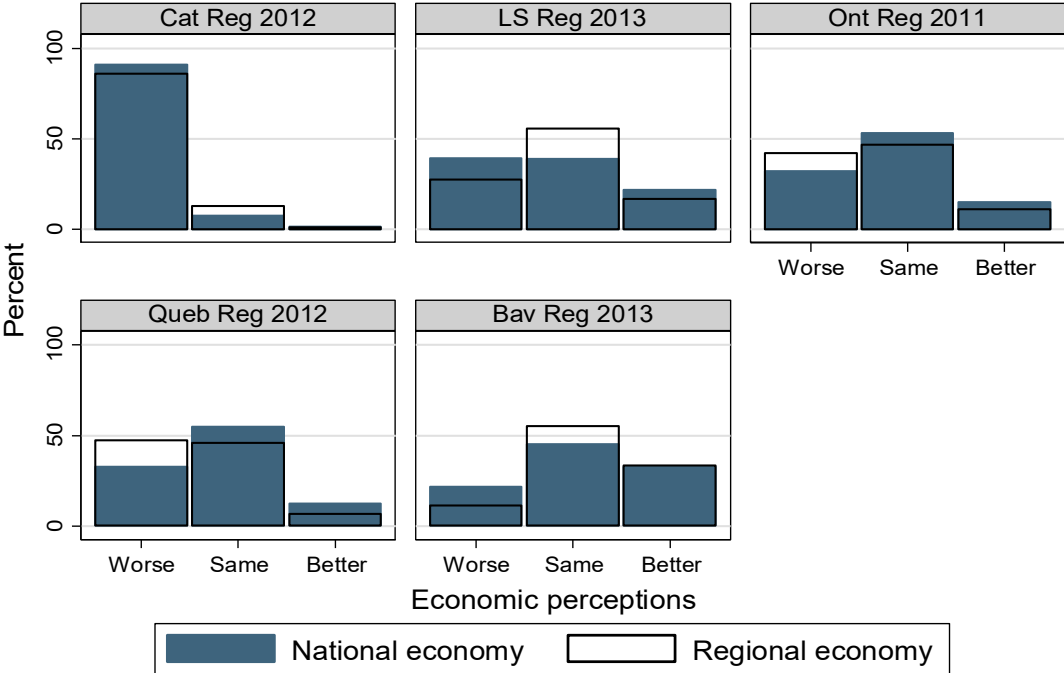
If we look at the results for national elections in Figure 3, we see that the Great Recession has had a visible impact on people’s assessment of economic conditions, especially in Spain where far more respondents consider that the state of the economy is worse than either same or better. A similar, though less gloomy picture emerges in Quebec and Ontario, while in contrast, in Germany, a plurality of people consider that economic conditions are generally the same. Interestingly, respondents across all countries are more optimistic about the state of their regional economy than the national economy. In Spain, the share of respondents that believe that the regional economy is doing worse is smaller than the proportion that think the national

⁸ In our models, we include the perceptions of same-level economic conditions (either national or regional) as a categorical variable. We then include cross-level economic perceptions relative to the same-level economic perceptions. Specifically, we add a categorical variable that is 0 if the perceptions are the same for both levels, with one binary variable capturing whether the cross-level perception is better and one binary variable capturing whether the cross-level perception is worse.

⁹ The bivariate correlations between national and regional economic perceptions are positive, but not very strong. The highest Cramer's V is for the 2011 Ontario regional election (0.48), the lowest for the Madrid survey at the 2011 national election (0.10).

economy is doing worse, and a higher share think the regional economy is the same. Similar trends can be observed in Bavaria, Saxony and to a lesser extent, Ontario, where a greater share of respondents think the regional economy is the same, and a smaller share of respondents that think the regional economy is doing worse. Respondents in Quebec hold similar views of the state of the national and regional economy.

Figure 3. Perceived economic conditions, regional elections



These results are generally replicated when we look at regional elections (Figure 4), in particular for regions like Bavaria, where respondents continue to be more upbeat about the national and regional economy. A similar pattern is found in Lower Saxony, although assessments of the national economy are slightly worse. In Catalonia, respondents seem to be equally pessimistic about the worsening condition of both the national and regional economy in regional elections. The most significant difference is found in Quebec and Ontario, where respondents seem to be more upbeat about economic conditions at both levels than during national elections. Thus, across all six regions, we find that perceptions of the national and regional economy during national and regional elections tend to be correlated within regions

over different types of elections, but that respondents nevertheless do distinguish between the two levels of the economy which they are asked to consider.

Controls

In the models, we control for basic predictors of support for national and regional incumbents: gender (male=1), age (in years), education level (country-specific scales, higher values indicate higher level of qualification), urban or rural residence (5-level measure, treated as continuous, high values indicate rural residence) and, importantly, a respondent's own financial position (worsened/improved). We also control for the respondent's left-right position; we include a quadratic term as well in order to better account for non-linear effects of ideology, for instance if citizens at the extreme left *and* the extreme right oppose the incumbent. We also control for positions on taxes and redistribution. We introduce further controls for the respondents' position on migration and their satisfaction with democracy at the regional and national level.

We also include a control for the strength of regional identity or national identity. In multinational states like Canada or Spain, citizens living in territories that feature national minorities like the Quebecers or the Catalans, and to a lesser extent, the Bavarians, profess a sentiment of national belonging that is culturally and historically distinct from the majority group. This regional identity will influence the way that citizens interpret the economic conditions that prevail at various territorial levels: voters that declare a strong feeling of regional identity may be more likely express pride in the activities of their regional rulers and therefore believe that the regional economy is doing well. Importantly, we also include party identification as a control, as this variable can explain a lot of the variation in terms of both government support and economic perceptions and is therefore an important confounder. Partisan support is a well-known influence on economic perceptions, to the extent that there is a debate about the extent to which economic perceptions reflect partisan bias or actual economic

conditions (Evans and Andersen 2006; Gerber and Huber 2010). We code party identification for the parties in national and regional government, respectively.

Where possible, we also include the like-dislike score for the regional incumbent party when predicting support for the national incumbent, and vice versa. If the two incumbents are from the same party, this control is not available, since like-dislike scores are only measured for each party.¹⁰ The precise coding of the control variables is presented in Appendix 4.

Results

The full regression results for national and regional elections can be found in Appendix 1 to 3. To ease interpretation of these results, we make use of the predicted level of incumbent support, calculated in our case by holding all other variables in the model at their observed values and changing the level of the variable of interest.

‘Same-level’ effects of economic perceptions

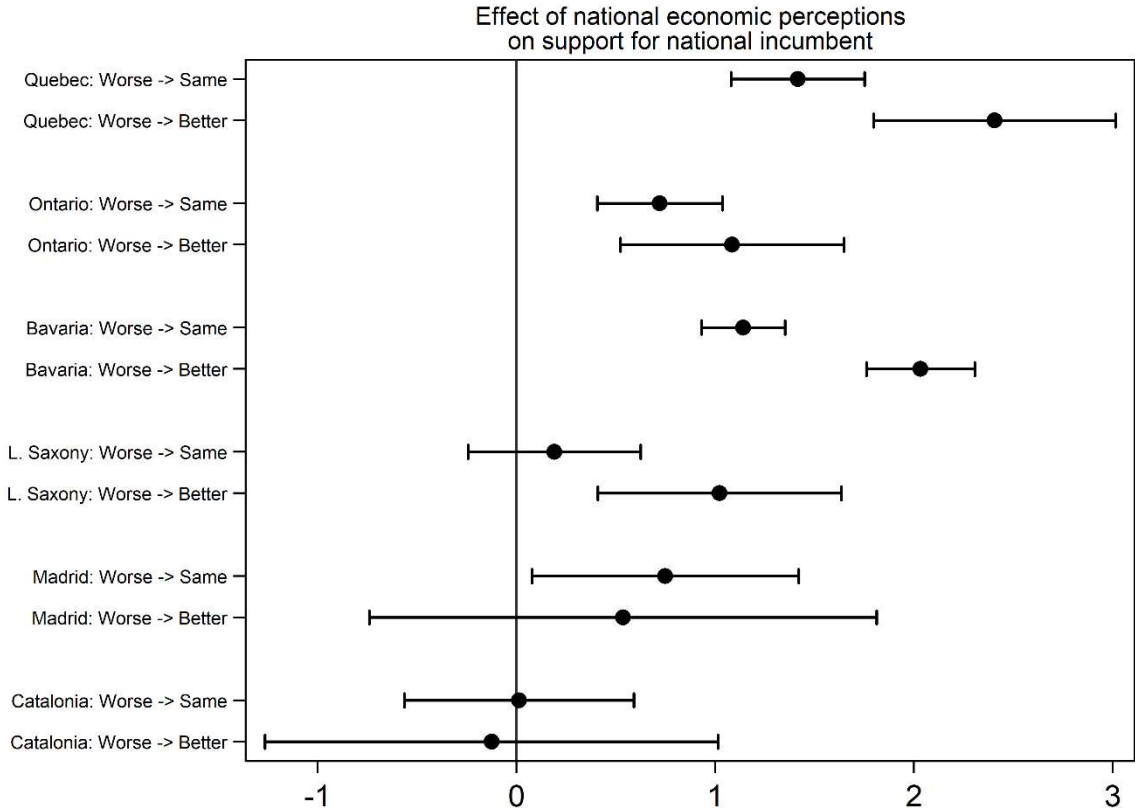
Let us consider first the effect of ‘same-level’ economic perceptions. Figures 4 and 5 present the predicted effect on the 0-10 like-dislike score for the incumbent party of changing perceived economic perceptions from worse to same and worse to better.

Looking first across the six national elections in Figure 4, it is clear that national economic perceptions are associated with increasing support for national incumbents. For instance, in Quebec the predicted level of incumbent party support if the citizen has positive economic perceptions (‘better’) is about 2.5 unit higher than if the citizen has negative economic perceptions (‘worse’). This difference is statistically significant at the .05 level. Thus, the better perceived the national economy, the more likely the individual is to like the national

¹⁰ The observed levels of multicollinearity in the models remains at acceptable levels (i.e., below a variance inflation factor of 4) in the models, despite the extensive set of controls.

incumbent government. Interestingly, and contrary to received wisdom, this relationship holds across the different types of dual, cooperative and intermediate federal systems, irrespective of the degree of clarity in the responsibilities assigned to federal and regional governments.

Figure 4. Marginal effect (first differences) of national economic perceptions on support for national incumbent

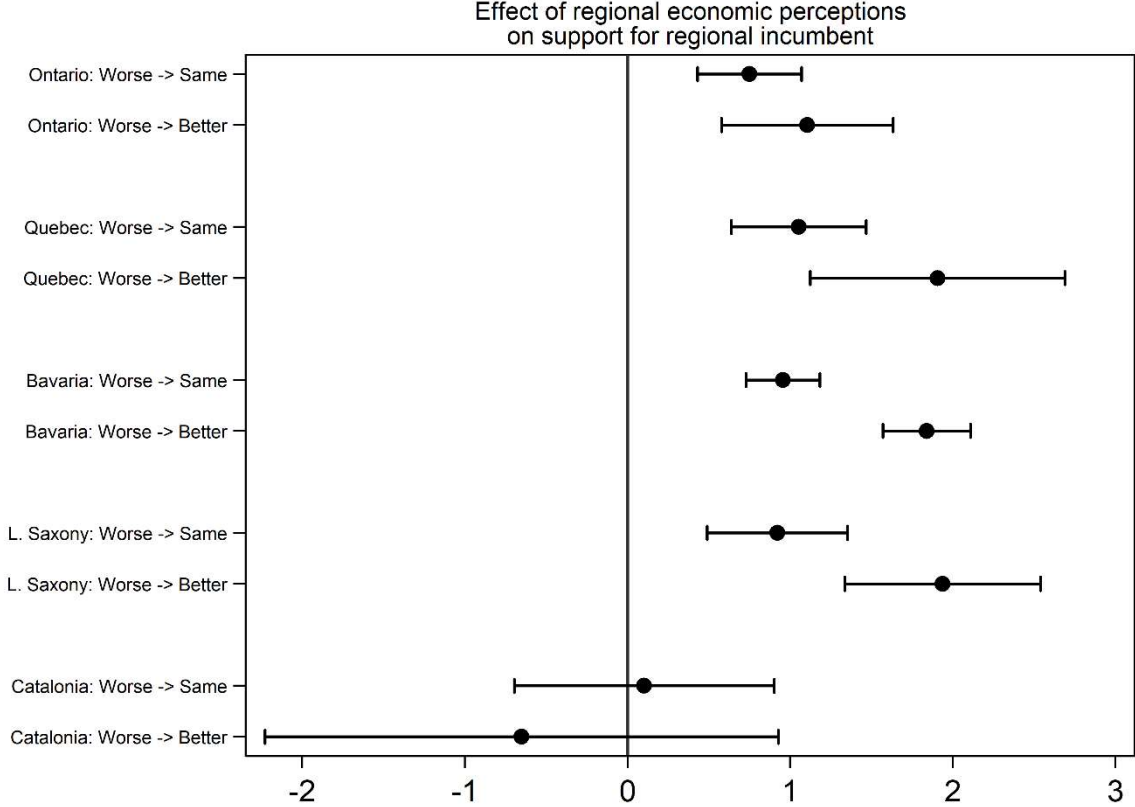


Note: Figure shows predicted effect of moving from a negative economic perception (‘worse’) to a neutral (‘same’) or positive (‘better’) perception. The outcome variable is the 0-10 like-dislike score for the incumbent party. Results based on Table A.1.

The pattern of effects is similar at the regional level: across all five cases, regional economic perceptions are strongly and significantly associated with support for the regional incumbent. Figure 5 shows, for instance, that in Ontario someone with positive regional economic perceptions is predicted to have a like-dislike score for the regional incumbent party that is about 2.1 higher than the predicted score for those with negative perceptions. Similar effects are found in all regions, with the partial exception of Catalonia, where patterns are less consistent. Thus, in contrast to the contradictory findings on regional economic voting present

in the literature, we provide clear evidence that voters hold regional incumbents accountable for perceived regional economic conditions.

Figure 5: Marginal effect (first differences) of regional economic perceptions on support for regional incumbent



Note: Figure shows predicted effect of moving from a negative economic perception ('worse') to a neutral ('same') or positive ('better') perception. The outcome variable is the 0-10 like-dislike score for the incumbent party. Results based on Table A.2.

'Cross-level' effects of economic perceptions

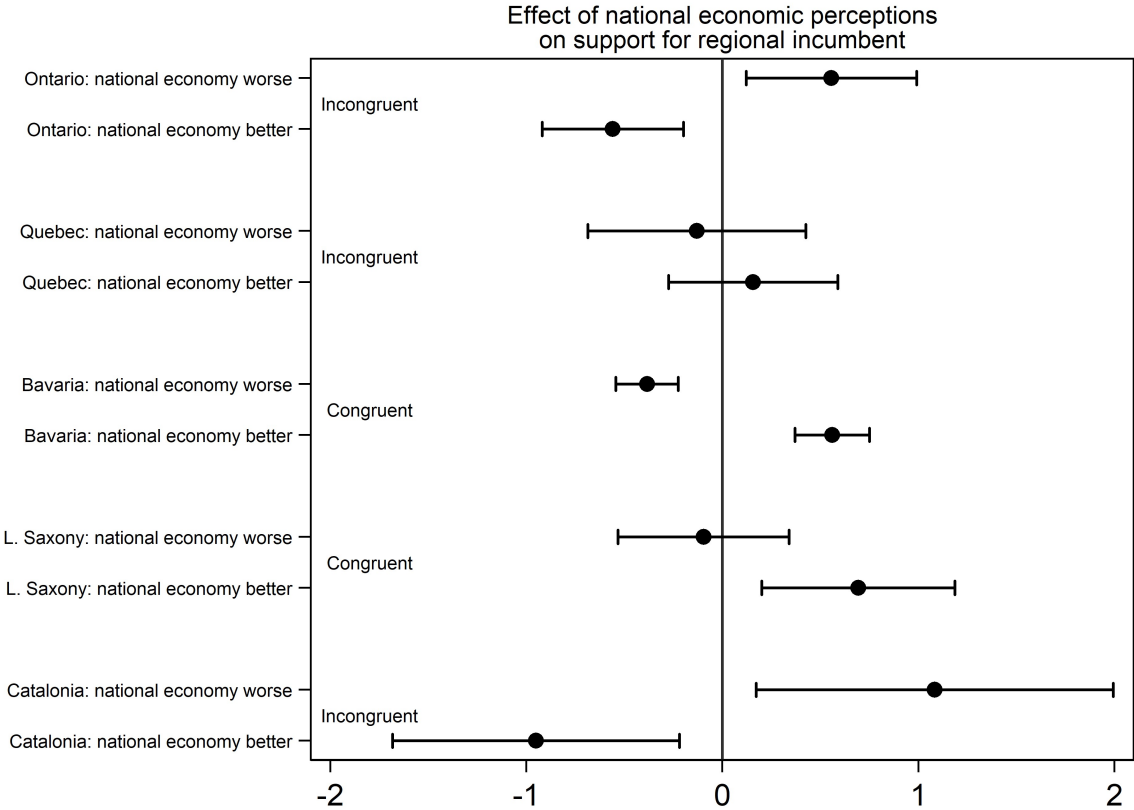
Turning to the 'top-down' effect of national economic perceptions on support for regional incumbents, we identify varied effects according to patterns of vertical partisan (in) congruence. We can see in Figure 6 that in regions with vertical partisan congruence (Lower Saxony and Bavaria), the predicted probability of voting for the incumbent regional government is higher if the national economy is viewed more positively than the regional economy, and vice versa.¹¹

¹¹ Note that in Lower Saxony there is no effect of thinking the national economy is doing worse than the regional economy; this can be interpreted as showing that regional incumbents are insulated from less positive national economic perceptions of a co-partisan government

There is thus clear evidence in support of H1a, predicating a second-order election effect in the case of vertically congruent governments. In contrast, in incongruent settings, we find the reverse pattern, supporting H1b: in Ontario and Catalonia, support for the regional incumbent decreases if the national economic conditions are viewed more positively than regional conditions. The effects for Quebec are unclear and not statistically significant. In sum, due to their distinct partisanship, these regional incumbents are either insulated from perceptions of national economic conditions (Quebec), or suffer a fate opposite to that of national incumbents.

Note however that the full results (reported in the Appendix) indicate that the magnitude of the ‘cross-level’ effects, at about 0.5 to 1 points on the 10-point scale, is at most about half the size of that for ‘same-level’ economic perceptions. So, while the level of support for regional incumbents can be affected by perceived national economic conditions and vertical partisan (in)congruence, it still depends primarily to the state of the economy at the same regional level.

Figure 6: Marginal effect (first differences) of national economic perceptions on support for regional incumbents

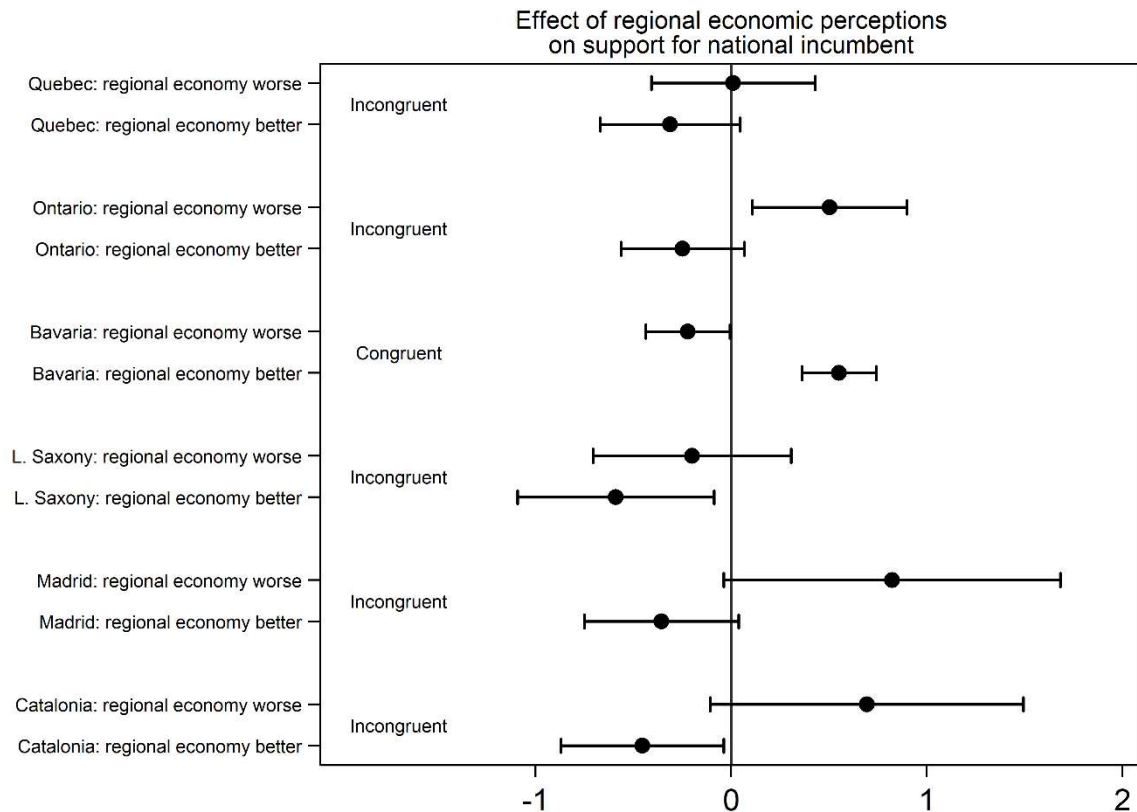


Note: Figure shows predicted effect of thinking that the national economy is doing worse or better than the regional economy, compared to thinking the two are doing equally well. The outcome variable is the 0-10 like-dislike score for the regional incumbent party. Results based on Table A.2.

Looking next at national incumbents, Figure 7 shows that the ‘bottom-up’ effects of regional economic perceptions on support for national incumbents also depend on the pattern of vertical partisan (in)congruence. In regions with vertically incongruent governments (Catalonia, Madrid, Lower Saxony, Quebec and Ontario), more positive perceptions of the regional economy compared to the national economy are associated with lower levels of support for the national incumbent party. The effects in Madrid, Ontario and Quebec are statistically significant at the 0.1 level. More negative perceptions of the regional economy compared to the national economy lead to an increase in support for the national incumbent’s party in Catalonia, Madrid and Ontario (though effects are significant only at the 0.1 level in Catalonia and Madrid). This confirms H2b. In Bavaria, a region with vertical partisan congruence, the effect is the opposite: more positive (negative) regional economic perceptions compared to national economic perceptions are linked to higher (lower) support for the national government, confirming H2a. There is thus support for the presence of a ‘bottom-up’ second-order effect, providing some support for our intuition that voters are swayed by the state of the economy in their immediate surroundings and engage in a form of regional ‘socio-tropic’ voting when determining their support for national incumbents.

However, note again that while the magnitude of these effects is not small, it is only about half that found for national economic perceptions: in Figure 6, effects are about 0.5, whereas the effects of the national economic perceptions are at least twice that. So, while we again find support for a degree of ‘cross-level’ effects of economic perceptions, the direction of which is determined by the presence of vertical partisan (in) congruence, national incumbents are still evaluated more based on the perceived state of the national economy.

Figure 7. Marginal effect (first differences) of regional economic perceptions on support for national incumbent



Note: Figure shows predicted effect of thinking that the regional economy is doing worse or better than the national economy, compared to thinking the two are doing equally well. The outcome variable is the 0-10 like-dislike score for the incumbent party. Results based on Table A.1.

Mechanisms of cross-level voting

Finally, we wished to know why national and regional incumbents experience dissimilar fates in incongruent settings. For instance, if the regional economy is doing well, do voters in national elections evaluate the national incumbent more negatively or do they reward the regional incumbent's co-partisans in opposition at the national level?

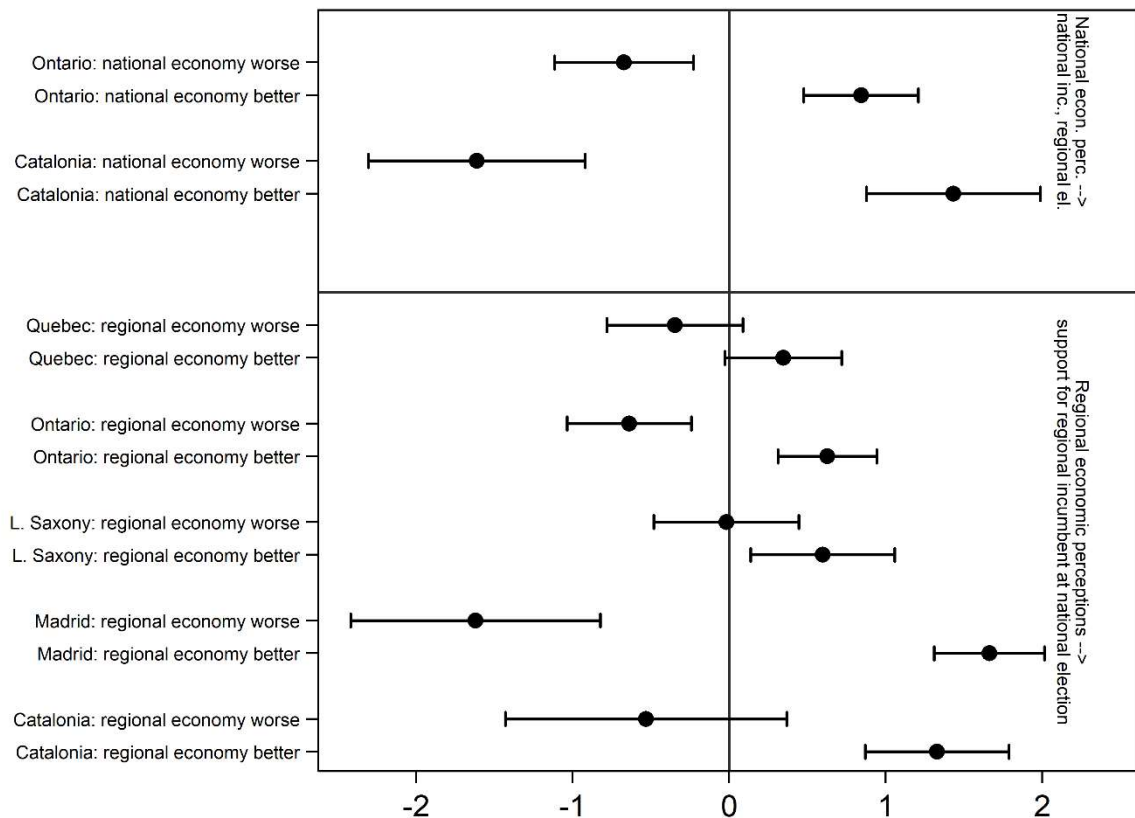
From the bottom part of Figure 8 we can see that, in national elections, the 'bottom-up' support for the regional incumbent party in national opposition is higher if perceived regional economic conditions are better than national ones. This is true in all 5 contexts, with the effects

in Quebec significant at the 0.1 level.¹² On the other hand, if regional economic conditions are perceived as worse than national economic conditions, this tends to decrease support for the regional incumbent in national elections, though the clarity of this effect varies. Overall, this provides support for H3a. Are the co-partisans of national incumbents at the regional level similarly rewarded for positive national economic conditions? The data to answer this question are only available for Ontario and Catalonia. However, the results, shown in the top part of Figure 8 are consistent with H4b: support for the national incumbent party in regional opposition increases (decreases) as if perceived national economic conditions are better (worse) than perceived regional economic conditions.

We thus have a more complete picture of the mechanism of ‘cross-level’ effects of economic perceptions in incongruent settings. There is evidence for the contention that national and regional incumbents are not being blindly punished for positively perceived economic conditions prevailing at the other level. What is happening is that co-partisans in regional and national opposition are reaping the rewards of their colleagues’ good performance in steering positive outcomes for the national or regional economy.

¹² This is consistent with what we know about the party system of Quebec and the organizational structure of the Liberal party. The territorial cleavage and presence of the Parti Québécois (PQ) as a left-wing regionalist party means that the Liberal party is on the centre-right of a bipolar party system with a salient territorial dimension. This has created incentives for the Liberal party to split the party organization. The Ontarian party system resembles more closely the federal party system, in which the Liberal is a centrist opposition to the centre-right Conservative party, and in competition with a left-wing NDP. The provincial and federal branches of the Liberal party are therefore more integrated and their shared party labels are more meaningful to voters. Thus, it is in that region (Ontario) in which the party has stronger organizational linkages between levels that we find stronger evidence of ‘cross-level’ voting mechanism proposed by H3.

Figure 8: Predicted effect of economic perceptions on support for incumbent national party in regional elections and for incumbent regional party in national elections



Note: Figure shows predicted effect of thinking that the national/regional economy is doing worse or better than the regional/national economy, compared to thinking the two are doing equally well. The outcome variable is the 0-10 like-dislike score for the national/regional incumbent party. Results based on Table A.3.

The effects of controls

The effects that we find for the influence of economic perceptions in national and regional elections hold while controlling for the effects of party identification. Party identification has a very strong impact on like-dislike scores, but does not completely account for the effects of perceived economic conditions. Hence, the patterns we find in Figures 4 to 8 do not just result from the fact that both economic perceptions and government support result from partisan sympathies. To further ensure that our findings are not due to partisan bias in economic perceptions, we re-ran our analyses excluding all individuals who expressed a partisan identity. While the results for these smaller samples are less often statistically significant, they point in the same direction as the main results. We present this finding in Appendix 6.

The results for regional and national identity show that there is no consistent effect of this variable on vote choice in national or regional elections. When we consider national elections, the only significant effect in the expected direction is that for national identity in Catalonia, Lower Saxony and Ontario; in the other regions, the effects are not statistically significant. If we consider regional elections, we find a significant effect in the expected direction for Catalonia, Bavaria and Quebec, and no significant effect for Lower Saxony. Surprisingly, the significant effects for Quebec are in the opposite direction to that expected. Finally, satisfaction with national and regional democracy generally work as expected: those satisfied with democracy tend to support the incumbent at that level.

Conclusion

The state of the economy is always going to be an important consideration for voters, especially during an economic recession. It is all the more important in multi-level states, where both federal and regional governments have the policy tools to influence economic conditions within their jurisdictions. But, as the campaigns and results of recent elections in Canada and Spain show, how economic conditions prevailing at different levels affect the outcome of regional and national elections is something that still needs to be elucidated.

This is what we aimed to do in this article. After noting the inconsistent results existing in the literature, we developed an analytical framework that focused on the lynchpin of democratic accountability in multi-level states, namely, how individual voters' perceptions of the regional and national economy affect support for the incumbent parties in regional and national government. We were interested in 'same-level' as well as 'cross-level' economic voting, and in the conditional effect of vertical partisan (in)congruence.

Using new data from the MEDW project, we found evidence for the effect of 'same-level' economic perceptions: positive economic perceptions tends to be associated with greater support for the incumbent at each respective levels of authority. What is worth highlighting is

that this effect is found in both ‘dual’ systems like Canada, ‘cooperative’ systems like Germany, and more intermediate systems like Spain. In contrast to the findings generated by Anderson’s (2006) cross-national analysis and Leon and Orriols’ (2016) cross-regional analysis, differences in the CoR do not seem to impinge on voters’ decisions to judge their rulers on their economic performance. Moreover, the finding that voters’ support for regional incumbents is influenced by perceived regional economic conditions represents an important contribution to the literature, which has so far found only mixed support for regional economic voting.

We also found evidence of a ‘cross-level’ effect of economic perceptions in cases of vertical partisan congruence. This is true for the ‘top-down’ effect of perceptions of national economic conditions during regional elections, confirming their status as ‘second-order’ contests. There is also support for a ‘bottom-up’ effect, in which regional economic conditions affect support for the national incumbents. This suggests that, given the spatial limits that govern their everyday lives, voters may engage in a form of regional ‘socio-tropic’ voting and hold national incumbents accountable for the economic wellbeing that they can observe in their region, as much as for the state of the national economy. In cases of vertical incongruence, the effects of cross-level economic conditions were reversed: parties in regional and national office of a different label will tend to experience a fate that is opposite to that of their rivals in central or regional office. Interestingly, we found that, in these settings, part of this contrasting approval may result from the way in which parties in national or regional opposition will tend to be rewarded (or punished) for the perceived improved economic conditions produced by their co-partisans in regional or national governments. Voters, it seems, consistently tend to assess economic performance on a partisan basis, across different levels of authority.

This should offer good reason to adopt a more benevolent view of accountability in multi-level settings than has hitherto been espoused by the literature. Our findings suggest that, in fact, voters are skilfully able to navigate the complexity engendered by the compound nature of authority of multi-level systems. They hold their rulers accountable for the economic

outcomes that they perceive, but they can also use the system of multi-level elections to ‘signal’ their dissatisfaction with the performance of national and regional incumbents.

Democratic accountability clearly works in multi-level settings, as there is evidence that ‘same-level’ economic perceptions matter: voters assess regional and national incumbents as a function of perceived economic conditions prevailing in their respective jurisdictions. Moreover, this occurs across different types of federal systems, irrespectively of whether the formal allocation of competences between tiers may blur lines of responsibility. The presence of ‘cross-level’ effects of economic perceptions has more troubling implications for accountability, since incumbent governments are being evaluated for generating economic conditions which, in theory, do not lie in the province of their authority. The clearest instance of this is that, in cases of congruence, regional governments are being incorrectly evaluated according to a ‘second-order’ logic, for their co-partisans’ failings or achievements at the national level. However, it is worth underlying, first, that the strength of these cross-level effects is only half as strong as those found for the ‘same-level’ economic perceptions. Thus, overall, voters are accurately evaluating their different rulers’ performance during regional and national elections. Moreover, we can dwell on the finding that, in incongruent settings, the divergent fates of regional and national incumbents is not driven by an inaccurate and unfair judgement of their respective performance – say, the sanctioning of a national government for positive regional economic conditions – but rather by the consistent support of regional incumbents’ co-partisans in opposition at the national level, for their good performance.

This suggests an alternative and positive interpretation of this pattern of behaviour: voters take valence and competence signals from governing arrangements and apply these to other levels, conditional on whether the same or a different party governs there. Thus, voters are prepared to use elections at different levels to signal their (dis) satisfaction with the state of the economy at one level by rewarding an incumbent’s co-partisans at another. While this may not be ideal for those concerned with maintaining sharply divided lines of accountability in

multi-level settings, it nevertheless shows that voters appear to be keenly aware of how partisan politics and government-opposition dynamics work in multi-level settings.

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