

# Institutions, Economic Performance and Political Support: New Evidence from Belgium, 1984-2007

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# **Institutions, Economic Performance and Political Support: New Evidence from Belgium, 1984-2007**

## **Abstract**

The relation between economic outcomes and incumbent popularity has been argued to require an institutional environment allowing voters to effectively assign responsibility. The present paper reassesses this claim using opinion poll data on Belgian federal government popularity (1984-2007). Belgium lends itself perfectly for this purpose due to the country's unique institutional context: linguistic division of its party system, divergent political environment across Flanders and Wallonia and its continually developing federal structure. The analysis illustrates that economic outcomes affect federal government popularity in Belgium, although, due to the complex institutional environment, the relation is feeble. Interestingly, political-institutional differences across Flanders and Wallonia make the observed link vary over both regions. Finally, the various stages in Belgian federalisation have different effects on the economy-popularity relation. The significant devolution of fiscal responsibilities (in 1988-89) abated voters' ability to assign blame/rewards to a larger extent than the introduction of direct regional elections (in 1993).

**Keywords:** Government approval, Vote intentions, Popularity function, Institutions, Economic voting.

# **Institutions, Economic Performance and Political Support: New Evidence from Belgium, 1984-2007**

## ***1. Introduction***

The link between economic outcomes and incumbent popularity has attracted much scholarly attention. Still, previous findings are not uniformly in favour of the hypothesis that incumbents are held responsible for economic ‘good’ and ‘bad’ times (for overviews, see Nannestad and Paldam, 1994; Lewis-Beck and Stegmaier, 2000, 2007). Much depends on whether the voter can clearly assign blame or praise. For example, the influence of economic variables on popularity (and election outcomes) is argued to be weaker for divided, coalition or minority governments compared to one-party majority or unified governments because the ‘clarity of responsibility’ of such governments is lower (Powell and Whitten, 1993; Whitten and Palmer, 1999). Also, the perceived responsibility of the national government is argued to be lower under multilevel governance – i.e. “the dispersion of political authority across multiple levels of government” (Anderson, 2006, 450). Finally, a credible alternative for the present incumbent is required (Paldam and Schneider, 1980; Anderson, 2000). In the absence of a viable alternative, the economy-popularity relation is likely to weaken (Anderson, 2000) or might even reverse (i.e. bad economic performance increasing government popularity; Paldam and Schneider, 1980).

The present paper provides a new assessment of politicians’ accountability for economic outcomes by exploiting the unique political, constitutional and institutional setting of Belgium. Belgium indeed lends itself perfectly for this purpose. First, the Belgian party system is – since the 1970s – split along linguistic lines and the country’s two main linguistic groups (Dutch- and French-speaking) vote for two

separate sets of parties.<sup>1</sup> The Belgian constitution, however, demands a federal government formed by parties from both language communities. This institutional-legal set-up leads to the continuous presence of coalition governments *and* national (economic) policies being determined by parties for which a large part of the electorate cannot vote (reducing the ‘clarity of responsibility’). Secondly, the country has a federal structure, which has undergone various changes over time. For example, important devolutions of powers took place in 1980 and 1988-89 and in 1993 direct elections for the regional parliaments were introduced (Murphy, 1995; Gérard, 2001; Hooghe, 2003, 2004 – see below for more details). Finally, the relative strength of single-issue parties in the Dutch-speaking part of the country (Flanders) compared to the French-speaking Wallonia implies that there might be less viable alternatives to the incumbent in Flanders versus Wallonia (cf. Paldam and Schneider, 1980; Geys et al., 2006).

While various existing studies analyse the effect of institutions on the economy-popularity relation (e.g., Powell and Whitten, 1993; Whitten and Palmer, 1999; Lewis-Beck, 1997; Anderson, 2000; Nadeau et al., 2002; Lewis-Beck and Nadeau, 2002; Anderson, 2006, 2008a, b), we add to this literature in two main ways. First, scholars have mostly relied on cross-country comparative analyses to assess the impact of institutional factors. We exploit institutional differences within different parts of and over time within one country (i.c. Belgium), thus allowing us to separate institutional from government-specific effects. Second, rather than focus on one particular institutional element as in most previous work, the complex institutional design of Belgium enables us to provide a more comprehensive view of the relation between institutions and accountability for economic outcomes. Our analysis is thereby most closely related to work on the complex French institutional setting by

Lewis-Beck (1997) and Lewis-Beck and Nadeau (2002) and the effect of Belgian federalisation by Anderson (2008a). Unlike these authors, however, we do not confine ourselves to the effect of electoral institutions (as Lewis-Beck, 1997; Lewis-Beck and Nadeau, 2002) or multi-level governance (as Anderson, 2008a), but look at the effects of the institutional setting in a broader sense.

In the next section, we review the previous literature and derive a number of testable hypotheses. Then, we describe the Belgian institutional setting in light of these hypotheses. The empirical analysis – presented in section 4 – employs survey data on Belgian federal government popularity (measured separately for Flanders and Wallonia) for the period 1984-2007. The main findings – described in the final section of the paper – indicate that economic outcomes affect government popularity in both Flanders and Wallonia, but only to a limited extent due to Belgium's complex institutional setting. Interestingly, however, the relation differs across the two regions.<sup>2</sup> This asymmetric reaction suggests that political-institutional differences between both regions matter for government accountability. The increasing federalisation of Belgium had at best a limited effect on the economy-popularity relation, and, crucially, its effect appears to depend on the type of institutional development. Particularly, the significant devolution of fiscal responsibilities (in 1988-89) had a stronger effect on the voters' (in)ability to assign blame/rewards than the introduction of direct regional elections (in 1993).

## ***2. Review of the literature and hypotheses***

The most commonly advanced argument to explain the link between the economy and election outcomes and/or politicians' popularity is based on Downs' (1957) instrumental voter model.<sup>3</sup> In this model, utility-maximising voters compare the

expected costs and benefits of voting for two alternative parties and base these expectations in part on parties' past performance. As a result, voters support parties that performed well in the past in the expectation that they will do well in the future.<sup>4</sup> More recently, this 'intuitive' idea has been given a firmer theoretical footing in, for example, the competency model of Rogoff and Sibert (1988). A similar prediction can also be obtained by viewing elections in a principal-agent framework (cf. Ferejohn, 1986; Banks and Sundaram, 1993). While pre-election promises are generally non-enforceable, voters (the principals) can discipline incumbents (the agents) through retrospective voting (e.g., Persson and Tabellini, 2000). This basic result is known as the 'responsibility hypothesis' and represents our first hypothesis:

H1: Voters hold incumbents accountable for economic developments  
and voice their reward/punishment at the polls.

Several studies find empirical support for H1 using unemployment, inflation or GDP growth as economic indicators (for surveys, see Nannestad and Paldam, 1994; Mueller, 2003; Lewis-Beck and Stegmaier, 2007). Still, the link appears unstable over time and space (Paldam, 1991). One explanation for this lack of stability is that institutional differences across countries or over time generate variation in the degree of political accountability. Powell and Whitten (1993), for example, contend that divided, coalition or minority governments have a lower 'clarity of responsibility' compared to one-party majority or unified governments, reducing voters' ability to unambiguously observe who is responsible for policy decisions. Anderson (2006, 2008a, b) maintains that additional layers of policy-making (or multilevel governance) similarly decrease the perceived responsibility of the national government. Hence, we can formulate a second hypothesis as:

H2: Institutional complexity reduces ‘clarity of responsibility’. This mutes political accountability for economic outcomes.

Empirical evidence in line with H2 is provided by, among others, Powell and Whitten (1993), Whitten and Palmer (1999), Anderson (2000), Nadeau et al. (2002) and Anderson (2006, 2008a, b) (see, however, Royed et al., 2000). Next to ‘clarity of responsibility’, however, accountability for economic outcomes may hinge on having a credible alternative for the present incumbent (Paldam and Schneider, 1980; Anderson, 2000). Indeed, voters might disapprove of the (economic) record of the current government, but lacking a viable alternative may end up voting for the same parties. Anderson (2000) therefore maintains that the economy-popularity link is likely to be stronger when a solid opposition party exists (rather than small and fragmented opposition parties). Paldam and Schneider (1980) contend that the direction of economic voting can reverse when opposition parties “concentrate on single issues, are centered around a colourful personality, tend to stress the protest dimension etc.” (the ‘stability’ hypothesis; Paldam and Schneider, 1980, 452-453). The reason is that such single-issue or populist parties provide no convincing economic program and traditional (government) parties might then still be considered more knowledgeable on economic matters (despite a potentially bad track record). Supportive evidence of this argument is provided in Paldam and Schneider (1980) and Anderson (2000).

H3: Lack of viable political alternatives reduces accountability for economic outcomes, and might even reverse its direction.

### ***3. The Belgian institutional complexity***

#### **3.1. Belgian party system(s) and coalition governments**

Since the introduction of an electoral system based on proportional representation in 1900, Belgium had a ‘two-and-a-half’ party system (Blondel, 1973; Deschouwer, 1999): a large Christian-democratic and social-democratic party and a smaller liberal party. However, the linguistic division of its population – a Dutch-speaking (Flemish) community (circa 60% of the population), a French-speaking (Walloon) community (circa 40%) and a German-speaking community (less than 1%) – and increasing regionalist tensions created two separate party systems in the mid 1970s (Deschouwer, 2004). Existing national parties split into French- and Dutch-speaking ‘sister’-parties, while new parties established since the division – e.g., the ecologist and extreme-right parties – immediately began as regional parties (see Table 1).

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Table 1 about here

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Importantly, parties from either language community cannot form a federal government on their own. The Belgian constitution explicitly stipulates that the federal government should be composed of an equal number of Dutch- and French-speaking ministers (the Prime Minister is considered linguistically neutral). Parties have, moreover, preferred to form symmetric and congruent governments. Symmetry implies that parties of the same political family are either jointly in or out of the federal government, while congruence indicates that the same parties are in power at different levels of government (i.e. federal and regional) (Deschouwer, 2004). As a result, Belgium is characterized by continuous (mostly symmetric) coalition governments of at least four parties, including parties from both language communities. This is illustrated in Table 2, where we show the composition of

Belgian governments from 1981 onwards. After two consecutive governments of Christian-democrats and liberals in the 1980s, the Christian-democrats and Socialists governed together for more than a decade. In 1999, a coalition of liberals, socialists and ecologists came into power, which continued without the ecologist parties after 2003.

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Table 2 about here

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Hypothesis 2 above argues that the attribution of responsibility is hard in complex institutional settings. In Belgium, this is not only due to the constant presence of coalition governments (cf. Powell and Whitten, 1993). Indeed, the ‘bi-lingual’ nature of governments and the impossibility to vote for parties in both language communities means that voters may (be lead to) attribute the responsibility for economic developments to parties from the other language community (for which they cannot vote) – further reducing accountability.

### 3.2. Single-issue parties

There are significant political-institutional differences between the party systems in Flanders and Wallonia. First of all, the dynamics of party competition vary strongly across both regions. This is clear from the discrepancy in the relative strength of both the traditional and single-issue parties<sup>5</sup> and suggests that different issues play in the electoral battle in both language communities. Secondly, there is the ‘cordon sanitaire’ around the Flemish extreme-right party, precluding cooperation with this party at any level of government. This clearly diminishes the options of the other parties to form coalitions (see Geys et al., 2006) and, as such, reduces potential (viable) alternatives to the incumbent. While a similar cordon also exists in Wallonia,

its constraining influence is *de facto* absent given the small size of the extreme-right. In line with H3, we expect such political-institutional differences to make the *extent* of accountability for economic outcomes vary across both communities.

Finally, single-issue parties at times play an important role in Flanders (especially the extreme-right Vlaams Belang since its 1991 electoral break-through, but also the regionalist Volksunie up to the late 1980s). In Wallonia, on the other hand, the traditional parties remain very dominant. Hence, the conditions under which the ‘stability hypothesis’ is likely to outweigh the ‘responsibility hypothesis’ (cf. Paldam and Schneider, 1980; see also section 2) are particularly well met in Flanders, but not in Wallonia.

### 3.3. Multilevel governance

Belgium’s development towards a federal state has been a long and gradual process that started in 1970 (Murphy, 1995; Gérard, 2001; Hooghe, 2003, 2004). In that year, the Belgian constitution was altered to recognize the existence of different territorial and cultural identities: i.e. it henceforth stated that Belgium consists of three Regions (i.e. Flemish, Walloon and Brussels Capital Region) and three Communities (Dutch-, French-, and German-language community). Further steps in the federalisation process after 1970 took place in three main stages. First, in 1980, a significant devolution of powers took place as the Regions and Communities obtained new competencies and more autonomy. At the same time, however, the regional level of government had little financial responsibility (obtaining most of its funds from block grants and spending less than 10% of the overall government budget) and regional parliaments were not directly elected. Then, in 1988-89, significant additional responsibilities – amounting to about one quarter of state

spending – where shifted to the Communities and Regions (Gérard, 2001; Moesen, 2005). Regional power to tax, however, remained limited (Hooghe, 2003). In the third stage, in May 1993, direct election of regional parliaments was introduced (Murphy, 1995; Gérard, 2001; Hooghe, 2003), thereby formally adding another layer of government decision-making in Belgium.<sup>6</sup>

It is clear that this process has gradually increased the importance of the regional level of government in Belgium and ‘hollowed out’ the central government (Hooghe, 2004). In line with Hypothesis 2, it can be expected that this increasingly blurs the accountability of the federal government (cf. Anderson, 2006, 2008a, b).

#### 3.4. Economic voting in Belgium: Previous findings

Previous studies about economic voting in Belgium generally test for the existence of accountability for economic outcomes (i.e. H1). Boute and Ginsburgh (1977) analyse national election results at the provincial level over the 1958-1974 period and find that only the Christian-democratic party – which lead most governments during this period – was affected by the economy (using unemployment, inflation and growth as economic indicators). Willemé (1993) discusses national election results for the 1958-1988 period and, despite the low number of observations (11), finds some support for the responsibility hypothesis. Naert (1987) and Willemé and De Pelsmacker (1991) analyse vote intentions rather than election outcomes and show that the economy plays only a minor role.<sup>7</sup>

To the best of our knowledge, only one study has thus far attempted to exploit Belgium’s particular and complex institutional setting. Anderson (2008a) finds supportive evidence for the idea that the creation of an additional layer of

government reduces accountability for economic outcomes. Nonetheless, by focusing on multi-level governance, he does not take other institutional complexities in Belgium into account. Moreover, he concentrates exclusively on the 1993-step in the Belgian federalisation process, thus disregarding potential effects from the other stages in this long process (see above).

#### ***4. Empirical Analysis***

##### **4.1. Dependent variables: Federal government popularity in Flanders and Wallonia**

We measure government popularity based on data from the quarterly political barometer by La Libre Belgique-IPSOS (henceforth LLB-IPSOS) over the 1984-2007 period. This survey asks 750 Flemish, 750 Walloon and 500 Brussels respondents: “If next Sunday, there were legislative elections, for which of the following parties would you vote for the Chamber of Representatives?”. Respondents can choose from a list of all available parties in their language community. Federal government popularity in Flanders and Wallonia is then defined (separately) by summing the vote shares of the parties in that specific language community that are part of the federal government.<sup>8</sup> The Brussels region is not taken into consideration because voters can vote for all Belgian parties there. We linearly interpolate data for (five) missing quarters and take a simple average when more than one poll was available in a given quarter. Note that assessing federal government popularity in both regions separately is essential to test whether the political-institutional distinctions between Flanders and Wallonia lead to differences in accountability for economic outcomes across both regions.

The popularity series for Flanders and Wallonia are depicted in Figure 1. We do not connect the data points when the composition of the government *coalition* changes

since these changes constitute a break in the data (we thus treat multiple governments as one government coalition as long as the coalition's composition remains constant). This coalition-based focus also explains why there are five breaks in the Flemish data-series while there are only four on the Walloon side. Indeed, regionalist Volksunie was part of the federal government on the Flemish side between 1988:3-1991:3, while no regionalist Francophone party was in the federal government during that period. When Volksunie left the government in 1992, this only constitutes a break on the Flemish side (as nothing changed on the Walloon side).<sup>9</sup>

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Figure 1 about here

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Several points are worth mentioning regarding Figure 1. Firstly, the combined vote share of the government parties in either region hovers between 40% and 80%. Hence, the government repeatedly fails to receive the support of half of the voters in one of the two regions. This need not be problematic as it does not necessarily require the backing of half of the representatives in each language group (it does, obviously, need a majority of the representatives in Parliament). Moreover, since the electoral system is not perfectly proportional, less than 50% of the votes may still lead to a majority of the seats. Secondly, evolution of government parties' popularity differs strongly across both regions. In fact, correlation between both data series is only 0.35. This gives a first indication that voters in both regions appear to react to different information – or react differently to the same information. Finally, one should note that comparison of the popularity series across coalition periods is untenable since the number and political strength of coalition partners varies. In the analysis below, this is addressed by adding coalition-specific intercepts (which

implies we compare popularity of a governing coalition over time within its legislative period).

#### 4.2. Model specification

In line with the extensive VP-function literature (cf. Nannestad and Paldam, 1994), we estimate the following basic specification:

$$P_{i,t} = a_i + b_1 P_{i,t-1} + b_2 ECO_{i,t} + b_3 POL_{i,t} + e_{i,t} \quad \text{with } i = \text{Flanders, Wallonia} \quad (1)$$

Where  $P_{i,t}$  is log-transformed popularity of federal government parties in Flanders and Wallonia respectively (i.e.  $P_{i,t} = \ln(\text{POP}_{i,t}/(100-\text{POP}_{i,t}))$ , with  $\text{POP}_{i,t}$  equal to the sum of vote shares of region  $i$ 's government parties in the LLB-IPSOS poll). Since vote shares are bound between 0 and 100, this transformation is important to prevent predicted values from lying outside this interval (estimations without this transformation give the same inferences and are available upon request).  $ECO_{i,t}$  and  $POL_{i,t}$  represent two vectors containing three economic and five political variables respectively (discussed below). Finally, to account for contemporaneous error correlation across the Flemish and Walloon popularity functions, we estimate the model using seemingly unrelated regression (SUR) techniques. This is preferred to OLS when both equations are not independent (a Breusch-Pagan test of independent equations rejects independence – see bottom row of Table 4).

As explanatory variables, we first of all include one lag of the dependent variable, thus modelling popularity as a partial adjustment process (e.g., Kirchgässner, 1991; Geys and Vermeir, 2008b). Slow adjustment is a common finding in the literature and indicates the weight of past events on voters' decision-making process (e.g., Frey

and Schneider, 1978; Kirchgässner, 1985). Moreover, inclusion of this lag is important to tackle the problem of autocorrelation which is present in both equations when it is left out.

The vector  $ECO_{i,t}$  is central to the current analysis and contains three ‘standard’ economic variables (Anderson, 2007): growth, unemployment and inflation. The national real GDP growth rate is measured as the percentage change in seasonally adjusted quarterly GDP at annual rates: i.e.,  $((GDP_t/GDP_{t-1})^4 - 1) * 100$ .<sup>10</sup> National inflation is calculated as the percentage change in the seasonally adjusted Consumer Price Index, also at annual rates. The regional unemployment rate equals the number of fully unemployed in the region as a percentage of the total regional population. Once again, we calculate the percentage change in seasonally-adjusted unemployment, at annual rates. While data constraints induce us to use regional-level unemployment and national-level growth and inflation<sup>11</sup>, this focus is theoretically justifiable. The reason is that media attention in both Flanders and Wallonia (which constitute largely independent media markets<sup>12</sup>) is mostly constrained to national rather than regional growth and inflation. For unemployment, on the other hand, regional unemployment levels obtain just as much – if not more – attention.

Note that to assess potential effects of the 1988-89 and May 1993 stages of Belgian federalisation, we include two vectors of interaction terms. Specifically, we interact all economic variables with a dummy equal to one after 1988:4 (Fed89) and a dummy equal to one after 1993:2 (Fed93). In order not to bias our estimates, we also include the two federalism-dummies (Fed89 and Fed93) as additional control variables (cf. Braumoeller, 2004; Brambor et al., 2006).<sup>13</sup>

The vector of political controls ( $POL_{i,t}$ ) includes five variables. First, we include dummy variables for all but one of the coalitions governing in the period analysed. Next, we control for the *cost of ruling* (e.g., Mueller, 1970; Frey and Schneider, 1978; Goergen and Norpoth, 1991; Nannestad and Paldam, 2002) by including a set of ‘time of government’ variables equal to the number of quarters a given coalition has been in power. Thirdly, we capture potential ‘pre-election rebounds’ in government popularity (e.g., Frey and Schneider, 1978; Schmitt and Wüst, 2006) through a dummy equal to 1 in the quarter of an election, 0 otherwise. Such an effect might derive from party leaders’ attempts to present themselves in the best possible light in the run-up to elections (Goodhardt and Bhansali, 1970; Cusack, 1999). Finally, we control for two political scandals: Agusta (a bribery scandal implicating the social-democratic parties) and Dutroux (a paedophilia scandal in which the political establishment was blamed for the malfunctioning of police and justice). The former is captured by a dummy variable equal to 1 in 1995:1-2 and 0 otherwise for Flanders, and 1 in 1994:1 and 0 otherwise for Wallonia (the scandal broke out at different moments in Flanders and Wallonia; see Deweerdt, 1995; Platel, 1996). The latter scandal is included via an indicator variable equal to 1 in 1996:3-4 and 1998:2, and 0 otherwise (the scandal unfolded in late 1996 and revived mid-1998 when Marc Dutroux briefly escaped from prison; see Deweerdt, 1995, 1997, 1999; Platel, 1996).<sup>14</sup> Descriptive statistics are given in Appendix 1.

#### 4.3. Empirical results

Prior to the analysis, extensive tests for the stationarity of our dependent and economic variables were performed through Augmented Dickey-Fuller tests (Dickey and Fuller, 1979; Said and Dickey, 1984).<sup>15</sup> Their results are shown in Table 3. We can reject the presence of a unit root in government popularity in all but one period

(i.e. the first coalition in Wallonia), though popularity is often found to be trend stationary. Given this trend-stationarity, we include a time trend for each coalition period (which effectively de-trends the series).<sup>16</sup> All economic variables are found to be (trend) stationary.

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Table 3 about here

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The results of the analysis are given in Table 4. While columns (1) and (3) contain the findings for the popularity of Flemish government parties, columns (2) and (4) show the results for the popularity of Francophone government parties. The first two columns provide a set of ‘base-line’ findings disregarding the potential effects of federalisation, while the last two columns present the full model including interaction effects to account for the increased federal nature of Belgium.

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Table 4 about here

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A brief review of the control variables confirms the slow adjustment of popularity ratings in both language communities (in line with Frey and Schneider, 1978; Geys and Vermeir, 2008a, b). The political variables generally also comply with expectations. There are significant coalition-specific effects in popularity, support is higher around election time in Wallonia (though elections have no effect in Flanders) and a longer time in government generally reduces popularity. Still, although the latter finding could support a cost of ruling (cf. Mueller, 1970), positive and negative trends might also result from changes in the party system (e.g., decline of regionalist parties or rise of the extreme-right). The Dutroux affair did not significantly affect

incumbent popularity, while the Agusta scandal mainly affected the popularity of Francophone parties in the federal government.

Turning to the main (economic) variables, Columns (1) and (2) indicate that economic growth never affects government popularity. Unemployment and inflation have significant effects only in Flanders. Hence, while economic outcomes have some effect (cf. H1), the results' overall weakness is in line with what one would expect given the complex institutional setting (cf. H2). Interestingly, although inflation has the expected negative effect in both regions, unemployment has a significant positive effect in Flanders and an insignificant negative one in Wallonia. While possibly reflecting the much larger unemployment problem in Wallonia, these results also indicate that the pattern of accountability for economic outcomes is different across both regions.<sup>17</sup> The political-institutional differences across both regions thus indeed affect political accountability (corroborating H3).

Columns (3) and (4) assess how the economy-popularity relation is affected by the increasing decentralisation in Belgium over time. This shows – in line with theoretical predictions (cf. H2) – that these institutional changes worked to further weaken federal government accountability (to the extent that they had any effect at all). Two observations stand out. First, most interaction effects remain insignificant – suggesting that the pre- and post-federalism effects are not statistically significantly different. Nonetheless, the negative effect of unemployment on incumbent support that existed before 1989 (i.e. the marginal effect of unemployment on popularity, given that both Fed89 and Fed93 are zero, is significant in both sides of the country) significantly weakened afterwards. This holds in both Flanders and Wallonia, but, interestingly, is stronger in Flanders: that is, in Wallonia the marginal effect of

unemployment on popularity remains negative (it drops to -0.059;  $p < 0.10$ ), while in Flanders the unemployment effect even becomes positive (0.036;  $p > 0.60$ ).<sup>18</sup> One possible explanation for this difference could be that the political-institutional differences across both regions invoked a dissimilar reaction to this decentralisation effort (cf. H3). This, however, appears improbably as we see no straightforward explanation for why and how this would occur. Another, more intuitive, explanation lies in the electoral break-through of the extreme-right in Flanders in 1991. This reflects the increasing strength of single-issue parties in Flanders and, according to H2 (see also Paldam and Schneider, 1980), this would reduce the strength of economic voting even stronger in that part of the country. This is exactly what we observe.

Second, only the institutional change in 1988-89 appears to have had a noticeable impact on the economy-popularity relation. Although the marginal effect of unemployment becomes insignificant in Wallonia as well in the post-1993 era ( $p > 0.25$ ), the substantive effect on the marginal economic effects in this case was much weaker (i.e. none of the interaction terms' coefficient estimates is substantively large, nor statistically significant).<sup>19</sup> One potential explanation for the 1989-1993 difference might lie in the type of change taking place at both points in time. As mentioned above, in 1988-89 a significant devolution of powers and spending responsibilities occurred whereas in 1993 the main modification was that the regional parliaments became directly electable. The former, fiscal change appears to have had more resonance than the latter, political revision of Belgium's institutional structure. It would be an interesting avenue for future research to evaluate whether this is a general finding (and why the type of institutional change would matter to voters' ability to hold their incumbents accountable).

## 5. *Conclusion*

Economic voting has been argued to depend on the extent to which voters can effectively assign blame or praise. Previous assessments of this hypothesis, while predominantly supportive, concentrate on cross-national comparative studies and often focus on one institutional characteristic. The present paper exploits Belgium's complex institutional setting to reanalyse the relation between institutions and political accountability for economic outcomes. Our focus on one country allows for an in-depth analysis of the country's institutional setting (providing an interesting case-study) while the inclusion of various institutional characteristics in the same analysis leads to a more encompassing view of the simultaneous effect of various institutional characteristics.

Our main findings – using La Libre Belgique-IPSOS opinion poll data over the period 1984-2007 to measure Belgian federal government popularity – illustrate that even in the complicated Belgian institutional setting the economy remains to affect government parties' popularity. However, the impact, in line with predictions, is feeble. A stronger, and perhaps more interesting, finding is that the economic effects observed differ across both language communities in Belgium. These differences can be reasonable linked to political-institutional differences over both communities. Also, the decentralisation efforts in 1988-89 and 1993 appear to have weakened the economy-popularity relation even further. Still, the effect was stronger after the fiscal devolution in 1988-89 than after the decision in May 1993 to directly elect regional parliaments. Future empirical work needs to determine the general nature of the latter finding, and should further explore how and why the nature of institutional changes might have a bearing on voters' ability to hold their incumbents accountable.

As a final remark, it is interesting to relate our findings to comparable work on Canada (which resembles Belgium in having two language communities and a federal structure). Guérin and Nadeau (1998) – for the period 1972-1984 – and Godbout and Bélanger (2002) – for the period 1988-2000 – show that the impact of the economy on incumbent popularity is stronger in English-speaking Canada compared to French-speaking Quebec. Guérin and Nadeau (1998) attribute this to the dominant presence in Québec of the Liberal Party, known for defending the interests of French-speaking Canadians. Godbout and Bélanger (2002) explain it by the strong presence of a regional party, the Bloc Québécois, which makes the constitutional debate on Quebec's independence a more salient issue than the economy. In comparison, our results likewise indicate weaker economic voting in the region with stronger single-issue parties (i.e., Flanders). This similarity of findings between Belgium and Canada suggests their importance beyond the Belgian case.

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*Appendix 1: Summary statistics (N=88)*

Variable	Mean	Standard deviation	Minimum	Maximum
Government Popularity Flanders	47.60	7.07	36.7	65.7
Government Popularity Wallonia	56.57	11.26	37.9	78.1
Growth	2.24	2.40	-4.84	6.90
Inflation	2.32	1.42	-0.13	6.79
Unemployment Rate Flanders	3.90	0.76	2.73	5.83
Unemployment Rate Wallonia	6.90	0.77	5.50	8.12
Election	0.06	0.23	0	1

Table 1: The Belgian party system(s)

	<i>Before regional division</i>	<i>After regional division</i>	
		<b>Flanders</b>	<b>Wallonia</b>
<b>Traditional parties</b>	Socialist Party Christian-Democrats Liberal Party	SP.a (SP) CD&V (CVP) VLD (PVV)	PS CDh (PSC) MR (PRL)
<b>Ecologist</b>	-	Groen! (Agalev)	Ecolo
<b>Regionalist<sup>a</sup></b>	Volksunie RW FDF	Volksunie	RW FDF
<b>Extreme right-wing</b>	-	Vlaams Belang (Vlaams Blok)	FN

Note: Given various recent name-changes, we give both the current and former (between brackets) party name.

<sup>a</sup> Volksunie split up in two separate parties in 2001: Spirit (which between late 2002 and November 2008 formed a cartel with SP.a) and N-VA (which between February 2004 and October 2008 formed a cartel with CD&V). RW dwindled in the 1980s and has largely been incorporated in the PS. FDF is part of MR since 1995.

Table 2: Belgian governments since 1981

<i>Period</i>	<i>Flemish Parties</i>	<i>Francophone parties</i>
1981-1985	CVP-PVV	PSC-PRL
1985-1988	CVP-PVV	PSC-PRL
1988-1991	CVP-SP-Volksunie	PS-PSC
1991-1992	CVP-SP	PS-PSC
1992-1995	CVP-SP	PS-PSC
1995-1999	CVP-SP	PS-PSC
1999-2003	VLD-SP-Agalev	PS-PRL-Ecolo
2003-2007	VLD-SP.a	PS-MR

Note: As noted in Table 1, most parties have changed their name over the timespan analysed. In Flanders, PVV renamed itself to VLD in 1992, CVP to CD&V in 1999, SP to SP.a in 2001 and Agalev to Groen! in 2003. On the Francophone side, PSC turned into CDh in 2002 and PRL into MR in 2002. We here present the name of the party at the time of its participation in the respective governments.

Table 3: Unit root test results

Variable	# obs.	# lags	$\tau_t$	Inference
Flanders I	18	2	-3.161 *	Trend stationary
Flanders II	13	6	-23.635 ***	Stationary
Flanders III	31	6	-9.372 ***	Stationary
Flanders IV	16	0	-10.442 ***	Stationary
Flanders V	15	1	-4.075 ***	Stationary
Wallonia I	18	1	-2.763	Unit root without drift
Wallonia II	44	0	-9.853 ***	Trend stationary
Wallonia III	16	5	-33.190 ***	Trend stationary
Wallonia IV	15	3	-4.405 ***	Stationary
Unemployment Flanders	83	9	-3.932 **	Trend stationary
Unemployment Wallonia	82	10	-3.540 **	Trend stationary
Growth rate	89	3	-5.137 ***	Stationary
Inflation rate	83	9	-3.525 **	Trend stationary

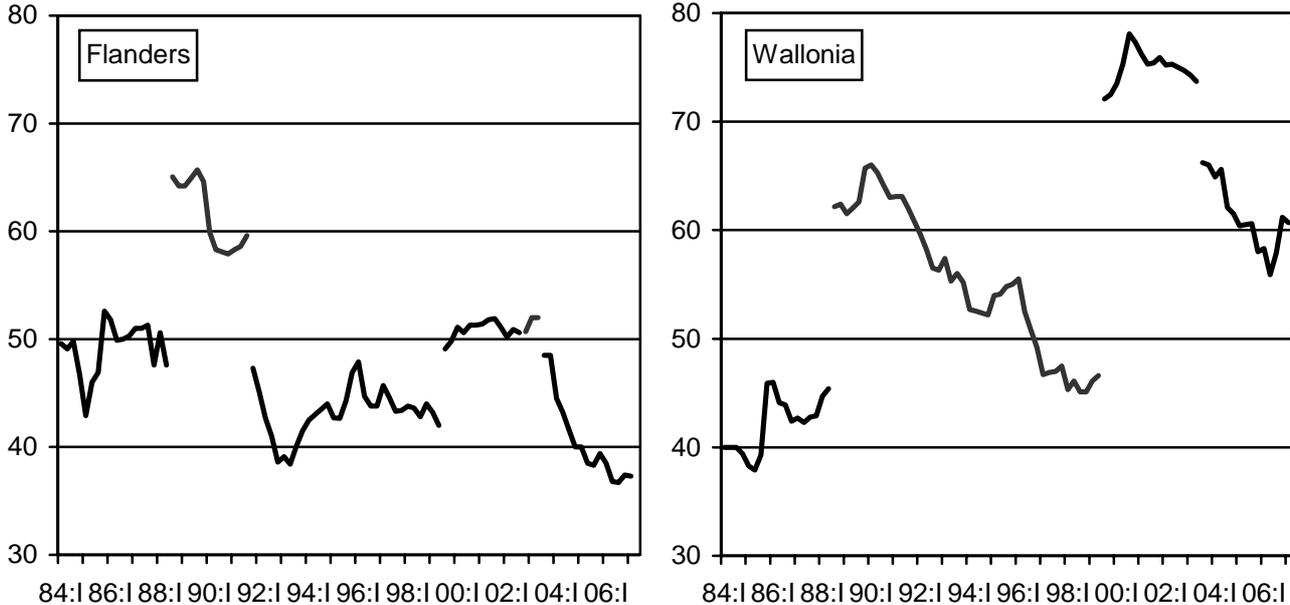
Note: Critical values  $\tau_t$ ,  $\tau_{\mu}$ , and  $\tau$  are in Fuller (1976). \*\*\* significant at 1%; \*\* at 5% and \* at 10%. We use interpolated critical values provided by Stata.

Table 4: Results popularity federal government parties in Flanders and Wallonia, 1984-2007

Variable	(1)	(2)	(3)	(4)
	Flanders	Wallonia	Flanders	Wallonia
Constant	-0.268 *** (-3.12)	0.350 ** (2.07)	0.486 (1.35)	1.863 *** (2.84)
Lagged Popularity	0.588 *** (7.61)	0.715 *** (10.49)	0.600 *** (7.32)	0.707 *** (10.42)
Inflation	-0.014 ** (-2.17)	-0.005 (-0.85)	-0.006 (-0.49)	-0.002 (-0.16)
Unemployment	0.051 ** (2.42)	-0.027 (-1.37)	-0.197 * (-1.94)	-0.309 *** (-2.67)
Growth	-0.001 (-0.43)	0.0001 (0.04)	-0.002 (-0.29)	0.004 (0.77)
Inflation*Fed89	-	-	0.001 (0.07)	-0.005 (-0.31)
Unemployment*Fed89	-	-	0.233 * (1.84)	0.250 ** (2.09)
Growth*Fed89	-	-	0.0001 (0.12)	-0.007 (-1.11)
Inflation*Fed93	-	-	0.0001 (0.01)	0.009 (0.55)
Unemployment*Fed93	-	-	-0.011 (-0.14)	0.004 (0.08)
Growth*Fed93	-	-	-0.001 (-0.66)	0.001 (1.42)
Fed89	-	-	-0.807 * (-1.83)	-1.352 ** (-1.99)
Fed93	-	-	0.132 (0.38)	0.025 (0.06)
Time in Government I	0.004 (0.99)	0.002 (0.58)	-0.022 ** (-2.21)	-0.006 (-1.44)
Time in Government II	-0.010 *** (-2.00)	-0.005 *** (-2.75)	-0.012 * (-1.92)	-0.006 *** (-3.04)
Time in Government III	0.002 (1.56)	-0.008 ** (-2.29)	-0.001 (-0.22)	-0.007 ** (-2.14)
Time in Government IV	-0.004 (-0.96)	-0.002 (-0.42)	-0.001 (-0.32)	-0.0003 (-0.09)
Time in Government V	-0.008 * (-1.80)	-	-0.008 * (-1.75)	-
Election quarter	0.008 (0.30)	0.060 ** (2.40)	-0.005 (-0.17)	0.056 ** (2.34)
Agusta	-0.065 (-1.62)	-0.078 (-1.59)	-0.029 (-0.53)	-0.089 * (-1.85)
Dutroux	-0.003 (-0.08)	-0.007 (-0.22)	-0.011 (-0.34)	-0.013 (-0.41)
Coalition dummies	YES 34.98 ***	YES 26.62 ***	YES 40.10 ***	YES 18.30 ***
Pseudo-R <sup>2</sup>	0.97	0.99	0.97	0.99
Breusch-Pagan test of independent equations	Chi <sup>2</sup> (1) = 12.443 ***		Chi <sup>2</sup> (1) = 8.436 ***	

Note: t-values between brackets: \*\*\* significant at 1%; \*\* at 5% and \* at 10%. Fed89 and Fed93 are dummies equal to one after 1988:4 and 1993:2 respectively. Coefficients in Table 4 are not directly interpretable. Marginal effects on the untransformed dependent variable are calculated as  $(100 \beta \exp(\beta x)) / (1 + \exp(\beta x))$ .

Figure 1: Federal government popularity in Flanders and Wallonia, 1984:1-2007:1



Source: Own calculations based on LLB/IPSOS polls

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## ***Endnotes***

- <sup>1</sup> Voters living in the Brussels Region and part of its periphery are an exception and can vote for parties of both language communities.
- <sup>2</sup> This divergence in the economy-popularity relation across various (linguistic) regions within one country is in line with results by Guérin and Nadeau (1998) and Godbout and Bélanger (2002) in Canada.
- <sup>3</sup> Although popularity *between* elections and re-election probabilities are often strongly related (e.g., Sigelman, 1979; Brody and Sigelman, 1983), there is an obvious qualitative difference between opinion polls and elections (Chapell, 1990; Fox and Phillips, 2003; Geys and Vermeir, 2008a). Being unpopular might make it more difficult to pass legislation, but it becomes impossible when one is not (re)elected. Although we assess ‘popular’ rather than ‘electoral’ effects of economic outcomes, we nonetheless refer to ‘economic voting’ in the remainder of the manuscript for ease of reference to the foregoing literature.
- <sup>4</sup> This is closely related to the reward-punishment model advanced by Key (1968) and Fiorina (1981). While making minimal assumptions regarding voters’ knowledge, they are assumed to make general, retrospective assessments of the incumbent’s performance. If this performance is deemed sufficient, the voter will support the incumbent. If insufficient, support is transferred to an opposition candidate.
- <sup>5</sup> In Flanders the Christian-Democrats are the dominant party (obtaining on average 34% of the votes in Flanders over the 1981-2007 period) while the Socialist Party has a dominant position in Wallonia (36% of the Francophone votes). The French-speaking Christian-Democrats and the Flemish Socialist party are much smaller than their counterparts in the other region (and both amass on average about 20% of the votes in their region). The French-speaking liberal (24%) and ecologist (10%) parties are somewhat stronger than their Dutch-speaking counterparts (respectively obtaining 20% and 6.6% on average). Flanders is, on the other hand, especially since 1991, characterized by the presence of a large extreme-right party (Vlaams Belang; peaking at over 20% of the Flemish voters at the turn of the millennium), while its Francophone counterpart, FN, has to date remained relatively small (less than 5% on average). Finally, regionalist parties had their largest success in the early 1970s, but have now blended into the traditional parties (see footnote *a* in Table 1).
- <sup>6</sup> In June 2001, the balance of fiscal powers across government levels altered as the regional level of government obtained more extensive taxation rights (Hooghe, 2003, 2004).
- <sup>7</sup> Both studies rely mainly on static models (excluding a lagged dependent variable). As a result, their models appear to suffer from autocorrelation. For example, Willemé and De Pelsmacker (1991) report that the Durbin-Watson statistics cannot reject the null hypothesis of no autocorrelation for most models. When

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they include a lagged dependent variable to control for this, all economic variables become insignificant (indicating misspecification bias in the static models).

- <sup>8</sup> This procedure assumes that support for a government can only come from voters of the governing parties. This might be constraining if some people approve of the government's performance, but would nonetheless not feel inclined to vote for one of its members. Still, recent evidence from Germany illustrates that popularity ratings based on vote intentions or government approval questions tend to be highly correlated, and that the choice of one or the other as dependent variable has at best weak effects on the empirical results (see Geys and Vermeir, 2008a).
- <sup>9</sup> In the last quarter of 2002, the small opposition party 'Spirit' joins the social-democrats in a cartel (see note *a* to Table 1). From then on the LLB-IPSOS poll considers the two as a single party. We do not consider this as a change in the government coalition, though for consistency we drop this observation (inclusion of this additional observation does not affect the results).
- <sup>10</sup> Annual rates give the value that would be obtained if a quarterly growth rate were maintained for an entire year. Seasonal adjustments of all economic variables were carried out using the TRAMO-SEATS procedure in the DEMETRA software package.
- <sup>11</sup> While data concerning regional economic growth rates exist at an annual level since – at least – 1984, no such data are available at a quarterly level (Thierry Vergeynst, Statistical Service of the Flemish Government, personal communication, 01/09/2008). This is unfortunate as recent studies have found that local-level economic indicators may independently impact national-level popularity or election results (see Pattie and Johnston, 2001; Auberger and Dubois, 2005; Elinder, 2007).
- <sup>12</sup> To illustrate this, it can be mentioned that the national news agency – BELGA (which has a dominant market position according to the European Journalism Centre) – has two independent editorial departments: one for the Flemish Community and one for the French-speaking Community.
- <sup>13</sup> While the substantive interpretation of these two dummies is meaningless – as their coefficients refer to the effect of federalisation when all economic variables are zero (which never occurs) – their exclusion might lead to significant bias and misinterpretation of the results (see Braumoeller, 2004; Brambor et al., 2006).
- <sup>14</sup> One other major scandal occurred in the period under study, namely the 'dioxin' scandal in 1999 (which involved dioxin-contaminated feed infecting chicken, pork and beef for human consumption). Still, this scandal erupted *after* the last poll for the CVP-SP/PS-PSC government and is thus not included in the model.

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- <sup>15</sup> Inclusion of a trend variable and constant term in the test procedure was based on statistical significance of these variables (following Dolado et al., 1990; Elder and Kennedy, 2001; Enders, 2004). The number of lagged first differences included was determined through a sequential *general to specific* rule (Hall, 1994; Ng and Perron, 1995; Maddala and Kim, 2004). Specifically, following Schwert (1989), we start out with  $k_{\max}$  lags (with  $k_{\max}$  equal to the integer part of  $12.(T/100)^{1/4}$  and T the number of observations) and iteratively test the significance of the last lag until it is statistically significant. Finally, we account for the breaks in the popularity series by performing separate tests for each coalition period (Enders; 2004; Perron; 1989). The drawback of splitting the sample this way is that the degrees of freedom in the subsamples are small, implying a low power of the tests. However, unit root tests accounting for structural breaks allow only one (e.g., Perron, 1989, 1990) or two (e.g., Lumsdaine and Papell, 1997; Lee and Strazicich, 2003) such breaks in the series; we have four and five breaks respectively.
- <sup>16</sup> These time-trend variables are the ‘Time in Government’-variables discussed above.
- <sup>17</sup> With exception of the unemployment effect, the difference of the economic effects across both regions is statistically insignificant at conventional levels.
- <sup>18</sup> For these calculations, we assume Fed93=0 to separate out the effect of the 1988-89 institutional change. While one might argue that this implicitly assumes the 1993-change did not happen, this is not an untenable assumption at the present stage as voters in, say, 1989 could not know that the 1993-change would take place.
- <sup>19</sup> Note that the 1993 Maastricht Treaty allowed the Belgian government to avoid responsibility for economic consequences of its policies by ‘blaming Europe’ for incisive budgetary measures taken to adhere to the Maastricht Criteria. While our data unfortunately do not allow disentangling both effects, the mere existence of such a ‘European effect’ would reinforce our conclusion that the 1993-step in the Belgian federalisation process had little impact on accountability for economic outcomes in Belgium.

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