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Federalization and Party System Fragmentation: On the Unintended Consequences of Increasing Decentralization.

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Abstract

Political decentralization is an often neglected predictor of party system fragmentation. While comparative research has mainly concentrated on the role of electoral systems and the socio-demographic diversity of a state's citizenry when explaining the number of political parties in a polity, scholars have highlighted that these two factors are not sufficient to explain changes in the number of political parties over time. We argue that devolving institutions and regional authority in important policy areas to the regions should lead to a more equal distribution of resources and political power between political parties in a party system. While governments respond to regional demands by decentralizing institutions and policy-making authority, hat these reforms should benefit non-dominant parties because their electorate is often regionally concentrated, and because they have difficulty accessing political resources at the national level. We test our theoretical argument based on a time-series-cross-sectional design using the Regional Authority Index to predict the effective number of political parties in 19 countries over 65 years. In line with our theoretical expectations, we find that increasing levels of political decentralization, and specifically the extent to which legislatures, executives, and policy authority are decentralized, predict party system fragmentation within states over time. Increasing party system fragmentation is hence predicted by previous decentralisation reforms, with important unexpected consequences for government formation, party system congruence, and political stability.

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1 Introduction

When investigating the institutional factors that predict party system fragmentation, political scientists have long focused on institutional arguments evolving mainly around electoral systems (Duverger 1954; Cox 1990a; Gallagher 1991; Cox and Niou 1994; Cox 1999; Forestiere 2011; Singer 2013; Müller-Rommel 1998; Golder 2003; Dinas, Riera, and Roussias 2014). According to Duverger (1954)'s law, systems with proportional representation will result in a fragmented party system, while first-past-the-post electoral systems should create approximately a two-party system. This institutional perspective has more recently been complemented by socio-cultural accounts focusing on the role of the ethnic diversity of a state's citizenry (Canon 1999; Taylor 2005; Togeby 2008; Brancati 2007). More ethnically fragmented societies will have more fragmented party systems because citizens vote along ethnic cleavages (Canon 1999; Taylor 2005). Yet, as Chhibber and Kollman (1998: 329) caution "in accounting for changes in the number of national parties over time within individual countries [...] explanations based solely on electoral systems or population diversity are strained". Although it is not unusual for opposition parties to lobby for a reform of the electoral system, successful reform is rare.¹ More often than not, parties that commit to changing the electoral system when in opposition, stick with the status quo once they are elected into office. The UK Labour Party after the election victory in 1997, and the Canadian Liberal Party in 2016 both refrained from introducing proportional elements into the electoral system, although both parties pledged to do so before the election. Moreover, while a large influx of migrants can change the ethnic composition of a citizenry in the long-run, effects are diluted due to strict citizenship laws in many countries. Moreover, there are few instances where immigrants have supported a small single issue party as opposed to established, often Social Democratic, parties.

Since Chhibber and Kollman (1998)'s important paper on how political centralization affects the incentives of politicians to associate themselves with established parties, only few scholars have addressed the question of how centralization and decentralization dynamics are linked to party system changes within countries (Deschouwer 2003). We argue in this paper that with increased decentralization, party systems will fragment. We suggest that this correlation is systematic: party system fragmentation is predictable based on previous steps towards greater political decentralization. Since electorates are often regionally concentrated, and only a small number of parties have the capacity to access political resources if they are concentrated at the national level, a larger number of parties should benefit from decentral-

¹See for instance the cases of New Zealand and Italy for examples of successful reform attempts.

2 What we know about the link between party system fragmentation & decentralization

ized legislatures, executives, and administrations. These decentralized institutions provide access to financial resources and political power in the form of coalition arrangements, and policy influence, even for parties that are excluded from national governments and legislatures (Dinas and Foos 2017; Spoon and West 2015). As such decentralized systems provide more opportunities for new parties to emerge at the national level by means of successful representation and government in regional institutions.

We test our arguments based on a time-series-cross-sectional regression analyses using the Regional Authority Index (RAI) (Marks, Hooghe, and Schakel 2008; Hooghe, Marks, and Schakel 2008) to predict the effective number of political parties in 19 countries, over 65 years. Furthermore, we provide in-depth evidence based on simulating the effects of three radical decentralization reforms to substantiate our global findings. A key objection in relation to our argument might be the possibility that incumbent parties use centralization and decentralization reforms strategically to their own benefit, and to forestall the emergence of new electoral competitors (Meguid 2008). However, we show that governing parties do to benefit electorally from decentralization. This finding suggests that decentralization has unintended electoral externalities. Incumbents appear to miscalculate the potential impact of decentralization on the electoral offer.

These findings have important implications for our understanding of decentralization and centralization efforts across Europe and beyond. On the one hand, pacifying calls for regional self-determination by extending decentralization is likely to lead to more, not less fragmented party systems. In turn, as a consequence of decentralization, finding stable governing coalitions and delivering policies at the national level will become increasingly difficult. On the other hand, decentralization could improve the descriptive and substantive representation of minorities within large nation states. States such as Canada that are both linguistically and ethnically diverse may hence be able to accommodate different regional interests without adopting a more proportional electoral system.

2 What we know about the link between party system fragmentation & decentralization

Previous research on party system fragmentation has mainly focused on the institutional reasons for the number of political parties active in a nation (Duverger 1954; Cox 1990a; Gallagher 1991; Rae 1967). Most prominently Duverger argued that first-past-the-post electoral systems tend to result in a two-party system. In contrast, countries employing proportional representation are likely to have multi-party systems. According to Duverger the most important micro-mechanism leading to this macro effect is voters' reasoning about the

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strategic changes of a given party winning a mandate within a constituency. In simple majority systems voters are more likely to be driven to vote for parties which actually stand a chance to win a mandate. Voters, thus, vote strategically, making it more likely that only a small number of parties are regarded as having chances to win a mandate and as a result gaining actual votes and seats.

Later studies coined the term “Duverger’s Law” when referring to this arguments made by Duverger. Especially in the 1990s, a large number of scholars not only tested Duverger’s Law, but also provided more nuanced arguments about the link between electoral institutions and party system fragmentation. For instance, Gallagher (1991) suggested that the simple dichotomy between proportional and majoritarian systems was not far-reaching enough. Instead, he proposed to understand electoral systems as being more and less proportional (see also: Riker 1976). Similar arguments have also been made by other researchers (Cox 1999, 1990b; Carey and Shugart 1993; Taagepera and Shugart 1989) and been expanded across several research areas (e.g. party competition: Ezrow 2011).

More recently, ethnic heterogeneity has also been associated with party system fragmentation. Ordeshook and Shvetsova (1994) show that the heterogeneity of societies interacts with political institutions and increases the number of parties in a country (see also: Neto and Cox 1997). Building on these earlier studies Lublin (2015) finds further support that the number of parties correlates with ethnic heterogeneity. But as Chhibber and Kollman (1998: 329) noted, neither electoral institutions nor the ethnic diversity in a given country can ultimately predict the variation of party system fragmentation we observe empirically over time. Based on the US and India – two majoritarian systems – they show that political and economic centralization influences the number of national parties. They argue that “as national governments centralize power and make policies that affect local areas, candidates have greater incentives to associate with national organizations, and voters have greater incentives to abandon locally competitive but nationally noncompetitive parties” (Chhibber and Kollman 1998: 329).

Building on their argument, a rich body of research highlights the importance of decentralization for the *congruence* of national and regional party systems (Simón 2013; Harbers 2010), but without explicitly showing a link between decentralisation dynamics and the number of political parties. We hence also contribute to this literature by seeking to understand if *ceteris paribus* decentralization efforts lead to an increase in the number of political parties, with theoretical and empirical implications for the congruence of party systems.

3 **Theoretical framework**

We argue that party system fragmentation will be a function of decentralization, independent of the electoral system. We assume that the electorate of many parties is regionally concentrated. This is obviously true for regionalist parties, but could also be the case for niche parties that mobilize on cultural issues such as Green, radical left and radical right parties (Riera and Russo 2016; Bischof 2017). The electorates of Green and radical left parties are often concentrated in large cities, while the electorate of radical right parties is more often concentrated in rural areas (Ford and Goodwin 2010, 2014). Riera and Russo (2016) show, moreover, that there is a systematic geographic pattern to the support of challenger parties such as the Five Star Movement in Italy and Podemos in Spain. In centralized systems, parties that are shut out of national government, face important organizational challenges. They face difficulty sustaining party activism, and providing instrumental incentives to voters. Moreover, centralized systems provide few opportunities for non-established parties to access public finances, and to attract media attention.

While ideological motivations, and the ability to voice grievances may be enough to sustain party activism for a short period of time, and to incentivize voters to support a party with an expressive, non-strategic vote, we know that a significant number of activists and voters are motivated by programmatic and instrumental reasons (Seyd and Whiteley 1992). They want to see their party govern, policy implemented, and may even desire selective benefits such a political career or a patronage appointment (Olson 1965). In a centralized polity, only nationally viable parties will be able to provide these privileges, and opposition parties will be entirely shut out of power during their time in opposition. However, while there can only be one national government at any given point in time, there can be multiple regional governments composed of by different political parties. That means in decentralized systems, national opposition parties can participate in the spoils of office. With increasing political decentralization, a larger number of parties gain access to the spoils of office, provide patronage appointments, and distribute “pork” to voters (Katz and Mair 2005; John and Poguntke 2012; Dinas and Foos 2017; Barberá, Dinas, and Riera 2015). In line with this theoretical argument, Dinas and Foos (2017) show that parties that marginally enter German regional parliaments are more likely to attract party members than parties that marginally fail to enter regional parliaments.

Accessing positions of political power, and especially participating in the government of a region, will also enable them to enact programmatic policies, particularly if important policy areas are under the authority of the regional government. Voters and activists alike should

3 Theoretical framework

value a party's ability to deliver on policy promises. Being represented in local administrations can be used to control policy making and implementation (John and Poguntke 2012). The ability to deliver on manifesto commitments is what sets parties that participate in parliament and government apart from parties that are denied access to these institutions (Strøm 1990: 574-575). As the economic voting literature suggests, voters mostly base their vote choice on retrospective performance evaluations (Fiorina 1981). As the establishment of regional governments enables a larger number of parties to enact key components of their election manifestos, voters should be able to reward parties who deliver at the regional level. The SNP government in Scotland illustrates this mechanism. A couple of years after the Scottish parliament was established, the SNP was able to form a government in 2007, and is widely regarded as a competent administration by Scottish voters (Johns, Mitchell, and Carman 2013).

Second, the establishment of independently elected regional legislatures and executives provides access to party financing at the regional level. In decentralized systems, parties can access direct public party financing at the regional level, and indirect financing via regional parliaments and governments (Katz and Mair 2009). As Dinas and Foos (2017) show at the example of the German federal system, German states provide more generous public party financing at the regional than at the national level. Moreover, parties that are represented in regional parliaments receive full-time staff, and substantial funding for their parliamentary work. Dinas and Foos (2017) hence present a mechanism by which smaller parties should benefit from decentralization, with implications for party competition at the national level.

Third, representation in regional parliaments and government could simplify media access, and thereby attract the interest of the electorate. Regional newspapers, TV, and radio stations are crucial factors in amplifying the message of parties at the regional level (Barberá, Dinas, and Riera 2015).

Overall, the three aforementioned mechanisms lead to the empirical expectation that countries that devolve institutions and policy authority to regions, will see an increase in the number of political parties, and as a result, an increasingly fragmented political landscape at the national level. This relationship should hold independently of the electoral system and the ethnic diversity of a state. Moreover, it should hold both in Parliamentary (Dinas and Foos 2017) and in Presidential systems (Spoon and West 2015). Even ethnically homogeneous countries that use FPTP in parliamentary elections should see increasing political fragmentation if they devolve political and policy authority to lower levels of government because smaller political parties will find it easier to access resources and influence policy.

- **Decentralization hypothesis:** The higher the levels of regional authority in a state, the higher the effective number of parties.

However, as outlined above specific characteristics of decentralization are more likely to predict an increase of party system fragmentation. First, the independence of a regional legislature and executive should increase the motivation for regional interest to mobilize politically and establish a political party:

- **Institutional decentralization hypothesis:** The more independent the regional legislature and executive, the higher the effective number of political parties.

Second, a party's ability to influence policy at the regional level will vary significantly with the degree to which policy areas such as education, policing or health-care are the prerogative of the regional government (Deschouwer 2003). Examples of decentralized policy areas are health-care in the United Kingdom or education in Germany. Policy-decentralization does not only imply that regional governments have authority over key parts of the public sector, which employs large numbers of public sector workers and provides crucial services to voters, they are also able to execute alternative policy agendas in areas that matter to voters.

- **Policy decentralization hypothesis:** The higher the level of policy decentralization, the higher the effective number of political parties.

Moreover, during the decentralisation process, regions may be empowered to raise their own taxes, or distribute resources that are allocated to them by the national government according to a specific funding formula. We expect that the higher the degree of fiscal decentralisation, the more power parties in regional government will have to fund their policy priorities. On the downside, a transfer of tax powers should also increase the extend to which parties in regional governments and parliaments can be held accountable to voters. It might hence be harder to blame the national government for budgetary decisions, for instance related to the funding of public services.

- **Fiscal decentralization hypothesis:** The higher the level of fiscal decentralization, the higher the effective number of political parties.

4 Data & methods

We test our theoretical arguments based on a time-series-cross-sectional design using several data sets to predict the effective number of political parties (in the lower house) in 19 countries over 65 years. Thus, in total our analysis covers 337 election years.

4.1 Measuring the number of parties

To measure the number of parties within a given party system we estimated the effective number of parliamentary parties based on each parties' vote-share in the countries included in our data (Laakso and Taagepera 1979):

$$ENP = \frac{1}{\sum_{i=1}^n p_i^2} \quad (1)$$

with i indexing the parties, and p_i being the share of votes each party received. Such that higher values indicate a party system with more effective parties. This measure is well validated and used in the literature on the developments of party systems (see, e.g. Chhibber and Kollman 1998; Tavits 2007).

We rely on the *parlgov* data set which provides the vote-share for each party per election for our set of countries, amongst other variables. Thus, we use the share of votes, and not the absolute number of seats to calculate the effective number of parties because we want a comparable measure of how well parties perform at the national level. We are interested in how many votes a party can allocate and not how these votes then translate into seats in parliament.

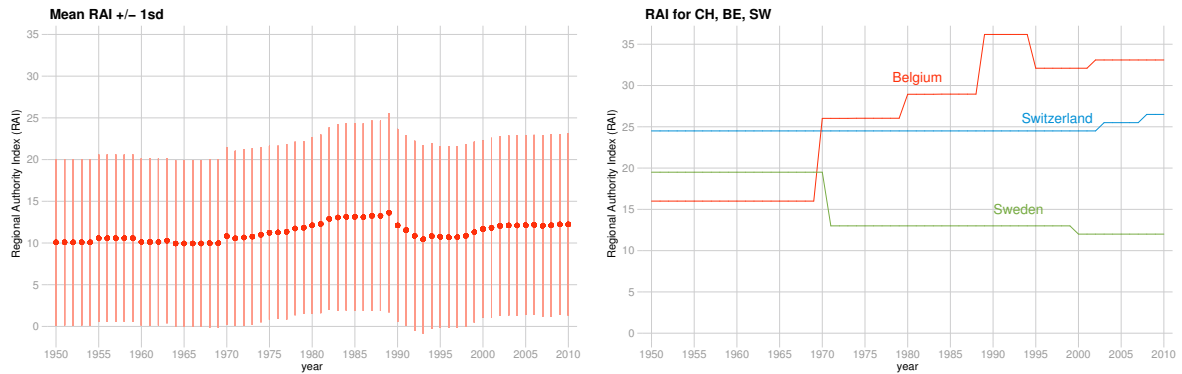
4.2 Measuring political (de-)centralization & controls

To measure our key concept of political decentralization we rely on the Regional Authority Index (RAI) (Marks, Hooghe, and Schakel 2008; Hooghe, Marks, and Schakel 2008). The authority of sub-units within each nation is thereby measured along ten dimensions: institutional depth, policy scope, fiscal autonomy, borrowing autonomy, representation, law making, executive control, fiscal control, borrowing control, and constitutional reform. Using primary sources as well as secondary literature, the RAI research team provides a systematic coding of decentralization processes within each country covered. The distribution of the RAI index over time in the 34 countries included in our dataset is displayed in Figure 1.

The RAI is particularly suited to test our hypotheses. First, it is the largest data set on decentralization as of today. Second, the measure is well validated in the literature. Third, it allows us to not only look into the general patterns between decentralization and the number of political parties within a country, but also provides us with the possibility to look into each of the ten dimensions separately. Therefore, we can carefully test which dimensions truly drive the number of parties within a country and which dimensions do not have an effect. The RAI thereby is the only data resource allowing us to test all of our hypotheses outlined

5 Results

Figure 1: RAI Index across 34 countries (1950-2010)



Source: Authors' own.

above. Notice, that for our analyses we divided the original RAI Index by 10 to ease-up the interpretation of our findings.

As outlined above previous research emphasizes that party system fragmentation is driven by institutional factors as well as the heterogeneity of the population. Thus, we control for electoral systems (proportional, mixed and majoritarian) as well as for the excluded ethnic groups in a country (Cederman, Wimmer, and Min 2010; Wimmer, Cederman, and Min 2009). Previous research relies on Alesina's (2003) fractionalization index. Yet, this measure shows now variation across time and, thus, is covered collinear to the country fixed effects we will employ below. Furthermore, as discussed above several measures for the institutional diversity of electoral systems exist. Thus, we not only use a dummy specification as discussed above but also use the Gallagher index of disproportionality as well as a relative measure of disproportionality (Gallagher 1991). Finally, we also control for a set of economic factors which might lead to the rise of new challenger parties (GDP growth, inflation and public deficit).

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To test our theory we estimate a set of time-series-cross-sectional models taking the following form:

$$ENP_{c,t} = \alpha + \beta_1 ENP_{c,t-1} + \beta_2 RAI_{c,t-1} + \Gamma Z_{c,t-1} + \zeta_c + \epsilon_{c,t} \quad (2)$$

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All our models contain country fixed effects (ζ_c) to control for unobserved time-invariant country characteristics such that we only exploit variation across time for our estimates. Furthermore, we control for autocorrelation by using a lagged dependent variable throughout our models. After stepwise integration of our covariates we also use different model estimators to show the robustness of our findings. First, we use panel-corrected-standard-errors assuming a panel-level heteroskedastic (models 1-5) in table 1 (Beck and Katz 1995). Since using a lagged dependent variable with fixed effects might lead to a Nickel bias, we also estimate our models without lagged dependent variables. Instead, we then use again panel-corrected-standard-errors but assume an ar(1) autocorrelation structure (model 6). Finally, in model 7 we rely on Driscoll Kraay standard errors which are specifically robust to time series with large N and small T (Driscoll and Kraay 1998) as it is the case for our data set ($N=19$; $\mu T=10.5$ election years). Furthermore, we lag all our key independent variables by one legislative period since our theory would not assume a direct effect of decentralization, but instead a more long-running/lagged effect.

Table 1 reports the coefficients stemming from these model specifications. These seven models report a significant and positive effect across all model specifications. Relying on within country variation only we find strong evidence for our first hypothesis: the higher the levels of regional authority in a state, the higher the effective number of parties. This finding is robust across all model specifications we estimate in table 1. Notice also that the size and confidence of our estimate remains comparably equal across the first five models we estimated. If we drop the lagged dependent variable and instead use an ar(1) correction the size of the coefficient becomes even larger (models 6 & 7).

The five models reported in table 1 assume a simple linear correlation between decentralization and the effective numbers of political parties in a nation. However, the question arises if the relationship might be non-linear. For instance one could assume that the effect of decentralization remains flat before exponentially increasing with a certain value. To test if there is a non-linear relationship we re-estimated our models using RAI_{t-1}^3 . The left graph in figure 2 reports the marginal effect based on this model specification.

The graph shows that the effect of the RAI index on the number of effective parties remains fairly consistent with increasing RAI. The slopes becomes slightly steeper with a RAI larger than 2. In general it seems that is fair to assume a simple linear relationship between decentralization and the number of effective parties.

The graph on the right in figure 2 reports the effect of different lag specifications for the RAI index (1,2,3 & 5 electoral cycles). The figure suggests that the relationship between decentralization and the effective number of parties does not depend on the lag structure we

5 Results

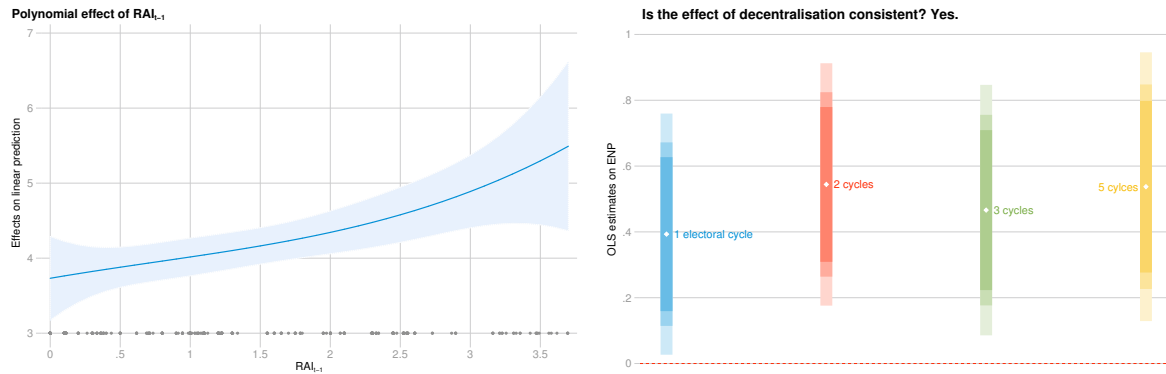
Table 1: Does federalism correlate with higher number of effective parties? Yes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	baseline	excluded groups	electoral system	economic controls	Gallagher	ar(1)	DKSE
ENP _{t-1}	0.469 (0.067)	0.467 (0.068)	0.461 (0.068)	0.454 (0.067)	0.453 (0.066)		
RAI_{t-1}	0.375 (0.145)	0.370 (0.145)	0.393 (0.142)	0.356 (0.141)	0.345 (0.147)	0.518 (0.198)	0.633 (0.183)
ethnic groups _{t-1}		0.0362 (0.096)	0.0357 (0.096)	-0.0268 (0.102)	-0.0421 (0.103)	0.0814 (0.132)	0.162 (0.152)
Modified PR			-1.438 (0.638)	-1.498 (0.650)		-1.437 (0.684)	-0.990 (0.466)
PR			0.243 (0.221)	0.260 (0.261)		0.771 (0.355)	0.771 (0.362)
disproportionality					0.0232 (0.015)		
GDP growth				-0.0437 (0.017)	-0.0386 (0.018)	-0.0423 (0.018)	-0.0518 (0.027)
Deficit(%GDP) _{t-1}				-0.00249 (0.013)	0.000220 (0.013)	0.000756 (0.016)	0.00978 (0.018)
Inflation _{t-1}				-0.000886 (0.010)	-0.000655 (0.010)	0.0243 (0.015)	0.0175 (0.026)
Constant	0.716 (0.357)	0.695 (0.360)	2.095 (0.679)	2.475 (0.742)	0.783 (0.442)	3.112 (0.857)	2.808 (0.515)
R^2	0.751	0.751	0.760	0.766	0.758	0.591	—
RMSE	0.787	0.789	0.777	0.771	0.783	0.820	—
<i>N</i>	337	337	337	337	337	337	337
<i>countries</i>	29	29	29	29	29	29	29
Country FEs	✓	✓	✓	✓	✓	✓	✓

standard errors in parentheses; country fixed effects omitted from table

are using for our model specifications. It appears that the effect remains similar across time in size and confidence.

To more carefully examine the mechanisms behind our main hypothesis and to investigate the remaining two hypotheses, we split the RAI index into its constituent parts. Figure 3 reports the key findings of ten regression models testing these arguments. All models use the exact same specification as model (3) in table 3. It shows that mainly four dimensions included in the RAI index drive our findings. Our institutional hypothesis find support:

Figure 2: How decentralization predicts ENP

Source: Authors' own.

Note: Both figures report OLS estimates surrounded by whiskers reporting 99, 95, 90 % confidence intervals. Based on model (3) in table 1. But lower figure estimated with RAI_{t-1}^3 .

regional autonomy and an independent legislatures predict an increase in the number of effective political parties. Thus, the more independent the regional legislature and executive, the higher the effective number of political parties.

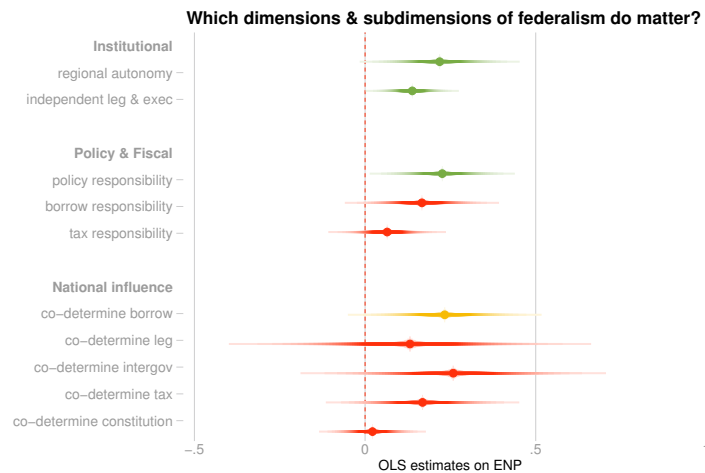
However, we have mixed findings for our final two hypotheses that increasing policy and fiscal decentralization correlate with more political parties in a state. In fact, we find support that policy responsibility (authoritative competences in economic, welfare and several other policies) correlate with a larger number of political parties. Yet, neither borrowing and taxing responsibilities report a significant effect on the number of political parties.

5.1 Substantiating the decentralization effect: Simulating the impact of decentralization in Belgium & Italy

To enhance our understanding of the substantive effect of our results, we simulate counterfactual scenarios for two crucial cases in our data set. The regression results (specifically the coefficients and standard errors) reported above rely on the number of observations included in our analysis (King, Tomz, and Wittenberg 2000). Yet, reporting regression results as point estimates (as in Table 1) or calculating derivatives (as in Figure 2) ignores the estimation uncertainty stemming from the fact that we observe fewer than the infinite number of observations (King, Tomz, and Wittenberg 2000: 348-349). In contrast, simulations allow us to estimate, report and investigate more carefully the uncertainties associated with our regression estimates.

5 Results

Figure 3: Which dimensions of federalism do matter, 35 countries (1950–2012)



Source: Authors' own.

Notice: Reported are coefficients of 12 regressions. Controls and fixed effects are omitted from the figure. Each marker represents the respective β coefficient of interests reported in the labels. Reported are 99.9 % confidence intervals.

We specifically analyze Belgium and Italy since both countries underwent major federalist reforms during the 1970s and the 2000s, respectively. For Belgium we look into the first state reform (1970). The reform resulted in the three cultural communities we know today: the Dutch, French and German cultural communities. In essence the reform led to the establishment of three autonomous regions. On 7 October 2001 Italian voters voted in favor of a major reform of the Italian constitution which also contained efforts to greater decentralization (Amoretti 2002; Del Duca and Del Duca 2006). The reform redistributed several lawmaking powers from the central government to the 20 regions, more specifically: “It devolves powers and responsibilities to the lowest feasible level of government, encourages officials to involve citizens in public affairs, gives regions a nominal and still somewhat hazily defined ‘fiscal autonomy,’ and ends the central government’s power to suspend new regional legislation pending a Constitutional Court ruling on its constitutionality”(Amoretti 2002: 127).

Both reforms are well captured by the RAI index. In Italy the RAI increased from 2.2 to 2.7; in Belgium from 1.6 to 2.6. In our simulations we first took 1,000 random draws from a multivariate normal distribution defined by the coefficients and covariance matrix from the regression models reported in model (3) table 1. Second, using the factual scenarios in Italy (RAI=2.72) and Belgium (RAI=2.6) we calculated linear predictions of our dependent

variable (ENP). We then saved the distributions of the estimates stemming from these models. Third, using the *counterfactual* scenarios in Italy (RAI=2.2) and Belgium (RAI=1.6) we again calculated linear predictions of our dependent variable (ENP). The counterfactual scenarios simulate the number of effective political parties if the reform in each country had not happened. Thus, the idea behind these simulations is to show the substantial effect of the federalist reforms both countries underwent as outlined above. We estimate this effect for the first election following the decentralization reforms.

Figure 4 reports the distributions of our simulations. For both countries we can see a substantively large effect by each reform. The simulations for Italy suggest an increase on the mean by 0.25 effective parties. In Belgium, we report an increase on the mean by 0.40 effective parties. Thus, even if we control for electoral systems and ethnic heterogeneity we still find a substantive effect by decentralization reforms in both countries on the effective number of political parties.

5.2 Sensitivity analysis: how does decentralization affect votes for parties?

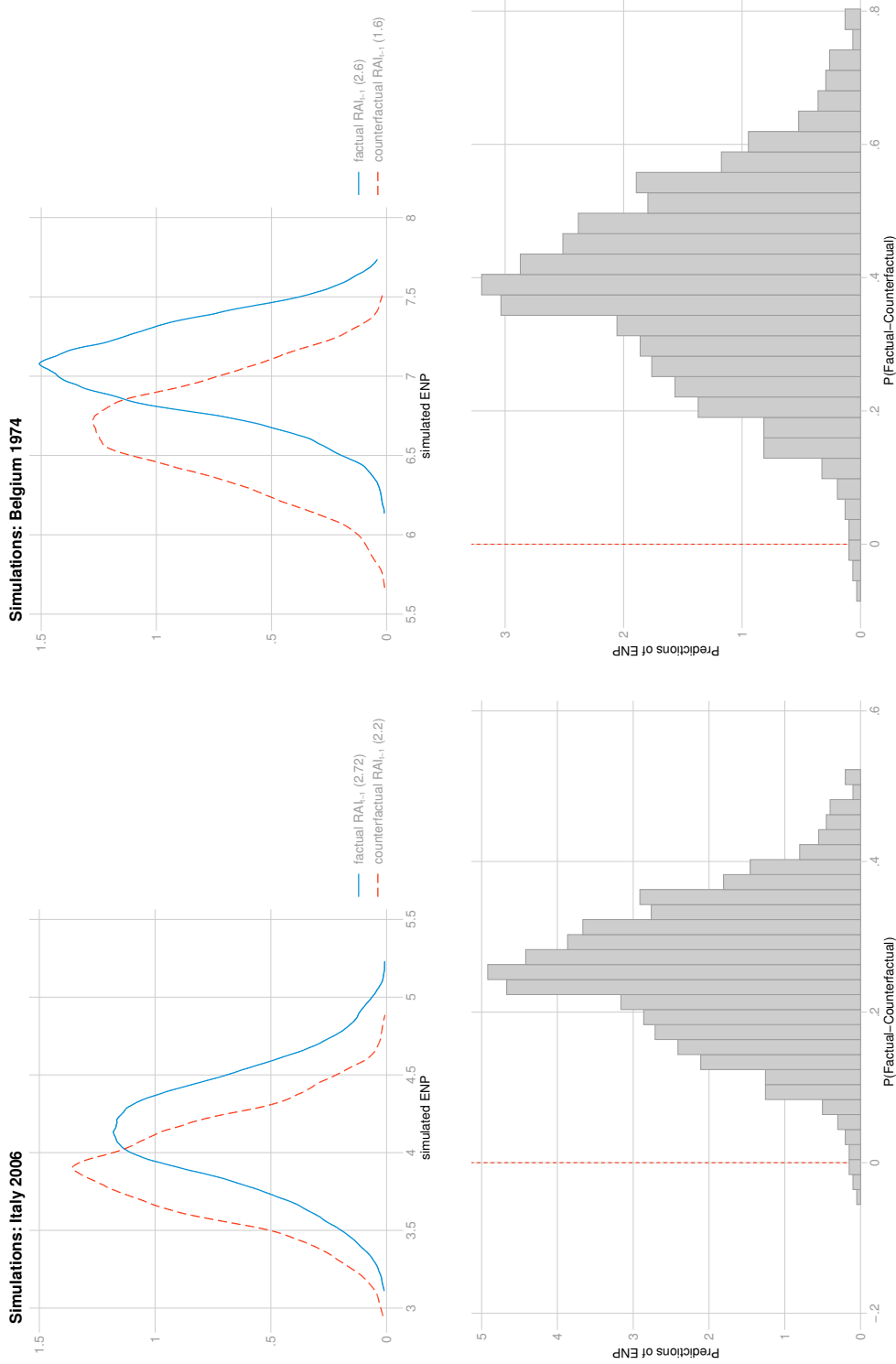
One key objection to our theoretical argument might be that incumbent parties explicitly use decentralization to appease regional movements. Following this reading decentralization can be understood as a strategic tool to secure incumbent votes while minimizing the electoral payoff for parties with regional strongholds (Meguid 2008). To test this argument we re-organized our data set into an incumbent party panel and estimated the following model:

$$\Delta\text{Vote-Share}_{i,t} = \alpha + \beta_1\Delta\text{Vote-Share}_{i,t-1} + \beta_2\text{RAI}_{c,t} + \zeta_i + \epsilon_{i,t} \quad (3)$$

Thus, we estimated which effect the degree of decentralization within a country ($\text{RAI}_{c,t}$) has on the shift of incumbent parties' vote shares ($\Delta\text{Vote-Share}_{i,t}$). We again use a lagged dependent variable to control for autocorrelation. Furthermore, we cluster the standard errors by party (panel corrected standard errors).

Figure 6 reports the coefficients from these models. We estimated these models for cabinet parties (blue) and prime minister parties (red) separately. In total we ran four different specifications. In each case we use the vote share of an incumbent party at t (so the party's vote share *prior* to changes in decentralization) and subtracted this vote share from the same party's vote share at $t + 1$, $t + 2$ and $t + 3$. It becomes immediately visible that incumbent parties did not benefit from reforms of decentralization. If anything, increased decentralization correlates with a *decrease* of the incumbent party's vote share.

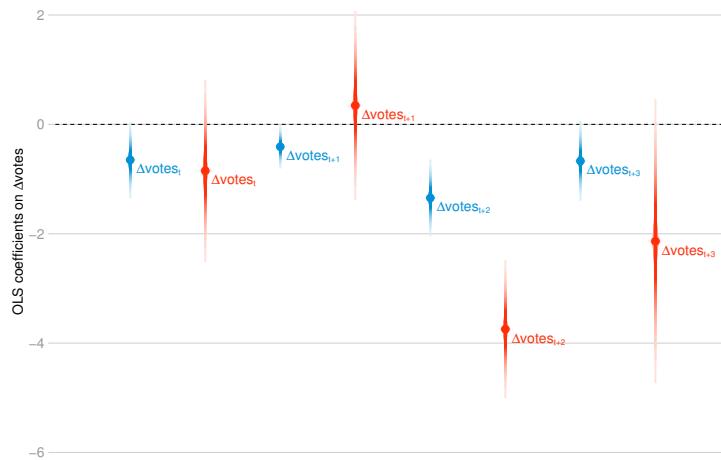
Figure 4: Descriptive insights: Cases, cross time development & the effect of extreme party entrance on public polarization



Source: Authors' own.
 Note: Figure 4 uses 83% confidence intervals.

6 Conclusion

Figure 6: Do incumbent parties benefit electorally from decentralization? No.



Source: Authors' own.

Note: Markeres report coefficients (RAI) stemming from regression analysis, whiskers report smoothed confidence intervals (95 % level confidence). Notice that we only analysed these models which have been in government three or more times.

6 Conclusion

In this paper we show that there is a systematic relationship between the degree of decentralization within a given polity and the effective number of political parties. While institutional explanations for the number of parties in a given party system have been predominant in the literature, decentralization, which often requires constitutional change, has received little attention as a driver of the fragmentation of a party system . We show that, when holding electoral systems constant, increased federalisation results in a higher number of parties. This finding is extremely robust across many statistical specifications, and including a set of important covariates. As the Regional Authority Index shows, changes in decentralization within states are much more common than we might expect. Since the year 2000, important reforms of the relationship between regions and national government have been passed in the UK, Germany, and Italy, to give only the most important examples. The fact that the United States has had a consistent two-party system for more than a century might hence be seen as an anomaly rather than an ideal type.

Our analysis shows that this relationship appears to be predominantly driven by institutional factors. These institutional factors mostly consist of whether regions have a legislature

6 Conclusion

and executive elected independently from the national government. Moreover, the degree of authority that regions have over policy areas is an important predictor of the effective number of parties in a state. This makes sense given that control over policy areas such as education and health-care enable opposition parties to put forth alternative programs of government and show that they actually matter in the policy-making process. In contrast, the degree of fiscal decentralization appears to be less important than expected. The extent of a region's tax raising power and debt authority does not significantly predict the effective number of political parties. The Scottish experience where the Scottish national party has authority over significant policy areas such as education and health-care, all while being able to attribute blame to the UK government for issues related to taxation and the imposition of austerity measures illustrates why fiscal decentralisation might impose constraints on a parties' ability to shift blame to the national government.

In conclusion, in this paper we show that governments that decentralize the state may encounter a larger number of competitors as a result. Decentralization, in contrast to what Meguid (2008) expects, does not result in a citizenry grateful to the governing parties. In contrast, it provides a springboard for new parties that challenge the status quo, and allows them to establish themselves in the national party system. These are the unintended consequences of federalisation, a policy decision that we show predicts a more fragmented party system.

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Table 2: Which dimensions predict an increase of ENP?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	regional autonomy	policy responsibility	tax responsibility	borrow responsibility	independent leg & exec	co-determine leg	co-determine intergov	co-determine tax	co-determine borrow	co-determine constitution
ENP _{t-1}	0.515*** (0.037)	0.514*** (0.039)	0.522*** (0.036)	0.530*** (0.035)	0.511*** (0.037)	0.535*** (0.034)	0.524*** (0.032)	0.526*** (0.038)	0.528*** (0.034)	0.535*** (0.039)
instdepth	0.239** (0.080)									
policy		0.253** (0.086)								
fiscauto			0.0930 (0.062)							
borrowauto				0.133* (0.053)						
rep					0.139** (0.045)					
lawmaking						0.117 (0.123)				
execon							0.207 (0.172)			
fiscecon								0.226 (0.112)		
borrowcon									0.269** (0.091)	
constit										0.0522 (0.069)
selfrule										
sharedrule										
Constant	1.490*** (0.126)	1.567*** (0.136)	1.824*** (0.132)	1.759*** (0.126)	1.615*** (0.121)	1.858*** (0.136)	1.879*** (0.125)	1.842*** (0.120)	1.883*** (0.117)	1.841*** (0.108)
N	426	426	426	426	426	426	426	426	426	426

References

standard errors in parentheses; country fixed effect omitted from table
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$