The impact of within-party and between-party ideological dispersion on fiscal outcomes: evidence from Swiss cantonal parliaments

Tjasa Bjedov, Simon Lapointe, Thierry Madiès

▶ To cite this version:

HAL Id: halshs-01098755

https://halshs.archives-ouvertes.fr/halshs-01098755

Submitted on 7 Jan 2015

WP 1435

The Impact of Within-Party and Between-Party Ideological Dispersion on Fiscal Outcomes: Evidence from Swiss Cantonal Parliaments

Tjasa Bjedov, Simon Lapointe, Thierry Madiès,

November 2014

The Impact of Within-Party and Between-Party Ideological Dispersion on Fiscal Outcomes: Evidence from Swiss Cantonal Parliaments

Tjasa Bjedov, University of Fribourg, Switzerland, **Simon Lapointe**, University of Fribourg, Switzerland, **Thierry Madiès**, University of Fribourg, Switzerland

The Impact of Within-Party and Between-Party Ideological Dispersion on Fiscal Outcomes: Evidence from Swiss Cantonal Parliaments

January 21, 2013

Abstract The impact of the fragmentation of executive and legislative bodies on the level and composition of government expenditure is a political feature that attracted considerable attention from economists. However, previous authors have abstracted from two important concepts: ideology and intra-party politics. In this paper, we explicitly account for these two phenomenons, and make two main contributions. First, we show that both intra-party and inter-party ideological dispersion matters in the level of public spending. Therefore, it is incorrect to consider parties as monolithic entities. We also show that ideological dispersion matters especially for current expenditures, and not so much for investment expenditures. To do so, we construct a panel database (2003 to 2011) including data from a survey that quantifies the policy preferences of individual party members that were candidates to federal elections in Switzerland.

Keywords: Political Fragmentation, Public Spending, Political Parties, Ideology.

JEL Classification Numbers: D72, H72, D78.

1 Introduction

The impact of the fragmentation of executive and legislative bodies on the level and composition of government expenditure is a political feature that attracted considerable attention from economists. Political fragmentation is present in all democratic countries, albeit to varying extents. In most countries of continental Europe, where coalition governments are the norm, political fragmentation manifests itself in a large number of political parties both at the executive and legislative levels (Müller and Strøm, 2003). For its part, the European Parliament is experiencing increasing fragmentation due to the enlargement of the Union. Indeed, the number of parties represented increased from 51 in 1979 to over 170 thirty years later (Hix, Noury and Roland, 2009). We also recently observed explicit political fragmentation in parliaments of the Westminster tradition, which are usually characterised by strong single party majorities. For example, in 2010, the United Kingdom saw its first formal coalition government since 1945.[1] At the end of the 2000s, Canada and Australia were governed by minority governments, in which the single governing party did not hold a majority of the seats.[2] To stay in power, the largest parties in these three parliaments have had to bargain with other parties.

Numerous authors have studied the relation between political fragmentation and fiscal outcomes. An early example is the paper by Roubini and Sachs (1989), which showed that coalition governments tend to spend more than single-party majorities, using a common-pool approach. Other more recent papers, reviewed below, mostly confirmed that a higher level of fragmentation is associated with higher spending or public deficit. Wars of attrition are another model offered to explore the relation between fiscal outcomes (especially debt) and political fragmentation. Padovano and Venturi (2001) provide an empirical analysis of this type of model, and find that more fragmented governments are less likely to engage in wars of attrition.

However, these papers all assume that political parties are monolithic entities, and most abstract completely from ideological differences. In this paper, we depart from these two as-

---

[1] Short-lived minority governments and pacts occurred between 1974 and 1978 and in 1997 (Maer, 2010).

[2] Australia had its first minority government in over 70 years in 2010, when the Labor Party and the coalition led by the Liberals both failed to capture a majority of seats (Horne, 2010). However, minority and coalition governments are more common in Australian sub-national jurisdictions. For its part, Canada was led by minority governments from 2004 to 2011 (the Parliament of Canada's website has details on the length of all minority governments in Canadian history: http://www.parl.gc.ca/Parlinfo/compilations/parliament/DurationMinorityGovernment.aspx). Hung parliaments are more common in Canada than in Australia, although this seven year-long string of minority governments was a first. Before that, the previous minority government ruled for six months in 1979.

sumptions, and analyse the effect of both within-party and between-party ideological dispersion on fiscal outcomes. To our knowledge, this concept is not addressed in the current literature on political fragmentation. Intra-party dispersion will be defined by the extent to which party members differ from their party's ideological mean (in practical terms, we use the variance of each party's members' ideologies). Inter-party dispersion will be defined as the extent to which the different parties' ideologies are dispersed (in other words, the variance of the parties' ideological means). We do so by constructing a database with data from a survey (Smartvote) that quantifies the preferences of individual party members that were candidates to federal elections.

Our main contribution is showing that both intra-party and inter-party ideological dispersion are significant factors for fiscal outcomes. In particular, we find that intra-party ideological dispersion has a positive impact on public spending, while inter-party ideological dispersion has a negative impact. We also find that these results are stronger for current expenditures than for investment expenditures.

Our econometric results are discussed in greater details in section five, below. Before turning to this discussion, however, the next section reviews important contributions to the literature, while the third section highlights features of the Swiss political system that are particularly relevant to the topic of this paper. Then, the fourth section describes the data sources and the methodology we used to obtain estimates of ideological dispersion. The last section concludes.

2   Related Literature

Weingast et al. (1981) were among the first to argue that because public projects often have localised benefits but universal costs, governments have a tendency to overspend. More recently, many papers made similar common-pool arguments and tested their predictions empirically. However, as discussed in the introduction, most of these papers do not consider the ideological dispersion of the political parties and politicians involved. Those that take this factor into account consider parties as monolithic entities in which all members share the same ideology (for more details, Ricciuti (2004) offers a comprehensive literature survey).

This literature explored various definitions of fragmentation, including size and procedural fragmentation, both in the executive and legislative branches. However, most papers implicitly or explicitly rely on the common-pool argument that politicians internalize only a portion of

3

the costs of public projects. In a coalition government, the argument is that each party in the coalition takes into account only the costs bearing on their own constituents, and not on constituents of their allied parties (Freier and Odendahl, 2012). Many authors have turned to the data to test these ideas. A notable early example is Roubini and Sachs (1989), in which the authors find that coalition government spend more than single-party governments, using a panel of OECD countries between 1960 and 1985. Kontopoulos and Perotti (1999) instead focused on cabinet size, as captured by the number of spending ministers. Also using a panel of 20 OECD countries from 1960 to 1995, they find that a greater number of ministers fighting for the common pool of resources is associated with a greater deficit. De Haan et al. (1999) find a similar relation between the number of political parties in government (or coalition size) and public debt, also using a panel of OECD countries from 1979 to 1995. Perotti and Kontopoulos (2002) distinguish between two types of fragmentation: the number of ministers and the size of the coalition. They find (again with a panel of 19 OECD countries, from 1970 to 1995) that cabinet size is the strongest determinant of fiscal policy, with particularly strong effects on transfers. Using a panel of Swiss cantons between 1980 and 1998, Schaltegger and Feld (2004) find a positive effect of cabinet size on cantonal government expenditures. However, they are unable to make strong conclusions on the effects of coalition size.

The literature thus offers some evidence that political fragmentation affects fiscal policy. However, other papers have cast some doubt over the robustness of the results. For example, Elgie and McMenamin (2008) show that the results are dependent on the sample choice. The authors successfully replicate the results of previous papers using a panel of OECD countries, but fail to do so when including non-OECD democracies (in an unbalanced panel, ranging from 1975 to 2004). They explain this result by including a variable for the institutionalisation of the country, defined as the age of the democracy. They argue that political institutions are more important in older democracies. Therefore, in those countries, political fragmentation does affect the budget surplus, but not in younger democracies. In earlier work, De Haan and Sturm (1997), using a panel of OECD countries between 1982 and 1992, also failed to replicate the results of Roubini and Sachs (1989). As mentioned above, De Haan et al. (1999) do find a relation between coalition size and public debt. However, they fail to find a relation between government type and fiscal policy. Finally, using a regression discontinuity approach with data from German municipalities on two electoral cycles (1996-2002 and 2002-2008), Freier and

Odendahl (2012) find, in contrast to earlier findings, that absolute majorities spend more than coalition governments. They exploit a discontinuity in election results, by comparing absolute majorities that barely won the last decisive seat and coalition governments that are composed of a party that almost made the cut-off to govern alone.

Most models described above define fragmentation in a limited sense, namely size fragmentation. Their definition captures the common-pool argument, or the extent to which individual policymakers internalize the costs of their decisions (Perotti and Kontopoulos, 2002). However, the relationship between political fragmentation and fiscal policy also depends on ideology. The idea that ideology matters was explored by Volkerink and de Haan (2001). These authors argue that large ideological differences in government matter because they make compromise more difficult. They also argue that when ideological differences in the parliament are large, the opposition is weaker, thus granting more freedom for the government to impose its policies. Empirically, however, the authors find no evidence that ideological differences affect public spending in a panel of 22 OECD countries between 1971 and 1996. Padovano and Venturi (2001) also include ideology in their analysis. They find that, in Italy, ideology does not affect government spending, concluding that politicians act in an opportunistic manner rather than motivated by ideology. In a more recent paper, Eslava and Nupia (2010) argue that the lack of evidence was due to an incorrect specification. In particular, they assert that ideology and size fragmentation are inter-related, such that econometric analyses must allow for an interaction effect between the two. In fact, with a panel of 22 parliamentary democracies for the period 1978-2005 (including developed and developing countries), they find that size fragmentation affects public spending only when some ideological polarisation is present.[3]

Lindqvist and Östling (2010) also study the relation between ideological dispersion (which they refer to as polarisation) and fiscal policy, albeit from a different approach. These authors use data from interviews with voters to estimate ideological dispersion in a cross-section of 74 countries, with data between 1995 and 2002. They find that this measure of ideology dispersion, derived from the perceptions of the electorate, has a significant negative effect on government size. The advantage of their approach is that their data measure political pref-

---

[3]These authors use two measures of ideological polarisation. The first is a variable describing the maximum distance between the governing parties (the executive party and the three main coalition partners) on the usual left-right scale (taking a value of two if one party is at the right end and another at the left end), while the second is the standard deviation of the ideology of the three main governing parties.

erences directly instead of relying on ethnicity or religion, for example. However, in contrast to our new dataset, their data are only available for the electorate and not for politicians. Furthermore, as acknowledged by the authors, the link between polarisation in the electorate, polarisation in the legislature, and public spending is not completely understood, although they find that a polarised electorate is not associated with a fragmented legislature.

Another limitation of the current literature is that it assumes that parties are the only decision-making units. Perotti and Kontopoulos (2002) state that "a party is a more or less cohesive entity representing the interests of specific groups in government expenditure." However, this rationale abstracts from intra-party politics, and from possible agreements and logrolling between members across parties—agreements that are not necessarily authorised by party authorities. We argue that ideological dispersion inside parties may impact policy-making just as it does between parties.

The idea that parties are not unitary actors is not new. In earlier work, Belloni and Beller (1976) argued that the study of party factions has been neglected relative to parties and interests groups, because these latter groups have more obvious structures. However, they also argued that party factions play an important role in the political institutions of many countries. They point out that in some cases, such as in Italy and Japan, factions have a long tradition and are almost official groups. More recently, the emergence of the Tea Party, an american grassroots movement mostly associated with the Republican Party, is another example of a somewhat official faction, now even recognised as an official Congressional Member Organization (CMO).[4] Party factions also exist in France. Indeed, major French parties are characterised by smaller factions. For example, the Socialist Party has a social-democratic, more moderate branch, but also members of a more radical leftist tradition. Similarly, the *Union pour un mouvement populaire* (UMP) is comprised of a socially conservative branch as well as a more market-oriented faction.

Theoretically, Strom (1990) lamented the lack of consideration for intra-party politics in the literature on political parties. For their part, Laver and Shepsle (1990) introduced a formal framework to study the relation between the formation of coalitions and intra-party politics. Departing from earlier papers, they focus on *government building* instead of coalition building.

---

[4]The relation between the Tea Party movement and the CMO is not official, with many members of the former not recognising the latter. However, the members of the CMO are supporters of the larger movement.

In other words, they consider the individuals that hold ministerial powers instead of their parties solely.

Intra-party politics may affect policy choices in at least two ways. First, it may do so by forcing party leaders to adapt their policies to appease a certain fringe of their party. However, a more indirect effect is also possible. We will explain this effect in details below, but the argument is that when parties have members farther from the party centre, there is a higher probability to have members of different parties with overlapping preferences. We expect this situation to facilitate vote trading, and thus to positively affect public spending. In fact, vote trading could be used by party members to reduce spending, but, as argued by Gilligan and Matsusaka (1995), "representatives are likely to view the tax base as a 'common pool' from which to finance particularistic projects for their constituents."

Political fragmentation and ideological dispersion are closely related to party discipline. If a party member is not satisfied with the party's position, he can always decide to vote against the rest of his party. In some countries, notably those with Westminster-inspired parliaments, these dissident votes can have significant impacts on the government's survival, and are thus heavily sanctioned. The willingness of party members to obey to party leaders will vary according to their outside options. Indeed, we can safely assume that a politician that could resign and immediately find lucrative employment in the private sector would be more willing to face consequences from the party than a politician with limited options on the outside.[5]

In Switzerland, cantonal politicians are not professionals, and often even keep their previous employment. For this reason, we should expect low party discipline. Indeed, Hertig (1978) and Lanfranchi and Lüthi (1999) show that Swiss parties, especially those in the centre and right wing of the political spectrum, have relatively low party discipline. This feature contributes to the importance of accounting for ideological dispersion when analysing the relation between political fragmentation and fiscal outcomes. [6] Moreover, since party discipline is far from perfect in most countries, ideological dispersion should be important in the analysis of other countries as well.

---

[5]Following the 2011 federal elections, about a third of members of the National Council were new. At that date, the median tenure in parliament was slightly under four years, highlighting the fact that turnover is high in Swiss politics, at least at the federal level.

[6]The fact that politicians are non-professionals with outside options, combined with low party discipline, provides some evidence that politicians in our study are at least party motivated by ideology rather than pure office-seekers.

3   Swiss Institutional Background

The institutional arrangement of Switzerland allows economists and political scientists to benefit from a sort of natural laboratory, in which 26 sub-national governments have large fiscal autonomy (Kriesi and Trechsel, 2008), but share the same institutional and socio-economic context. Indeed, this country is organised in a decentralised federal system with three layers of government: federal, cantonal, and municipal (known as communes). The country is comprised of 26 cantons of different cultures and languages, enjoying a relatively high level of independence from the federal government (Kriesi and Trechsel, 2008). Finally, studying a single country at a time can also circumvent the issue of coding different government systems, a problem that could be exacerbated by adding an ideological component to the analysis.

Our paper focuses on the cantonal governments and parliaments. The parliaments of the twenty cantons included in the analysis are unicameral with a varying number of elected members, while the governments are constituted of an executive council also elected by general suffrage. Kriesi and Trechsel (2008) offer a more complete description of the Swiss political system, and of the factors that contributed to its particular development. The remainder of this section will focus on important distinctive features that are particularly relevant to our paper.

First, the trusting of executive power to a council without a clear leader is a characteristic unique to Switzerland. Indeed, most countries vest a large portion of executive power to a single person, such as a President. In the context of our paper, this distinction is important because all the parties represented in this council share the executive power and can directly influence the elaboration of the budget. In most countries, the executive power is either held by a single party, or by a coalition born through negotiations between parties. In a slight abuse of language, we will refer to the parties in the executive council as the governing coalition, even though they do not form a coalition in the usual sense. We will refer to the other parties as the fringe group. In our data, the governing coalition includes between 65 per cent and 100 per cent of the members of parliament.

Another important feature of Switzerland's political system is the high level of collegiality present in the legislature. It is a system in which consensus and stability are important (Church and Vatter, 2009), despite the high level of political fragmentation (Ladner, 2001). Kriesi

and Trechsel (2008) argue that this feature stems from the tradition of direct democracy in Switzerland. Indeed, before presenting a budget or a new law, the government spends a large amount of time consulting not only other political parties, but also a wide variety of interest groups. This process ensures that the project is widely accepted, and not subject to a popular vote (referendum) after adoption. Consequently, direct democracy led to the inclusion in the decision process of all political parties that can make a credible referendum threat (Kriesi and Trechsel, 2008). This development is directly related to the theory of veto players of Tsebelis (2002). Moreover, collegiality is reinforced by the fact that parties in the executive branch must find a way to collaborate. Indeed, in contrast to traditional parliamentary systems, coalitions in Switzerland's cantonal executive councils cannot be dismantled even if negotiations between member parties break down. The next section explains the methodology we employed to construct a variable of individual ideology, and describes the other variables included in our econometric analysis.

4 Description of Variables Used

As mentioned in the previous sections, one key contribution of our paper is that we acknowledge the ideological dispersion between and inside political parties. This section describes the construction of our measures of ideological dispersion. It also describes the more traditional fragmentation variables, and presents the various control variables included in our econometric models.

4.1 Political Dispersion and Fragmentation

Hug and Schulz (2007) discuss different methods for estimating the position of Swiss politicians and political parties on the usual left-right scale. These methods use data from the parties' voting recommendations, roll-call votes and the contents of party manifestos. We depart from these methods of positioning elected representatives and instead directly consider their ideological positions on a multitude of issues to construct a composite index of their political profile. For that purpose, we use data from a survey of Swiss politicians called Smartvote. Smartvote is an online voting advice application for Swiss voters that was first launched in the run-up to the 2003 Swiss federal elections, and used again for the elections in 2007 and 2011. Prior to

the election, the Smartvote team sends questionnaires on a wide range of topics to all electoral candidates. The political profiles of the candidates are generated from their answers to the questionnaire. In practice, the profiles are represented by an index that varies from zero to one.[7] Two candidates that have similar indices also have similar policy preferences. We use the individual political profiles of candidates for both the lower and the higher chamber of the federal legislature, and these candidates are then aggregated by canton and party. As mentioned in the previous section, politicians consult a wide range of stakeholders before proposing new laws, including other political parties, and most likely members of their own parties. For this reason, we use of the ideologies of the political parties at large (i.e. all candidates), and not only elected members.

With the ideological profiles, we calculate a decomposition of the variance (intra- and inter-party) of the ideological positions.[8] Furthermore, as mentioned earlier, we split the political parties in two groups: a governing coalition and a fringe of often-smaller parties. We calculate the variance for the governing coalition group alone, as well as for all parties combined. We obtain two measures for each group: the variance of ideological positions within political parties (INTRACOAL and INTRAALL) and the variance of the parties' positions (INTERCOAL and INTERALL). The position of a political party is calculated as the average of its members' profiles.[9] We use data from the Swiss Federal Statistic Office for the party breakdown of the Cantonal parliaments and executive councils from 2003 to 2011 (the years corresponding to our ideology data).[10]

The richness of our database allowed us to construct these variables in ways that differ from previous papers. It is therefore important that we discuss the results that we can expect from our estimations. The decomposition of the variance in within-party and between-party components allows a *ceteris paribus* interpretation of their effects. With both variables in the model, we expect intra-party dispersion to positively affect public spending and inter-party dispersion to negatively affect it. Figure 1 illustrates a situation in which intra-party dispersion increases while

---

[7]During the electoral campaign, voters can answer the same questionnaire on the Smartvote website and have their answers compared to those of the candidates. As a result, Smartvote matches each voter with a specific ranking of all participating candidates.

[8]Further details are provided in a longer version of this paper, available on request.

[9]Both the variances and the party means are weighted. The weights used are the number of elected representatives.

[10]The composition of each group varies following every cantonal election (or by-election), while ideology scores (the average score of, and variance within, each party) stay constant between each federal election. For this reason, we have variables that have at least some variation every year, if only for composition effects.

inter-party dispersion stays constant. In this case, the range of the ideological profiles of political parties necessarily stretches, while each party remains centred on the same mean. A larger range increases the probability that some parties have members with overlapping preferences. We argue that this situation, especially combined with relatively independent politicians, leads to increased opportunities for exchanges of votes, and consequently higher spending. The opposite situation in which inter-party dispersion increases but intra-party dispersion stays constant widens the distance between parties without a corresponding expansion of their ideological range. This situation should lead to decreased logrolling, or possibly punitive behaviour against other parties. We argue that in such situations, we should observe lower spending. A vote-trading explanation for higher spending in larger legislatures was also provided by Gilligan and Matsusaka (1995), but these authors had not considered the interaction with ideological dispersion.
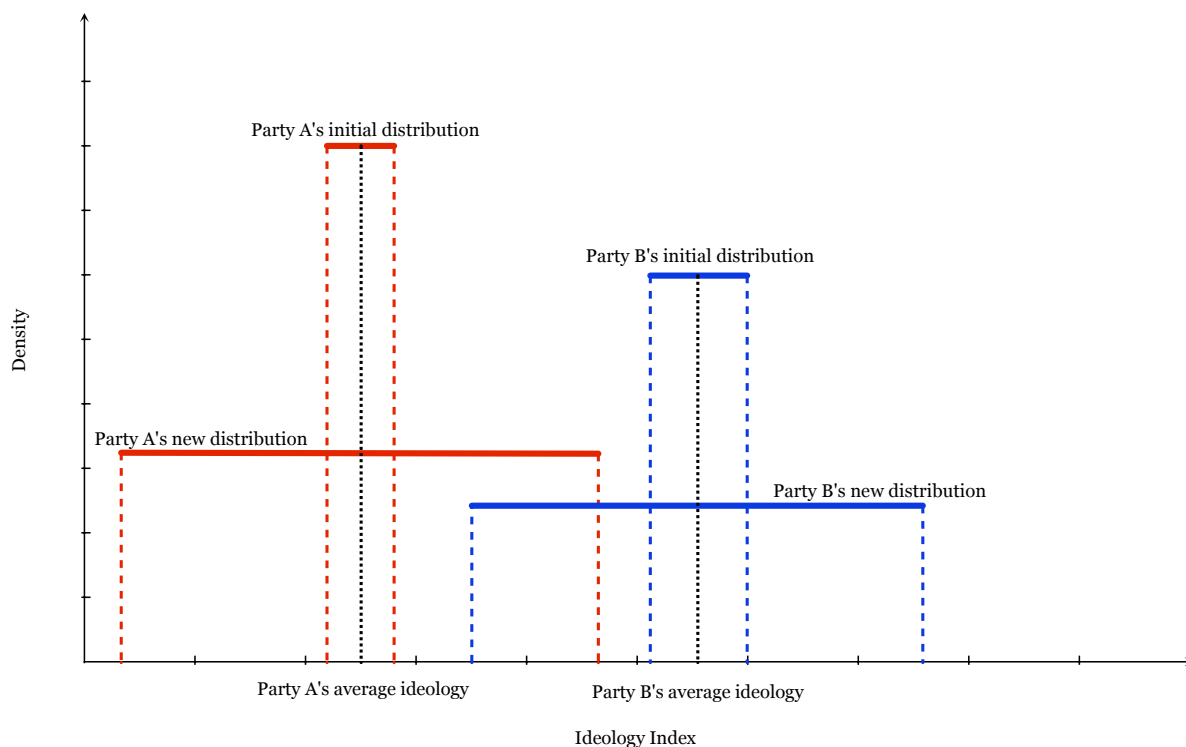
Figure 1: An increase in INTRACOAL, with INTERCOAL constant

To stay in line with the literature reviewed earlier, we also construct a measure of fragmentation similar to what is called size fragmentation in the literature (Volkerink and Haan, 2000; Perotti and Kontopoulos, 2002). More precisely, we use the effective number of political parties (Laakso and Taagepera, 1979). This measure is in essence the inverse of a Herfindahl concen-

11

tration index. This index (ENPCOAL and ENPALL) takes a value of one for a parliament in which a single party holds all the seats. It is constructed in line with the current literature, so we expect a higher effective number of political parties to be associated with increased public spending.

4.2 Dependent Variables and Control Variables

The rest of the data is from the Swiss Federal Statistic Office, and covers the years between 2003 and 2011. Our dependent variables are total cantonal public spending per capita and as a percentage of total cantonal GDP; both were taken without interest charges. As explained later, we will also estimate the model using public spending disaggregated by nature: investment expenditures and current expenditures.

We also add economic and political control variables to our models. To account for the political decision-making process, we include the number of seats in the cantonal parliament. Previous literature showed that there is a positive correlation between the number of seats and political fragmentation. To capture the fact that governments can manipulate spending in electoral periods, we also include a dummy variable for election years.

To control for the economic context, we include the lagged net debt per capita, which we expect to negatively affect public spending. We also control for GDP per capita.[11] We also include the share of the dependent population in total population. We define dependent population as the sum of people 20 years old and younger and of people 60 years old and older. The empirical literature usually shows that this variable has a significant positive impact on public spending since it corresponds to increased expenditure needs. Finally, we include the unemployment rate for the time period considered, which we expect to negatively impact public spending.

---

[11]Cantonal GDP data are not available for every year. We obtain data for GDP per capita from the Swiss Federal Statistic Office for 2003-2005. For the years from 2006 to 2010, we extrapolate the data using the national growth rate of GDP per capita, assuming that the growth rate is similar across cantons.

Table 1: Summary Description of Variables

Name	Description	Expected Sign	Mean	Std. Dev.
Dependent variables				
SPENDCAP	Total cantonal public spending per capita (in thousands of CHF)		10.1	3.8
SPENDGDP	Total cantonal public spending as a percentage of cantonal GDP		19.15	9.09
CURRENTCAP	Total cantonal current expenditures per capita (in thousands of CHF)		8.87	3.46
CURRENTGDP	Total cantonal current expenditures as a percentage of cantonal GDP		16.93	8.15
INVCAP	Total cantonal investment expenditures per capita (in thousands of CHF)		1.00	0.55
INVGDP	Total cantonal investment expenditures as a percentage of cantonal GDP		1.83	1.06
Variables of interest				
INTRACOAL	Intra-variance of the governing coalition	+	0.0061	0.0045
INTERCOAL	Inter-variance of the governing coalition	-	0.037	0.0201
ENPCOAL	Effective number of parties in the governing coalition (inverse of the Herfindhal index)	+	3.33	0.64
INTRAALL	Intra-variance of all parties combined	+	0.00867	0.0193
INTERALL	Inter-variance of all parties combined	-	0.0425	0.0194
ENPALL	Effective number of parties in the whole parliament (inverse of the Herfindhal index)	+	4.46	0.84
Control variables				
NBSEATS	Number of seats in the cantonal parliament	+	120.32	35.86
ELECTION	Election year	?	0.24	0.42
LAGDEBT	Lagged net debt per capita (in thousands of CHF)	-	6.78	7.45
UNEMP	Cantonal unemployment rate	-	3.39	1.24
DEPENDENTS	Dependent population in percentage	+	43.9	1.3
GDP	GDP per capita (in thousands of CHF)	+	57.5	20.087

5 Econometric Results

This section presents the regression estimates obtained from a variety of models. We obtain these estimates using standard fixed effects models[12] on our panel of 20 cantons over eight years.[13] All models are estimated with clustered robust standard errors.

Our main model includes the governing coalition variables (INTRACOAL, INTERCOAL, ENPCOAL), in addition to the control variables listed in the previous section. Estimation results are shown in columns one and two of Table 2. With both dependent variables, we obtain significant coefficients of the expected signs for both intra- and inter-party dispersion (INTRACOAL and INTERCOAL). In particular, we observe that intra-party ideological dispersion in the coalition group is associated with higher public spending. The size of the coefficient is difficult to interpret, because the variable is not measured in any kind of usual unit. However, we can obtain a general idea of its scale. If we could increase the coalition group's intra-party dispersion by one time its standard deviation, while keeping everything else constant, we would

---

[12]To obtain a causal interpretation, researchers have turned in recent years to quasi-experimental methods such as instrumental variables or regression discontinuity designs. Obviously, we would welcome the use of such methods to study the relation between ideological dispersion and fiscal outcomes. However, our specific framework does not allow for it. The presence of endogeneity not being obvious, we believe that our results, while needing to be interpreted with some caution, are still interesting.

[13]Ticino is an exception. For this canton, we only have four years of observation. Also, some variables are missing in some years, limiting the number of observations suitable for our model.

observe an increase in public spending per capita of 535 francs. Alternatively, it would lead to an increase of 0.37 percentage points in public spending as a percentage of cantonal GDP. This effect is thus also economically significant.

In both regressions, we also find that inter-party dispersion in the coalition group is negatively associated with public spending, although the effect is quantitatively smaller than the the one from intra-party dispersion. As above, to obtain a idea of the scale of the estimated coefficient, an increase in the coalition group's intra-party dispersion of one time its standard deviation, while keeping everything else constant, would be associated with a decrease in public spending per capita of 242 francs. Alternatively, it would lead to a decrease of 0.81 percentage points in public spending as a percentage of cantonal GDP. As explained earlier, the results for intra-party and inter-party dispersion are due to the fewer opportunities for exchange of votes between parties that are more ideologically dispersed.

As a robustness check, the second model we estimate (columns three and four of Table 2) includes all the variables of the previous, but considers all political parties instead of only the ones in the governing coalition. As discussed in section 3, in Switzerland all parties may play a role in the legislative process, especially if they are able to organise referendums. For this reason, it could be important to also include the smaller parties in the analysis. Also, in some cantons, large parties such as the Swiss People's Party (SVP)[14] are not elected to the executive council even though they are represented in the legislature.

Some of our findings for the coalition group's inter-party and intra-party dispersion are robust to this change of specification, although only for one of the two dependent variables. We still observe a negative effect of the coalition's inter-party dispersion on public spending, although only on public spending as a share of GDP. With this dependent variable, we obtain that an increase of one standard deviation in the inter-party dispersion variable is associated with a decrease of 0.80 percentage points in public spending as a share of GDP. We can summarise the results we obtained so far as thus:

Result 1. *Higher intra-party and lower inter-party ideological dispersion are both associated with higher public spending.*

---

[14]The Swiss People's Party is one of the largest parties at the federal level in Switzerland, as well as in many cantons.

Table 2: Regression Results

	(1) SPENDCAP	(2) SPENDGDP	(3) SPENDCAP	(4) SPENDGDP	(5) CURRENTCAP	(6) CURRENTGDP	(7) INVCAP	(8) INVGDP
INTRACOAL	118.870***	81.288**			103.215***	71.882**	13.159*	8.088
	(28.75)	(29.77)			(33.72)	(28.83)	(6.45)	(11.11)
INTERCOAL	-12.043**	-40.528***			-11.781**	-36.317***	0.761	-1.259
	(4.89)	(10.58)			(4.66)	(9.33)	(1.72)	(2.86)
ENPCOAL	-0.219	-0.113			-0.142	-0.085	-0.077	-0.032
	(0.25)	(0.49)			(0.25)	(0.51)	(0.08)	(0.09)
INTRAALL			-0.393	7.44				
			(2.87)	(4.37)				
INTERALL			-1.687	-41.304***				
			(3.99)	(11.006)				
ENPALL			-0.797	-0.766				
			(0.53)	(0.53)				
NBSEATS	-0.007	-0.015	-0.011*	-0.018	-0.004	-0.011	-0.003*	-0.005*
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)
ELECTION	0.115	0.008	0.131	0.138	0.083	0.008	0.027	-0.004
	(0.08)	(0.18)	(0.10)	(0.19)	(0.07)	(0.16)	(0.04)	(0.06)
GDP	-0.033	-0.171**	0.001	-0.000**	0.003	-0.124*	-0.033**	-0.045***
	(0.02)	(0.07)	(0.00)	(0.00)	(0.02)	(0.07)	(0.01)	(0.01)
DEPENDENTS	0.641*	0.486	0.571***	0.802	0.629*	0.589	-0.005	-0.104
	(0.33)	(0.73)	(0.19)	(0.64)	(0.33)	(0.72)	(0.07)	(0.10)
LAGDEBT	-0.080*	-0.157	-0.159**	-0.276*	-0.075*	-0.179	-0.018	-0.004
	(0.04)	(0.13)	(0.07)	(0.14)	(0.04)	(0.12)	(0.02)	(0.02)
UNEMP	-0.029	0.188	-0.233	-0.070	0.045	0.241	-0.065	-0.049
	(0.08)	(0.18)	(0.13)	(0.22)	(0.07)	(0.19)	(0.07)	(0.08)
Constant	-14.157	11.301	-7.080	3.182	-17.661	1.156	3.965	9.809**
	(13.82)	(30.36)	(7.60)	(25.37)	(13.84)	(30.11)	(3.35)	(4.29)
N	135	135	136	136	135	135	135	135
R2	0.37	0.38	0.22	0.37	0.38	0.28	0.26	0.33
p-value	0.000	0.000	0.001	0.000	0.000	0.000	0.116	0.002

Note: Robust standard errors in parentheses. Significance levels: *** 1% ** 5% * 10%

Using both dependent variables, we are unable to replicate the literature's finding that a greater number of political actors (captured with the variable ENPCOAL) is positively associated with public spending. To further explore this contradiction with the earlier literature, we estimated the models without the two ideological dispersion variables. Even with this simpler specification, we are unable to reject the null hypothesis.

One issue that can crop up in our analysis is that politicians may be office-seekers instead of motivated by ideology. In this case, one could argue that the policy preferences measured by electoral surveys (such as Smartvote) are irrelevant, and that politicians will decide to implement a different policy once elected. However, in this paper, we are not interested in policy preferences per se, but in the dispersion of those preferences. If politicians "fake" their preferences to get elected, their announced policy preferences will be compressed relative to their real preferences. In the extreme case, every candidate would locate at the median voter. Such a dynamic would lead to an under-estimation of the ideological dispersion. In other words, we would have measurement error in our variables of interest.

This problem, however, may be of little important in Switzerland. As mentioned earlier, politicians in Switzerland, especially at lower levels of government (including cantons), are non-professional politicians. Having outside employment options may allow them to be motivated by ideology more than by holding their seat. Furthermore, turnover is high, also indicating that Swiss politicians may be at least partly motivated by ideology. Indeed, a third of the politicians in the National Council immediately following the 2011 elections were newly elected members of parliament. Moreover, the median tenure of these politicians was just under 4 years, so that more than half of the politicians had been sitting for less than four years.[15]

In section three, we argued that ideological dispersion could have an effect on public spending through increased or decreased logrolling opportunities. It is also possible that exchanging votes is easier for projects that are not too far in time. Indeed, as politicians in Switzerland are not professionals, their tenure is often expected to be relatively short. For this reason, a given politician will not want to enter a vote exchange agreement with another politician for a project that could only be subject to a vote in a large number of years. Instead, they agree to help each other with projects that occur in the short term (for example to keep some

---

[15]We did not calculate the tenure for politicians at the cantonal level, but there is no reason to believe that cantonal politicians stay longer or behave more like career politicians.

already-existing government project running longer). In terms of public spending, we should thus expect that logrolling is mostly prevalent for current expenditures, and not so much for investment expenditures.

To verify that hypothesis, we use data for spending disaggregated by nature. Our results are summarised in columns five to eight of Table 2. We find that our two ideological dispersion variables have an impact on current expenditures, with the same signs as previously (namely, a positive impact of intra-party dispersion, and negative impact of inter-party dispersion). However, we find almost no impact on investment expenditures. In fact, we only find a small effect of intra-party dispersion on investment expenditures per capita. Moreover, for this variable, we can only reject the null hypothesis at the 10 per cent confidence level. Our model thus offers some support for the hypothesis that politicians make logrolling agreements especially on short term spending, and not on longer term commitments. We can summarise this second finding as thus:

Result 2. *Ideological dispersion has a greater effect on current expenditures than on investment expenditures.*

6 Conclusion

In this paper, we have made two main contributions to the literature on the impact of political fragmentation on public spending, both showing that ideology matters. First, we have shown that intra-party and inter-party ideological dispersion have an impact on public spending. In particular, intra-party dispersion is associated with higher public spending, while inter-party dispersion is associated with lower public spending. A corollary to this finding is that intra-party politics matter. This result is especially important, given that the previous literature abstracts from interactions inside parties. Our second finding is that ideological dispersion is especially relevant for current expenditures, and not so much for investment expenditures. We explain this result with the fact that politicians are mostly concerned with short-term projects when agreeing to exchange votes with their colleagues.

One issue in our analysis may be measurement error in the independent variables. Indeed, ideology is difficult to measure. To confirm our results, one interesting avenue would be to replicate our method using data from other countries. For example, Ansolabehere et al. (2001)

also used individual-level ideological data for the United States congress. However, they have not used their data to study the effect of ideological dispersion on fiscal outcomes.

References

ANSOLABEHERE, S., J. M. SNYDER JR, AND C. STEWART III (2001): "Candidate positioning in US House elections," *American Journal of Political Science*, pp. 136–159.

BELLONI, F. P., AND D. C. BELLER (1976): "The Study of Party Factions as Competitive Political Organizations," *The Western Political Quarterly*, 29(4), 531.

CHURCH, C. H., AND A. VATTER (2009): "Opposition in Consensual Switzerland: A Short but Significant Experiment," *Government and Opposition*, 44(4), 412–437.

DE HAAN, J., AND J.-E. . E. STURM (1997): "Political and economic determinants of OECD budget deficits and government expenditures: A reinvestigation," *European Journal of Political Economy*, 13(4), 739 – 750.

DE HAAN, J., J.-E. . E. STURM, AND G. BEEKHUIS (1999): "The Weak Government Thesis: Some New Evidence," *Public Choice*, 101(3), 163–176.

ELGIE, R., AND I. MCMENAMIN (2008): "Political fragmentation, fiscal deficits and political institutionalisation," *Public Choice*, 136(3), 255–267.

ESLAVA, M., AND O. NUPIA (2010): "Political Fragmentation and Government Spending: Bringing Ideological Polarization into the Picture," *DOCUMENTOS CEDE*.

FREIER, R., AND C. ODENDAHL (2012): "Do absolute majorities spend less? Evidence from Germany," *DIW Working Papers*.

GILLIGAN, T. W., AND J. G. MATSUSAKA (1995): "Deviations From Constituent Interests: The Role of Legislative Structure and Political Parties in the States," *Economic Inquiry*, 33(3), 383–401.

HERTIG, H. P. (1978): "Party Cohesion in the Swiss Parliament," *Legislative Studies Quarterly*, 3(1), 63–81.

HIX, S., A. NOURY, AND G. ROLAND (2009): "Voting patterns and alliance formation in the European Parliament.," *Philosophical Transactions of the Royal Society*, 364(1518), 821–31.

HORNE, N. (2010): "Hung parliaments and minority governments," Discussion paper.

HUG, S., AND T. SCHULZ (2007): "Left—Right Positions of Political Parties in Switzerland," *Party Politics*, 13(3), 305–330.

KERR JR, H. H. (1978): "The Structure of Opposition in the Swiss Parliament," *Legislative Studies Quarterly*, 3(1), 51–62.

KONTOPOULOS, Y., AND R. PEROTTI (1999): "Government fragmentation and fiscal policy outcomes: Evidence from OECD countries," in *Fiscal Institutions and Fiscal Performance*, ed. by J. M. Poterba, pp. 81–102. University of Chicago Press.

KRIESI, H., AND A. H. TRECHSEL (2008): *The politics of Switzerland : continuity and change in a consensus democracy*. Cambridge University Press.

LAAKSO, M., AND R. TAAGEPERA (1979): ""Effective" Number of Parties," *Comparative Political Studies*, 12(1), 3–27.

LADNER, A. (2001): "Swiss political parties: Between persistence and change," *West European Politics*, 24(2), 123–144.

LANFRANCHI, P., AND R. LUTHI (1999): "Cohesion of Party Groups and Interparty Conflict in the Swiss Parliament: Roll Call Voting in the National Council," in *Party discipline and parliamentary government*, ed. by S. Bowler, D. M. Farrell, and R. S. Katz.

LAVER, M., K. A. SHEPSLE, AND K. KENNETH (1990): "Government Coalitions and Intraparty Politics," *British Journal of Political Science*, 20(04), 489–507.

LINDQVIST, E., AND R. ÖSTLING (2010): "Political Polarization and the Size of Government," *American Political Science Review*, 104(03), 543–565.

MAER, L. (2010): "Hung Parliaments," *UK House of Commons Library Reports*.

MÜLLER, W. C., AND K. STROM (2003): *Coalition governments in western Europe*. Oxford University Press.

PADOVANO, F., AND L. VENTURI (2001): "Wars of attrition in Italian government coalitions and fiscal performance: 1948–1994," *Public Choice*, 109(1), 15–54.

PEROTTI, R., AND Y. KONTOPOULOS (2002): "Fragmented fiscal policy," *Journal of Public Economics*, 86(2), 191–222.

RICCIUTI, R. (2004): "Political fragmentation and fiscal outcomes," *Public Choice*, 118(3), 365–388.

ROUBINI, N., AND J. D. SACHS (1989): "Government spending and budget deficits in the industrial economies," *NBER Working Papers*.

SCHALTEGGER, C. A., AND L. P. FELD (2004): "Do large cabinets favor large governments?: evidence from Swiss sub-federal jurisdictions," *CESifo Working Paper Series*.

STROM, K. (1990): "A Behavioral Theory of Competitive Political Parties," *American Journal of Political Science*, 34(2), 565.

TSEBELIS, G. (2002): *Veto Players: How Political Institutions Work*. Princeton University Press.

VOLKERINK, B., AND J. DE HAAN (2001): "Fragmented government effects on fiscal policy: New evidence," *Public Choice*, 109(3), 221–242.

WEINGAST, B. R., K. A. SHEPSLE, AND C. JOHNSEN (1981): "The political economy of benefits and costs: A neoclassical approach to distributive politics," *The Journal of Political Economy*, 89(4), 642–664.