

# Democratic Contestation and Citizen Satisfaction in German States

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April 9, 2004

## **Abstract**

Contestation is a central element of democracy. Party competition disciplines political leaders and fosters more responsive government. Higher levels of two-way party competition are hypothesized to lead to more citizen satisfaction, controlling for ideological position and party loyalty. Data from 69 West German regional election studies over 25 years confirm this hypothesis. OLS regression analysis of individual-level data demonstrates a negative relationship between citizen satisfaction and one-party dominance. Time series cross-sectional analysis of regional-level data support this finding. Implications for decentralization and sub-national accountability are discussed.

“I’m not sure I’d welcome a regional assembly as we might not get the regular change you have at Westminster. Down there, it more or less alternates between Labour and Tory, but there’s a risk here it’d always be Labour.” *Newcastle resident quoted in The Guardian, May 10, 2002.*

## 1 Decentralization – government closer to the people?

Decentralization of political power is an ever-popular proposal. The subsidiarity principle, introduced by the Roman Catholic Church and perpetuated by the European Union, promises to bring government closer to the people, by placing real power in the hands of local and regional leaders. Far from national capitals, these leaders are considered in a better position to understand particular needs and provide tailored solutions.

The European Union and several of its member states agree that decentralization, and notably regionalization – bringing power to the middle level of government – is a way to improve public policy. Yet in an age of national and global broadcast media and high mobility, do smaller units always mean bringing government “closer to the people”? Further, once power has been devolved, how can sub-national leaders be held accountable? Indeed, given the prominence of national media and party agendas, what keeps decentralization efforts from actually *reducing* accountability?

This paper examines the issue of regional-level electoral accountability with data from German states (Länder). In particular, competition between the two main political parties, the CDU/CSU and SPD, is shown to vary significantly among the states. This leads to variation in the degree to which elections can function as instruments for

disciplining regional governments. Although satisfaction with government and with regional democracy start at varying levels, the results show that over time and within each Land, satisfaction is greater in periods of greater party competition. The implications of this finding are twofold. First, contestation, essential to democracy, varies significantly across time and space at the sub-national level; a variation induced by events and alignments at the national level, and thus exogenously to the regional arena. Second, voters appreciate this variation and report greater satisfaction with government performance when competition, and by extension democracy, is stronger.

## **2 Competition, accountability, and citizen satisfaction**

One of the major questions found in theories of representative democracy is to what extent ordinary citizens can control the actions of the leaders to whom power has been delegated. Representative democracy can be defined as a set of “processes by which ordinary citizens exert a relatively high degree of control over leaders”(Dahl 1956:3). Dahl proposes two requirements for such control; participation and contestation. Leaving aside the question of participation rates, which tend to be relatively stable within democratic countries, this paper will focus on contestation. At the sub-national level, there is interesting variation on this dimension, with important consequences for citizen satisfaction and democracy.

Contestation for government position is necessary because the preferences of rulers and the ruled diverge. (Cox 1997, Iversen 1994). This divergence has several origins. Leaders, elected or not, have more information about how the government works, and

can exploit their position of power. Further, a bias is caused by the self-selection of politicians. Their preferences will therefore tend to be somewhat removed from the preferences of the citizenry at large. Voters have limited means at their disposal for checking government behavior. Elections generally allow them only to re-elect or throw out the incumbent party (or parties). At the end of each term, a decision is made on this simple, binary choice. In this context, the purpose of party competition is to bring government actions more in line with what the public wants. That is, more party competition will lead to more citizen control over their leaders, and, by Dahl's definition, to more democratic government.

It is important to note that the firing or re-hiring decision does not depend exclusively on the performance – real, anticipated, or perceived – of the incumbent. Equally important is the anticipated performance of the opposition. “The existence of an opposition – in essence, an alternative government – restrains incumbents” (Lipset 2000). Only an opposition that can credibly win the next election and form an alternative cabinet can provide an external incentive for an incumbent to perform in the interests of the citizens.

Yet if the opposition is systematically disadvantaged, for example, as is often the case in sub-national assemblies, by national party ideology, incumbents perceive a looser accountability link. Key's (1949) classic study of the effects of low party competition at the sub-national level demonstrates this. Studying the US South, Key argued that the absolute dominance of the Democratic Party, and the corresponding lack of opposition and competition, favored well-organized interest groups and the wealthy over the

unorganized poor. Lacking other instruments for gaining influence than the vote, and having no influence over election outcomes due to an absence of viable alternatives, the “have-nots” could be ignored at no risk by Southern state governments.

In most West European countries, sub-national parties possess only a limited freedom to move to the ideological center, as defined from the viewpoint of any particular local or regional jurisdiction. When the ideological distance between the regional and national median voter is great, this ideological rigidity can be a serious problem for an opposition party, since its nationally defined stands on position issues make it unattractive locally. In such cases, the opposition’s probability of winning elections may be very low. Consequently, the incentives of governing parties to please the median voter, notably on valence issues, are smaller when the incumbent feels safe. In the view of a critic, the worst cases of regionalization imply a “transfer of increased power to powerful barons entrenched in one-party regions” (Wright 1998:48). Unlike what is typically the case at the national level, variation in party competition is significant at this level. And, as will be demonstrated, this variation has effects on citizen satisfaction with government performance.

## **2.1 Valence and position dimension of evaluation**

I hypothesize that more party competition leads to higher levels of citizen satisfaction. However, two questions about satisfaction need to be answered before proceeding to measure party competition. First, given the great number of things governments do, how do citizen collapse these dimension into one when they evaluate governments? Second, is

it reasonable to assume that satisfaction reflects actual government performance, more objectively speaking?

Starting with the issue of what satisfaction levels mean, it is useful to distinguish between two main dimensions along which citizens evaluate government, whether for voting or survey purposes. Policies can be divided into whether the concern “valence” or “position” issues (Stokes 1960). Valence issues are characterized by a consensus on the goals; position issues by contention. Typical valence issues are economic growth and unemployment (everybody tends to want more of the former and less of the latter); examples of position issues are regulation of the economy, welfare spending, and the position of religion in politics. To the position dimension I will also add party loyalty as an independent motivator for supporting a party – although this is not a policy issue, it represents a position that influences how satisfaction is reported. Finally, when the term “performance” is used from here on, it will refer to the level of competence or success with which valence issues are addressed by the incumbent. Performance is thus construed as orthogonal to the dimension relating to position issues.

To what extent does the valence dimension of citizen satisfaction, correspond to government performance measured in more concrete ways? Satisfaction with performance means satisfaction with policy controlling for position issues. Previous studies of institutional performance at the regional level use indicators such as bureaucratic and legislative effectiveness (Putnam 1993) and parliamentary procedures (Stoner-Weiss 1997). Such indicators will not be used in this paper, however, objective, non-survey indicators have recently been developed for German regions. It is thus possible to compare

the Forschungsgruppe Wahlen satisfaction scores used in this paper to more objective measures of performance.

Two alternative, objective performance indicators are available. First, the Europe-wide PISA school performance study provides region-level data collected in 2000 (Baumert et al. 2002). The correlation coefficient between the total scores of this study and the raw satisfaction scores used in this study is .67. corresponding satisfaction numbers. Second, a study measuring business friendliness in each region (Waldow 2000) provides score totals that correlate at .64 with the present satisfaction numbers. While the latter indicator could be biased toward regions with right-wing party dominance, these two coefficients increase confidence in the conjecture that satisfaction represents actual government performance.

With these considerations about satisfaction and performance in mind, the predicted relationship between competition and government can be summed up in the following hypothesis:

*H1: Controlling for ideological position, citizens will be more satisfied with the performance of sub-national governments given higher levels of party competition.*

### **3 Defining and measuring party competition**

Party competition plays an important role in a wide range of academic work found on the border between empirical and normative political science. The simplest measures are binary, categorizing the units of analysis into competitive and non-competitive systems. This is the method implicitly used by Key (1949) in categorizing most Southern US

states as non-competitive. In a similarly binary way, Przeworski (1991) classifies states in which one party wins more than 60% of the vote twice in a row as uncompetitive, and thus un-democratic.

Among continuous variables, Vanhanen (1997) operationalizes competition as the vote share of all the parties except the largest, arguing that several smaller or medium-size parties make for more electoral competition than one big, dominant party. Following the same logic, the effective number of parties, as calculated by Taagepera and Shugart (1989) has also been employed. Finally, Besley (2002) uses discrepancies between vote and seat shares in British council election to calculate a “incumbency bias” that increases the sense of safety for majority parties. This idea of measuring a kind of electoral “slack” is very similar to that motivating the competition variable used in this paper.

If some general features of the party system are constant, a more specific measurement of party competition is both permissible and desirable. A context in which a number of custom-made party competition measures are found is the study of US state politics. The 50 states, different constitutions notwithstanding, are similar in their electoral institutions. The most commonly used measure of party competition specifically developed to compare levels of party competition across on US states is the Ranney index (Ranney 1976; Holbrook et al. 1993). This index consists of five indicators of Democratic Party strength, each averaged within a given time period. The average of these five indicators ranges from 0 (no votes for Democrats) to 1 (complete Democratic dominance).

The relevance of the Ranney index for competition arises because a value of one half



means electoral equality between Democrats and Republicans, assuming that there are only two major parties. Two-party competition thus increases with proximity to this middle point on the scale, and a “folded” scale can easily express this distance numerically (Holbrook et al. 1993:956).

Within Germany, the party systems are very similar across states, particularly the 11 Western states that will be studied in this paper. Most importantly, the first and second places in all elections have been filled by the two major center-right and center-left parties. Furthermore, at least one of these two parties has been present in all regional government coalitions in the history of the Federal Republic. They have also tended to share about 85% of legislative seats between them. Due to the two-party-plus structure of politics in the German states, an adapted version of the Ranney index will provide a reasonable way to measure party competition here.

### **3.1 Introducing the moving-average party differential**

Party competition is measured in this paper using a 4-election retrospective discounted differential between the two largest parties in each region over time. The measure is retrospective, thus ensuring that no more information is included than that available to lawmakers of the given year; it looks at four elections, thus reducing the effects of exceptional swings; and it discounts past elections relative to more recent ones, thus giving more weight to the nearer past.

The variable is calculated by comparing the long-term strength of the two major parties, the CDU/CSU and SPD, in each region over time. Only the electoral perfor-

mance of each individual regional party organization, such as the SPD in Hesse or CSU in Bavaria, is counted - national results play no role in the calculations. This sets the measure apart from the Ranney index. Observations are defined by the region and year in which a Land election and election study was held.

For each observed region-year, the major-party vote shares from the four most recent regional elections serve as the basis for the competition variable. Only data from elections prior to each observation of the dependent variable qualify. In German regions this typically means that the observations for the competition measure were picked for elections held between four and 16 years prior to the survey. Further, for each party, an average four-election vote share is calculated, weighted with a .2 discount for each election going back in time. This means that among the past four elections, the most recent (normally four years ago) would be assigned a weight of 1, the one before that a weight of .8, and so on via .64 to the fourth most recent past election, which would be weighed at .51, or about half that of the most recent election. The results are robust to marginal changes in the discount rate. Averaging these weighted vote shares, a moving average based on past results emerges for the regional branches of the CDU, CSU, and the SPD. Subtracting the moving average of the SPD vote from that of the CDU or CSU, we get an easily interpretable indicator of the left-right orientation of a regional political system in any given year. Taking the absolute value of this result, a continuous variable ranging from 0 (perfect competition) to 1 (perfect one-party dominance) emerges. The distance from perfect competition is now reported as a positive number regardless of whether the party with the most support is the CDU, CSU, or SPD.

The moving-average party differential has the following formal expression:

$$\left| \frac{\sum_{t=1}^4 ((vote_{CDU_t}) - (vote_{SPD_t})) * w^{(t-1)}}{\sum_{t=1}^4 w^{(t-1)}} \right| \quad (1)$$

where  $t$  is the number of elections going back, the most recent election being given as  $t=1$ , and the earliest as  $t=4$ . The weight  $w$  is a constant with value .8, as noted.

### 3.2 Summary statistics for the competition variable

The party differential varies with time, as party fortunes rise and fall. Such variation informs the decisions of officeholders, who weigh their decisions and efforts against their perceived likelihood of staying in office. The party differential also varies across regions. As Table 1 indicates, the party differential ranges from .0013 (Berlin in 1985) to .28 (Bavaria in 1990). The distance between the CDU/CSU and SPD thus fluctuates between almost perfect competition and a gap of 28 percentage points.

Table 1: Variation in moving-average distances between CDU/CSU and SPD

Region	No. of studies	Mean distance	Minimum	Maximum	Range
Berlin	6	.093	.0013	.16	.16
Hamburg	8	.097	.036	.19	.15
Saarland	5	.063	.016	.12	.11
Rineland-Palatinate	6	.078	.015	.11	.098
Bremen	6	.17	.11	.2	.09
North Rhine-Westphalia	5	.06	.023	.11	.084
Lower Saxony	7	.042	.0022	.077	.075
Schleswig-Holstein	6	.076	.038	.097	.059
Baden-Wuerttemberg	6	.18	.15	.2	.047
Hesse	8	.012	.003	.039	.036
Bavaria	5	.27	.25	.28	.031
Total	68	.099	.0013	.28	.28

## 4 Party competition and citizen satisfaction

The existence of 25 years of regional election studies permits a test of the effects of party competition on citizen satisfaction over time and within regions, as opposed to simply across regions. The advantages of this are clear: German Länder differ in size, wealth, urbanization, labor structure, religion, and political culture. An analysis with region and period dummies permits a test of the variables of interest while taking into account such unit-specific factors that may otherwise be difficult to measure.

In this section, ordinary least squares (OLS) regression analysis will be run with citizen satisfaction, as measured in 69 German regional election studies, as the dependent variable. The main explanatory variable will be the four-election discounted differential between the CDU/CSU and the SPD. In addition, individual-level variables, such as religion and union membership, will also be included in order to control for the position dimension of citizen satisfaction as far as possible. Finally, unemployment and economic growth rates will be included as control variables.

### 4.1 The dependent variable: Citizen satisfaction

The dependent variable in the regression models in this paper is a -5 to +5 satisfaction scale, on which respondents in the 11 West German regions were asked to evaluate the performance of their regional government. The question asked is:

Are you satisfied or dissatisfied with the performance of the [incumbent party or coalition] regional government in [your Land]? Please use the thermometer from plus 5 to minus 5 (Forschungsgruppe Wahlen, several years).

In the 69 surveys in which it was asked, the question had a response rate of 93.5%.<sup>1</sup>

Figure 1 gives a preliminary presentation of the main dependent and explanatory variables. The scatterplot shows changes in citizen satisfaction over changes in the party differential, both calculated within regions since the previous election. The scatterplot shows a negative trend, significant at a 1.7% confidence level.

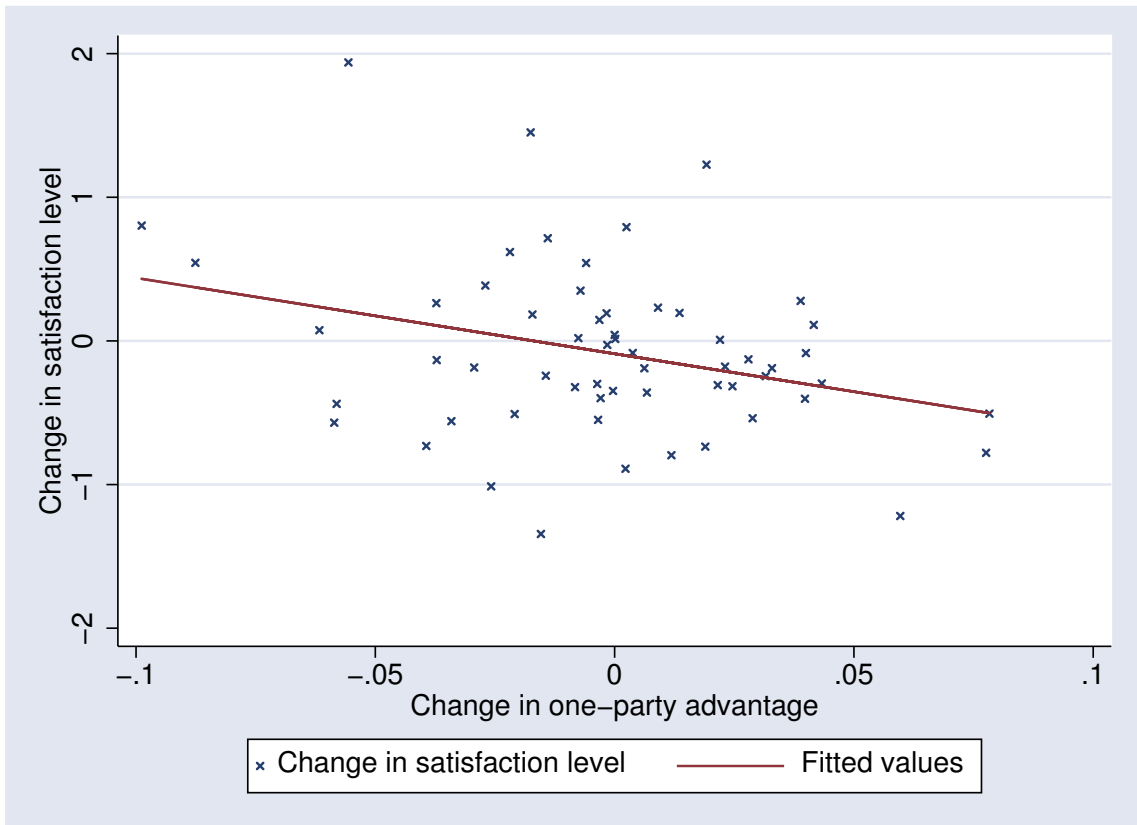


Figure 1: Change in satisfaction since last election over change in party differential

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<sup>1</sup>For one survey, conducted in North Rhine-Westphalia in 1980, only summary statistics are available. These values will be included where possible, but excluded in the analyses of residual satisfaction levels in Section 4.5, notably Fig. 2 and Table 5. This gives 68 or 69 studies, depending on the level of analysis.

The changes, rather than the raw values themselves, are used because factors particular to each region, notably demographics, influence the underlying levels of satisfaction and party advantage. These factors need to be examined in more detail in regression analyses, using an extended set of variables, the most notable drawn from the level of individual respondents.

## 4.2 Controlling for the position dimension, including party loyalty

Variations that influence satisfaction but are unrelated to government performance or competence are mostly found at the individual level. The most important variables that indicate particular ideological or other positions relevant for placement on a position dimension are vote in the previous regional election, religious denomination (or absence thereof), and whether the respondent or anyone in her or his household is a union member. As all these variables - vote, religion, and union membership - can be expected to influence satisfaction levels in different ways depending on the party composition of the regional government, they will be interacted with political variables. Most importantly, the vote variable will be transformed into a binary variable that is 1 if the party for which the respondent voted in the previous regional election is presently in the regional government, and 0 otherwise. Union membership will be interacted with an SPD premiership dummy variable, whereas religious denomination – separate dummies for the Catholic or Protestant denominations – will be interacted with CDU premiership.<sup>2</sup> This

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<sup>2</sup>The government dummy will be determined according to what party the Minister President, or Land premier, belongs to. This distinction is made because of three instances of grand CDU-SPD coalition, in which the senior party has held the post of premier.

is possible because all historical Minister Presidents of German regions since at least the 1970s have belonged to one of these two major parties.

Moving on to the aggregate-level variables, the most important of these is the party differential, for which 68 different values exist. Another political variable, a dummy indicating whether the regional government is formed by a coalition (1) or a single party (0) will be included in some of the iterations. The significance of coalition government will be left for future research. Further, the effects of national economic trends will be controlled for, notably unemployment rates and changes, as well as economic growth.<sup>3</sup>

Summary statistics are given in Table 2.

Variable	Obs.	Mean	Std. error	Min	Max
<i>Dependent variable:</i>					
Satisfaction	66617	.84	2.8	-5	5
<i>Regional-level explanatory variables:</i>					
Party differential	70082	.10	.074	.0013	.28
Coalition dummy	70082	.43	.50	0	1
<i>Individual-level variables:</i>					
Resp. voted for incumbent	63094	.49	.50	0	1
Union member in household	70082	.29	.45	0	1
Union membership * SPD	70082	.16	.37	0	1
Catholic	70082	.31	.46	0	1
Protestant	70082	.52	.50	0	1
Catholic * CDU premier	70082	.17	.38	0	1
Protestant * CDU premier	70082	.22	.42	0	1
<i>Economic variables:</i>					
Federal unemployment rate	70082	.088	.022	.038	.13
Federal unemployment change	70082	.0022	.0085	-.01	.02
Federal GDP per capita (log)	70082	9.9	.088	9.8	10
Federal GDP change	70082	.010	.030	-.099	.041

Table 2: Summary statistics of the variables used in the analysis

<sup>3</sup>Regional economic variables will not be used in the analyses because economic success is a valence issue, and belongs in the group of dependent, not explanatory, variables. The difference is nevertheless not very important, as economic indicators correlate strongly between the regional and federal levels.

A few remarks on the interpretation of the summaries are appropriate here. First, from the mean values of the dummy variables we can see that 49% of respondents had voted for the incumbent government, which seems reasonable given that survey respondents also include non-voters and supporters of minor parties that do not attain parliamentary representation. Also note that economic variables are given as numbers, not percentages. Thus, for example, average federal unemployment is given as .088, not 8.8%, and share of Catholics as .31 rather than 31%.

### **4.3 Testing the hypothesis using individual-level regression analysis**

Using the data presented in the previous section, it is now possible to specify a number of ordinary least squares (OLS) regression models to establish the effect of variations in party competition on satisfaction in regions over time. The satisfaction variable is regressed over three different sets of variables, the results of which are given in Table 3. In model 1, the only substantial explanatory variable is the moving-average party differential, which is accompanied by region and period dummies and a constant term. As hypothesized, the result shows a negative relationship between one-party dominance (the differential) and citizen satisfaction, even when not controlling for any other effects.

The second model adds two dummies, one for coalition government and another indicating a vote cast for the incumbent regional government. The third model adds demographic variables and federal-level economic variables. As noted earlier, changes in regional unemployment and GDP are left out here due to the high correlation with national economic variables, and because these variables themselves may be seen as



indicators of government performance. In the discussion of the coefficients to follow, the coefficients from Model 3 will be used as the point of reference.

Note again that the model uses data aggregated at three levels: individual, regional, and national. Most importantly, there are 1,000 individual observations for each region-year, whereas variables with year or region-year as the unit of analysis are drawn from only 25 and 69 distinct observations, respectively. For this reason, the t-statistics of coefficients on these variables in Table 3 (i.e., the coefficients divided by their standard errors) cannot be taken at face value as indicators of significance, despite their high values. The significance of the party differential will be demonstrated with aggregate data in section 5.

Although the very strong t-statistics on the CDU/CSU-SPD party differential do not by themselves ensure significance, I am confident to interpret them here, in light of Figure 1, and anticipating the results of section 5. In Model 3, the coefficient on the party differential indicates a slope of 6.5 to 1 on the regression equation. This means that an increase of one on this explanatory variable will translate into a decrease of 6.5 on the satisfaction variable, all else equal. Of course, this is not possible, as the maximum value of the differential is .28 and its minimum value is just greater than zero.

A more reasonable yardstick for evaluating the regression coefficient in Model 3 is the median intra-regional party differential, which, as Table 1 indicates, is found in North Rhine-Westphalia, and stands at .084. That is, in this region, the distance between the greatest and smallest party differential recorded in the period is equivalent to 8.4 percentage points. This number is derived from the fact that the distance between the

Table 3: OLS regression of citizen satisfaction over party differential, individual- and federal-level variables, and coalition, region and time period dummies

Satisfaction with government performance	(1)	(2)	(3)
Party differential	-3.834 (11.18)	-5.664 (17.22)	-6.463 (19.36)
Coalition dummy		-0.312 (11.23)	-0.304 (10.68)
Voted for incumbent		2.535 (125.31)**	2.439 (118.71)**
Catholic			-0.028 (0.69)
Protestant			0.175 (5.41)**
Catholic * CDU government			0.768 (16.52)**
Protestant * CDU government			0.344 (9.28)**
Union member in household			-0.401 (12.11)**
Union member * SPD government			0.786 (17.99)**
Federal unemployment			.5305 (0.23)
Federal unemployment change			-26.6 (9.39)
Federal GDP per capita (log)			-0.192 (0.36)
Federal GDP change			4.193 (7.55)
...			
(Coefficients on fixed region and period effect dummies not reported.)			
...			
Constant	1.317 (25.96)	0.415 (7.96)	1.895 (0.35)
Observations	66617	60465	60465
R <sup>2</sup>	0.02	0.23	0.24

Absolute value of t-statistics in parentheses. \*\* significant at 1% level

vote shares of the SPD and the CDU in North Rhine-Westphalia has not been narrower than 2.3 percentage points (which happened in 1985), nor wider than 11 percentage points (in 2001).

Having established that the variation in the party differential is best illustrated by the range found in the median region, and that this range is .084, it is now possible to interpret the first regression coefficient reported under Model 3. Fundamentally, this coefficient of -6.5 means that a change in the party differential in the median region from the greatest to the lowest level, a change of -.084, would translate into a change in the satisfaction level of  $(-6.5) * (-.084) = .546$ , or just over one half-step on the satisfaction scale. That is, on the -5 to +5 scale of citizen satisfaction, a move from minimum to maximum competition in a typical region, all respondents would increase their reported satisfaction level by 1/2 step on average.

What does this 1/2 step mean? Is it small or large? It turns out that the median range of the average satisfaction levels, again – by coincidence – drawn from North-Rhine Westphalia, is .99, or practically a whole step on the -5 to +5 scale. (See Figure 2 below for a graphical representation of the ranges). This means that in the most typical – or median – region, the average change in satisfaction that occurs when moving from the lowest to the highest level of party competition has a magnitude that corresponds to half of the range between the lowest and highest level of aggregate satisfaction found in the median region. Thus, far from being insignificant, one half-step on the 11-point scale is actually a substantial distance when compared to the variation that is found within regions over time.

The individual-level variables introduced to control for position-related (as opposed to valence-related) satisfaction also display clear effects. Not surprisingly, individuals who report a vote for a present government party in the previous regional election, also report greater satisfaction with this regional government. Supporters of the present government – as measured by previous vote – report on average 2.5 steps higher satisfaction on the 11-point scale than those who did not vote for the present government. This is by far the most significant of all the coefficients, as shown by the extremely high t-score of 125. Simply put, the probability that Germans do not on average value “their” own parties in government higher, is infinitesimal. The importance of the position dimension, specifically party loyalty, is strong.

In a similar way, religious and union membership influence reported satisfaction levels. Not surprisingly, Catholics are on average more satisfied with CDU regional governments, while union membership predicts greater satisfaction with the SPD. Perhaps more surprising is the fact that also Protestants are more satisfied with CDU governments. In any event, these demographic variables clearly predispose respondents to favor one party over another, and in ways that cannot be construed as having anything to do with government performance or competence. Including these variables thus helps isolate the valence dimension of citizen evaluation of government.

The coalition coefficient is also of interest, as it shows that respondents reduce their satisfaction by at least .3 steps for coalition governments, when compared to one-party government. This means about 1/3 of the total satisfaction range of the median region. Note that this difference only holds if all other variables are held constant. This “ceteris

paribus” condition, present in all regression analyses, cannot be satisfied in this case, as the presence of coalition governments depends on whether one party has an absolute majority or not. German regions in the period have always had majority and minimum winning cabinets (although not always the smallest combination of parties available - cf. grand coalitions between the CDU and SPD). This means that coalition governments are less likely when one party is clearly dominant, as long as the size of third parties is the same. This relationship between competition and coalition government, each pulling satisfaction levels in opposite directions, will remain a topic for further research.

#### **4.4 Verification of the competition effect by region**

The finding that competition leads to satisfaction holds on average, but it is worth asking whether it also holds in each individual region or whether only a few strong cases drive the result. There are two ways to look at this, each with its strengths and weaknesses: a regression analysis with separate coefficients for each region, and a graphical analysis of trends. The statistical method has the advantage of giving us precise results for each region, but its effectiveness is reduced by a low number of observations in each region, on average six. The graphical method may be less precise, but displays the data used so far in a more direct way. In addition, graphs enable us to see the trends in competition and satisfaction over time.

Both graphical and regression methods indicate that the findings presented in Table 3 hold for most regions over time. To facilitate the display of trends in satisfaction and party competition, a standardized party competition variable is derived, calculated as

a linear function of the party differential. This variable ranges from the lowest to the highest observed competition level, as reported in the bottom row of table 1. The party differential is reversed and expanded to fit a scale from 0 to 1, so that the maximum party differential (.28) corresponds to zero on the new variable, and the minimum party differential (.0013) corresponds to one on the new competition variable. The scale for these values is given to the right of the graphs.

Figure 2 displays the trends in party competition and satisfaction over time for each of the 11 West German regions from 1978 to 2003. It is worth repeating that for each given election year, the competition variable builds exclusively on data from previous elections. Thus, each observation of the party competition variable is temporally prior to any satisfaction observation directly above and below it, and, of course, to any satisfaction observation to the right.

As Figure 2 shows, changes in satisfaction do indeed follow similar changes in party competition in most regions.<sup>4</sup> This trend is clearest in Lower Saxony, Hesse, and Schleswig-Holstein, while only the two first regions, plus perhaps Bremen and Hamburg, seem not to display any clear trend. Note that the satisfaction measure is based on the raw averages found in each election study, which means that party vote has not been controlled for. This understates the satisfaction levels under closer competition, as a greater party differential means that a greater number of survey respondents will have voted for the incumbent government.

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<sup>4</sup>Note that election studies with satisfaction measures do not exist for the following regional elections: Berlin 1991, Schleswig-Holstein 1987

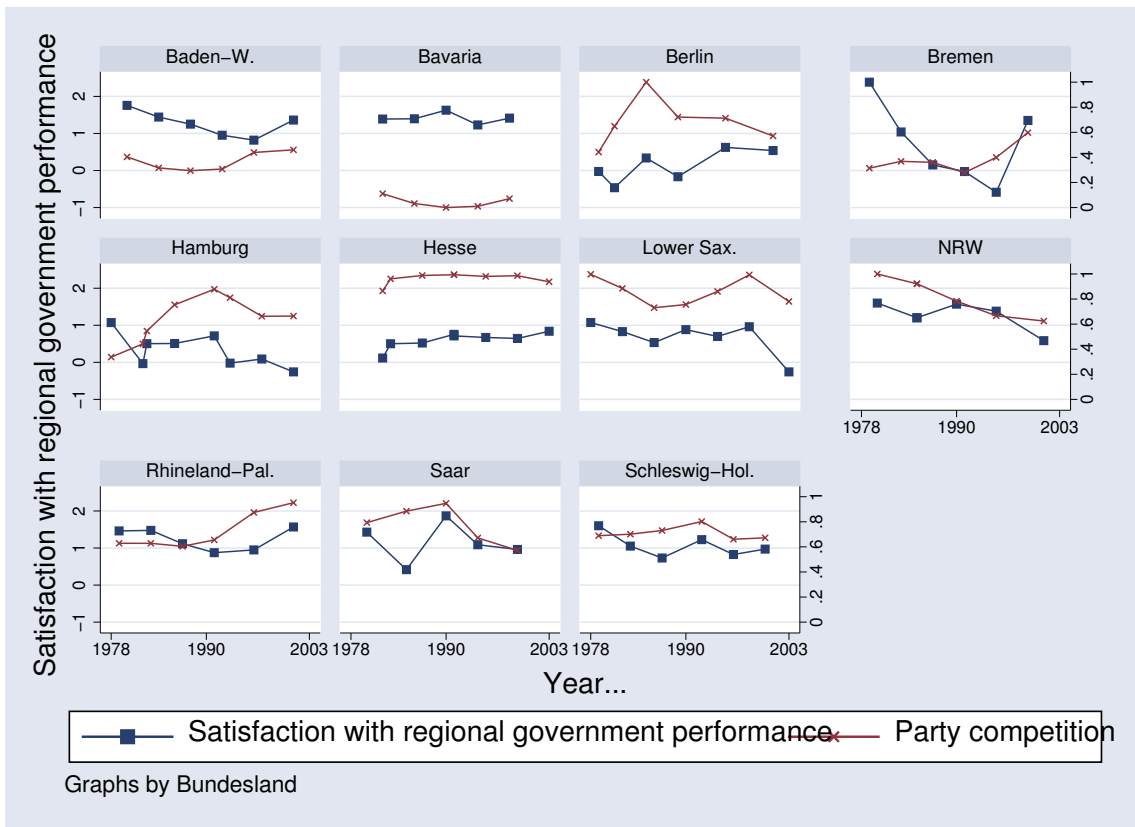


Figure 2: Evolution of party competition and satisfaction over time

The graphs of citizen satisfaction and party competition by individual region indicate that the results found earlier, in table 3, are not due to any exceptionally strong effects in a small number of regions. Instead, there seems to be a positive relationship between competition and satisfaction in at least two-thirds of the regions, while no region clearly goes against the finding. Still, graphical interpretation is prone to errors, as systematic trends often exist exclusively in the eyes of the beholder. It is therefore prudent to check the graphical impression against numerical evidence.

The most straightforward statistical method to verify whether the result found in

table 3 holds evenly for many regions – as opposed to strongly for a few regions – is to perform a regression analysis for each region. With the low number of observations, the coefficients cannot be interpreted with great confidence, and the results from the regression would not be admissible as independent evidence for any effect of party competition. However, as a strict extension of the models in table 3, a regression analysis broken down by region can at least yield an insight into which Länder contribute to the established effects, and which ones do not.

By splitting the main explanatory variable into one for each region and running a regression analysis with all regions present, it is possible to obtain results equivalent to those from regressions for each individual region. The advantage of this method is that more variables can be added with fewer degrees of freedom lost, while coefficients can “borrow strength” from the entire dataset. To split the party differential by regions, 11 new variables are created, each consisting of the party differential variable multiplied by a region dummy variable. For each individual observation in the data set, then, 11 new variables are added, of which ten are set to zero, and one is set at the party differential that already exists for the particular region and year. The coefficient on each of these 11 interaction effects, or, more importantly, its direction, will thus apply exclusively to variation found within the corresponding region.

Table 4 shows the results from the regression analysis on the party differential interacted with the region dummies. As noted above, what is interesting about the coefficients is not their size, which is highly variable due to the low number of observation in each region. The important finding is that in the full model, reported in column 6, ten of



Table 4: OLS regression of satisfaction over party differential, broken down by individual region, plus position-related, economic, and region and time dummy variables

Satisfaction with government performance	(4)	(5)	(6)
<i>Party differentials interacted with dummies for each region:</i>			
Baden-Wuerttemberg * party differential	-0.319 (0.15)	-1.573 (0.74)	-2.705 (1.16)
Bavaria * party differential	9.587 (2.63)	2.351 (0.66)	-11.139 (3.01)
Berlin * party differential	-4.847 (6.17)	-6.561 (9.18)	-5.402 (7.08)
Bremen * party differential	-11.213 (8.22)	-11.055 (8.10)	-5.787 (3.99)
Hamburg * party differential	-2.676 (4.12)	-4.769 (7.53)	-6.128 (9.42)
Hesse * party differential	-14.698 (4.94)	-17.542 (5.99)	-14.961 (4.87)
Lower Saxony * party differential	-3.805 (3.08)	-4.931 (4.19)	-8.197 (6.61)
North Rhine-Westphalia * party differential	-4.941 (3.47)	-4.023 (2.98)	-6.452 (4.53)
Rhineland-Palatinate * party differential	-4.982 (4.85)	-8.851 (8.59)	-13.17 (11.73)
Saarland * party differential	-1.941 (1.75)	-5.629 (5.22)	-1.702 (1.52)
Schleswig-Holstein * party differential	1.327 (0.45)	9.330 (3.24)	4.178 (1.29)
<i>Other variables:</i>			
Coalition dummy		-0.351 (10.86)	-0.320 (9.41)
Voted for incumbent		2.539 (125.43)	2.439 (118.59)
...			
(Economic, religion, and union variables used in Model 6 only.)			
...			
(Year and region dummies used in all models.)			
...			
Constant	1.175 (12.87)	0.397 (4.54)	1.837 (0.29)
Observations	66617	60465	60465
R-squared	0.02	0.23	0.24

Absolute value of t-statistics in parentheses

the 11 regions have a negative coefficient on their individual party differential. This clearly reduces the plausibility of the hypothesis that the result found in table 3 is due to a few outliers. Rather, the finding that increased party competition leads to greater satisfaction with the regional government is supported also when the competition data are broken down by individual region.

## **5 Aggregate tests of one-party dominance and satisfaction**

Having now established a clear positive effect of two-way party competition on satisfaction (in other words, a negative effect of one-party dominance) at the individual level, it is now time to examine whether this result holds at the aggregate level. Notably, this is necessary to establish the significance of the coefficient on the party differential. To do this, it is necessary to devise a measure of satisfaction that isolates the valence, or performance, dimension as precisely as possible.

The main potential pitfall of an aggregate-level analysis of satisfaction with regional government performance follows from partisan support. As seen in Models 2-3 and 5-6, having voted for an incumbent party translates into an increase in satisfaction of about 2.5 steps on the 11-point scale. Although the moving average party differential uses data from the last four elections, and not just the most recent one, more dominant parties will tend to score higher satisfaction levels merely from the fact of more respondents having voted for them. This boost comes from position or partisan evaluation, not performance or competence.

To control for position-based (as opposed to performance-based) evaluation, an

Table 5: Aggregate-level tests of satisfaction and competition

Model type	OLS	Fixed effects	
Residual satisfaction with government performance	(7)	(8)	(9)
Party differential	-5.986 (3.85)**	-4.307 (2.60)*	-4.797 (2.92)**
Coalition dummy	-0.354 (2.77)**		-0.242 (1.84)
Federal GDP change	4.319 (2.07)*	4.023 (2.29)*	
Federal unemployment rate	0.393 (0.04)	-5.644 (2.41)*	
Federal unemployment change	-0.196 (1.54)	-0.082 (1.27)	
...			
(Region and period dummies in Model 7 not reported.)			
...			
Constant	0.562 (0.51)	0.907 (3.08)**	1.043 (3.50)**
Observations	68	68	68
R-squared	0.63	0.24	0.29

Absolute value of t-statistics in parentheses.

\* significant at 5% level; \*\* significant at 1% level

OLS regression model is run with satisfaction, again, as the dependent variable, and individual-level, position-related explanatory variables. These variables are the same as those reported in Table 3: vote for/against the incumbent, religious denomination and union membership, plus interaction terms combining party government with the two latter variables. The residuals of this model are then calculated and averaged by region-year, yielding in all 68 observations. These residuals represent the level of citizen satisfaction that cannot be explained with existing information about a respondent's likely placement on position issues. Hence, residual satisfaction is the best available aggregate measure of government performance.

With this new aggregate satisfaction indicator, it is possible to treat the data as

a cross-section, time-series data set. This permits the use of fixed effects models. In Table 5, the first column reports the results from a simple OLS model with region and time period dummies; Models 8 and 9 use fixed effects. The results again support the theory that more competition leads to higher levels of citizen satisfaction, controlling for political position. Crucially, it is here possible to establish that the effect of one-party dominance is significant at the 1% or 5% level. Further, the coefficient hovers between -4 and -6, that is, within the range established by earlier models. This further strengthens confidence in the initial hypothesis.

### **5.1 Effects of inter-regional variation in party competition**

Having thus demonstrated the intra-regional effect of variation in competition on citizen satisfaction, what about *inter*-regional differences? The regression models reported so far in this paper have not addressed this question, as the dummies required for fixed effects regression explain all variation among the regions. Yet the differences in party competition across regions are, if anything, greater than the differences within regions. Should we not expect an even clearer positive effect of party competition in inter-regional comparisons?

One reason why we might not expect a strong competition effect, and certainly not dramatically negative effects of one-party dominance, relies on anecdotal evidence from two southern regions, Bavaria and Baden-Württemberg. These two large, populous, and predominantly Catholic regions are known for remarkable long-term economic growth under stable, dominant Christian Union parties.

Figure 3 plots residual satisfaction levels against the level of one-party advantage. The scatterplot indicates that the two southern regions— most notably Bavaria – do indeed have the least competitive party systems of the 11, although Bremen’s SPD is almost as dominant as Baden-Württemberg’s CDU. In light of the competition hypothesis supported so far in this paper, the satisfaction level is unexpectedly high in Bavaria in particular. One might think that wealth would explain some of the variation, but it turns out that other regions are wealthier per capita, notably Hesse and the city states, yet have low satisfaction levels. A more qualitative approach, focusing on party flexibility and positioning, is necessary to explain the Bavarian outlier.

Of all 11 West German regions, Bavaria has the most extreme one-party dominance, as can readily be seen in Table 1 and Figure 3. The CSU has had a plurality of seats in all Bavarian parliaments since the first postwar election in 1946, and has also won over 60% of the vote twice (although not consecutively) – in 1974 and 2003. What most decisively sets Bavaria apart politically from all the other Länder, however, is the fact that the CSU, uniquely among the major German parties, is able to tailor its policy positions specifically to Bavarian regional-level politics. Although the party cooperates closely with the CDU at the federal level, it fiercely guards its separate identity and sees itself as the prime guardian of Bavarian interests. As one observer puts it,

Characteristic of the CSU’s hegemony is its single-party rule since 1966, its presence in all aspects of society, and its penetration of the state apparatus and mass media, all of which lead to a tendency to identify the party with the *Land* (Gunlicks 2003:292).

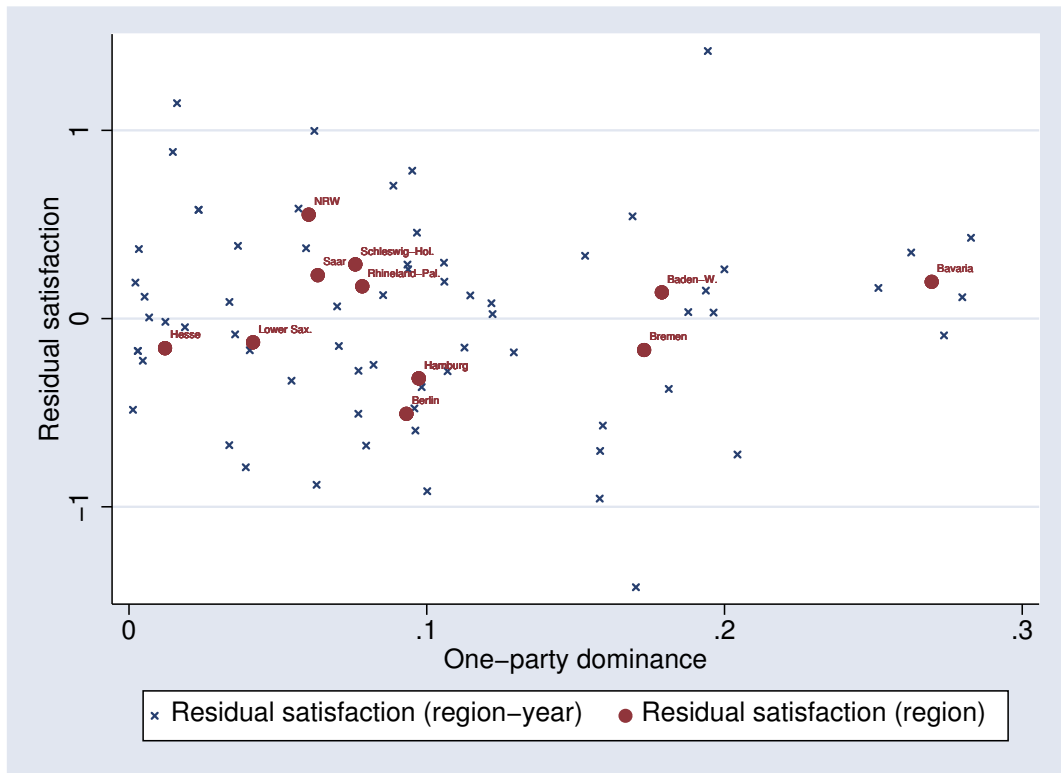


Figure 3: Satisfaction with regional government performance over party differential, by regional election study (x) and by region (solid circles and Land names).

Thus, citizen satisfaction with the CSU as party in government is difficult to distinguish from satisfaction with the fact that the CSU reflects Bavarian preferences in a way no other party does in any other region.<sup>5</sup> The unique ability of the CSU to take positions that represent the Bavarian electorate has even spurred debate recently among that region's Social Democrats over whether to copy the CSU by creating an independent,

<sup>5</sup>In addition to its particular party system, Bavaria's institutions have also differed from those the other German states in, as they have included a corporatist upper house until abolished by referendum in 1998 (Gunlicks 2003:213). It is beyond the scope of this paper to isolate the effect of this second chamber.

regionally-based party organization for themselves.<sup>6</sup>

Having established the Bavarian party system as a unique case among German regions, it is easier to understand the erratic coefficients on its individual party differential in Table 4. On a more speculative note, a cross-regional regression analysis can be performed with a special dummy variable for Bavaria. By modeling what is special about Bavaria using a separate dummy variable, it is possible to examine the cross-regional effects of competition among the remaining ten regions.

Since a simple, pooled regression analysis requires that the errors on the variables (here, notably the aggregate-level variables) do not correlate, and since fixed effects model would solve this problem by throwing out inter-regional variation, neither method is acceptable in this case. Instead, a cluster regression model, or ordinary least squares with robust standard errors, will be used. This kind of specification assumes that observations are independent across given clusters, but not necessarily independent within them. In this case, each of the 11 regions represents such a cluster. The results of three variations on this model are given in Table 6.

When introducing the dummy variable to account for the peculiar Bavarian case, as is done in Model 8, a negative effect of one-party dominance is indeed found. This agrees with the findings from Models 1 through 6, although it should be noted that the coefficient is only one-third of that in Model 3, and the significance level is much lower. Nevertheless, controlling for Bavarian exceptionalism, we get the hypothesized effect also across regions.

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<sup>6</sup>“Bayern-SPD sucht eigenes Profil,” *Die Tageszeitung*, March 16, 2004

Table 6: Cross-regional cluster regression analysis with robust standard errors

Satisfaction with government performance	(7)	(8)	(9)
Party differential	-1.323 (1.64)	-2.351 (2.59)*	-1.152 (1.66)
Coalition dummy	-0.408 (2.19)	-0.398 (2.16)	-0.319 (2.31)*
Voted for incumbent	2.445 (25.80)**	2.451 (25.93)**	2.450 (25.30)**
Union member in household	-0.371 (5.32)**	-0.371 (5.34)**	-0.388 (5.27)**
Union member * SPD government	0.762 (8.45)**	0.767 (8.49)**	0.781 (8.28)**
Catholic	0.140 (1.64)	0.127 (1.48)	0.048 (0.48)
Protestant	0.159 (2.80)*	0.164 (3.01)*	0.163 (2.72)*
Catholic * CDU government	0.955 (7.40)**	0.885 (7.21)**	0.748 (6.03)**
Protestant * CDU government	0.564 (6.78)**	0.528 (5.35)**	0.368 (4.17)**
Federal GDP per capita (log)	2.494 (2.29)*	2.366 (2.30)*	1.689 (1.66)
Federal GDP change	6.774 (2.80)*	6.498 (3.07)*	4.892 (2.18)
Federal unemployment rate	-0.084 (2.13)	-0.090 (2.58)*	-0.082 (2.28)*
Federal unemployment change	-0.013 (0.14)	-0.019 (0.22)	-0.054 (0.64)
Bavaria dummy		0.522 (2.30)*	0.322 (1.93)
City dummy			-0.413 (3.79)**
Constant	-24.627 (2.33)*	-23.217 (2.32)*	-16.431 (1.65)
Observations	60465	60465	60465
R-squared	0.23	0.23	0.23
Robust t-statistics in parentheses			
* significant at 5% level; ** significant at 1% level			



The skeptical reader may now object that Bavaria is not the only common denominator for peculiar effects in the present data set. A case can be made that the three city-states, Berlin, Bremen, and Hamburg, while not having their own, regional, dominant parties, at least share political and institutional features that set them apart from the other eight regions. For example, all three city states have merged local and regional governments, they have the highest levels of gross regional products per capita in Germany (Hamburg has the highest in the European Union). Still, their public finances do not reflect this, partly because substantial parts of the workforce in each city-state live in neighboring regions.

The merits of controlling for a special city effect are less convincing than those of the Bavarian dummy variable. Most importantly, their competition levels, particularly of Hamburg and Berlin, are closer to the overall average. Crucially, their party differentials overlap with those of other regions. The two latter Länder have also recently had CDU leaders, and Bremen is currently governed by a grand coalition of the SPD and CDU. In short, despite their institutional and geographical differences, the city states come across as more politically ordinary regions than Bavaria, and do not deserve the same status as “outliers.”

Since controls for unit-specific effects has been sanctioned, a city dummy is nevertheless added to the analysis in Model 9. This moves the coefficient on the party differential back to the original level in Model 7. Hence, regardless of whether one thinks these controls are acceptable, Model 8 demonstrates that the Bavarian case is crucial in removing the positive, cross-regional effect of party competition on citizen satisfaction. At the

same time, Model 9 shows that the city states drive that same positive effect when controlling for Bavarian exceptionalism.

## 6 Discussion and alternative explanations

The analysis in this paper strongly supports the hypothesis that greater levels of party competition in a region increase public satisfaction with the performance of the regional government. This result is most pronounced if region-specific effects are controlled for, but inter-regional comparison does not contradict the claim. Within regions and over time, the effect is robust, being based on trends demonstrated in at least 2/3 of the West German regions in the period from 1978 to 2003. Thus, one can conjecture that greater competition also leads to better regional government performance, all else equal.

The results also support the more general theory that smaller differences in electoral support between parties compel regional governments to take into account the immediate interests of as many voters as they can, or alternatively to be replaced in the next election. Conversely, parties cushioned by a wide vote margin seem free to do as they please, and do not face expulsion even if their performance is low. Thus, while low party differentials tend to focus government performance at a reasonably high level, greater differentials permit both high and low performance. Which one of these roads an electorally “safe” government will take depends on motivation and individual factors other than electoral structure.

While a clear effect of competition on citizen satisfaction can be demonstrated, what does this imply for of regional democracy? Unfortunately, the German Land election

surveys do not ask voters to evaluate the quality of the regional political process per se, only the performance of various partisan actors. In addition to the regional government, though, respondents are also asked to evaluate the performance of the regional opposition and of the federal government. Since opposition is one of the main elements of democracy (Dahl 1971, Lipset 2000), citizen evaluation of the regional opposition is interesting for measuring regional democracy. The opposition variable can be analyzed alone or added to the main citizen satisfaction variable to form an index of regional political system performance. Regression analysis of these variables show remarkably similar results to the ones found for satisfaction with the regional government, although the coefficients are somewhat smaller. This implies that party competition improves not only regional government performance, but also positively influences the functioning of the regional political system at large.

### **6.1 A note on causality and potential endogeneity**

This paper has demonstrated that party competition has a positive effect on citizen satisfaction with regional government performance, and has further conjectured that competition also enhances regional democracy overall. However, is it possible that causation runs in the opposite direction? That is, could it be that high government performance leads to more competition? Alternatively, might low performance leads to one-party dominance?

The answer is no, since voters cannot determine the level of competition. The party differential is an aggregate outcome of individual actions, voting, and there is no single

strategy for individual voters to minimize the aggregate distance between the two major parties.<sup>7</sup> More importantly, it would not make sense to maximize competition when satisfied with the regional government. If perceived performance is high, citizens should support, not desert, the incumbent, which will almost always be the largest party. By the same mechanism, dissatisfaction with a dominant party should make it progressively less dominant. Consequently, given the negative relationship between the party differential and citizen satisfaction, there can be no endogenous causality in the model.

Even though the main model does not involve any endogeneity, it may be useful to verify the measures relative party strength with variables not drawn directly from election outcomes. An election forecasting model can then be constructed using aggregates of demographic variables such as union membership, religious affiliation, party vote in a fixed, past federal election, and similarity of the main regional and federal government parties. The predicted probabilities of either the CDU or SPD filling the post of Minister President can thus be derived from the forecasting model, and a party differential directly calculated.

It turns out that substituting this alternative and fully exogenous party differential for the moving-average party differential produces very similar results to those reported in Table 6. There is accordingly little to be gained from excluding past regional election outcomes in the model. On the contrary, the party differential accurately models the underlying strengths of the two major parties.

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<sup>7</sup>In the counterfactual case that one-party dominance were deemed better, voters could easily achieve and strengthen that by supporting the largest party. Under this scenario, endogeneity would be a real concern.

## 6.2 The effect of federal politics

While not adding explanatory power, the forecasting model mentioned in the previous section does show that parties increase their vote totals at the regional level in if they are in opposition at the federal level. This confirms the results reported by Jeffery (1999), who infers that German Land elections function as referenda on the national government. By voting against the federal government in regional elections, Germans directly strengthen the hand of the federal opposition in the Bundesrat (Lohmann et al. 1997).

If it is true that regional elections serve predominantly as “thermometers” of federal-level trends, the idea of regional-level party competition loses much of its meaning. Specifically, all regional cabinets would find themselves as hostages to federal politics, and not feel constrained by conditions in their own jurisdictions. This would have the same effect as making all Länder equally uncompetitive.

The moderating elections hypothesis does not constitute an alternative explanation to the results above, as it does not offer any predictions about variation in satisfaction levels. However, if regional politics does not matter, neither does regional party competition. Fortunately, the fact that Germans engage in moderating behavior when voting at the regional level does not mean that regional politics is determined by such behavior. This is because the literature on moderating elections looks exclusively at differences between federal and regional election results, not at changes in regional election results over time.

In fact, it can be demonstrated that correspondence in partisanship between federal

and Land levels, while certainly influencing the differences in vote total by party between levels, has no significant effect on the party vote from one regional election to the next in the period from 1978 to 2003. Counter-intuitive as this may seem, it can be most easily explained by the fact that there has been remarkable government stability at the federal level during this period. Indeed, there have been only two changes in federal chancellor and government party composition over the entire period. Accordingly, while federal politics certainly has an impact on regional party competition, two instances of government turnover are clearly insufficient to explain variation over a total of 69 separate regional elections.

## **7 Conclusion**

Competition disciplines leaders. When incumbents in German regions feel that their main opponent is gaining electoral support, they behave in ways that enhance public satisfaction with their work. Conversely, when the gulf between parties starts to widen, and incumbents get a sense of security from “electoral slack”, regional governments seem to change their behavior in ways that citizens, on balance, consider negative.

This finding is good news for democracy. First, there is no self-reinforcing trend between higher performance and increasing electoral strength of the incumbent. Instead, holding region-specific effects constant, dominant parties seem to pursue their own projects when they feel electorally secure, often over the heads of their citizens, who are then likely to rein them in come election time. Second, this pattern neatly demonstrates the role of uncertainty in democratic politics: Aggregate voting outcomes

clearly influences government behavior, yet voters cannot determine the level of party competition in their region on purpose.

The unexplained negative effect of coalition government hints at a further dilemma that voters face. While a smaller difference between the major parties leads to greater average satisfaction, all else equal, greater competition also increases the probability that coalition governments will form. This is a situation unique to proportional representation that, understandably, does not feature in the cited works on party competition in the US states. Given that citizens are less satisfied overall with coalition governments, by about 1/3 of a point on the satisfaction scale, some of the advantage of party competition is lost if it forces the competing parties to take a coalition partner. Further research is needed to examine the causes of this negative effect on perceived performance.

Looking at the issue of sub-national democracy more generally, this paper shows that elections other than those to the national level need not be seen as “secondary”. Electoral accountability is possible, and desirable, also at the regional level. The findings do, however, also point out a pathology of sub-national accountability more generally – one resulting from the subordination of local and regional party systems to national issues and alignments. When one major party unable to move ideologically due to national concerns, undue electoral advantages ensue for its major competitor.

Yet the problem of national party systems operating in regional contexts does not only apply to cases of excessive safety. The problem applies generally wherever regional vote totals are too easily predictable in terms of national trends, rather than sub-national performance, thus breaking the accountability link that (competitive) elections are in-

tended to supply. For example, the French regional elections of 2004 showed a national swing to the left, ousting all right-of-center regional executives bar one. The simplest explanation for this sweep is dissatisfaction with the conservative government in Paris. Thus, the low job security of the French regional executives is not something they can easily counteract themselves, which again severs the accountability link.

The prospect of creating one-party dominated regions – like some of the German Länder – or of letting regional elections function as mere referenda on the national government – as seems to be the case in France – should be a warning to countries planning to regionalize. While the European Union encourages the establishment of a strong regional level, reformers should make sure that accountability accompany devolution in countries such as Britain. Indeed, the skepticism of the Newcastle resident quoted at the beginning of the paper has been vindicated by the German data analyzed here.

## References

- Banzhaf, J. F. 1968. "One Man, 3.312 Votes: A Mathematical Analysis of the Electoral College." *Villanova Law Review* Vol. 14, Winter, 304-332.
- Barrilleaux, C. 1997. "A Test of the Independent Influences of Electoral Competition and Party Strength in a Model of State Policy-Making." *American Journal of Political Science* 41 (4): 1462-1466.
- Baumert, J.; C. Artelt, E. Klieme, M. Neubrand, M. Prenzel, U. Schiefele, W. Schneider, K. Tillmann, M. Weiss (eds.) 2002. "PISA 2000 - Die Länder der Bundesrepublik Deutschland im Vergleich." Opladen: Leske + Budrich.
- Besley, T. 2002. "Accountability and Political Competition: Theory and Evidence." Paper prepared for PIEP meeting, Harvard University, June 1.
- Bundesanstalt für Arbeit. Website [www.arbeitsamt.de](http://www.arbeitsamt.de). Annual Land unemployment rates for Germany.
- Cox, G. W. 1997. *Making Votes Count: Strategic Coordination in the Worlds Electoral Systems*. Cambridge: Cambridge University Press.
- Cusack, T. R. 1997. "Social Capital, Institutional Structures, and Democratic Performance: A Comparative Study of German Local Governments." Discussion Paper FS III 97-201. Wissenschaftszentrum Berlin für Sozialforschung (WZB).



- Dahl, R. 1956. *A Preface to Democratic Theory*. Chicago: Chicago University Press.
- Dahl, R. 1971. *Polyarchy: Participation and Opposition*. New Haven: Yale University Press.
- Dye, T. R. 1984. "Party and Politics in the States." *Journal of Politics* 46 (4): 1097-1116.
- Dye, T. R. 1996. *Politics, Economics, and the Public: Policy Outcomes in the American States*. Chicago: Rand McNally and Company.
- Erikson, R. S., M. B. MacKuen, and J. A. Stimson. 2002. *The macro polity*. Cambridge: Cambridge University Press.
- Ferejohn, J. 1999. "Accountability and Authority: Toward a Theory of Political Accountability" in A. Przeworski, Susan C. Stokes, and Bernard Manin: *Democracy, Accountability, and Representation*. Cambridge: Cambridge University Press.
- Forschungsgruppe Wahlen. 1978-1999 (several years). Land election studies. Mannheim: Berichte der Forschungsgruppe Wahlen, nos. 1245-1251, 1370-1372, 1465-1468, 1766, 1932-1934, 1963, 2115-2119, 2301, 2302, 2311-2319, 2398, 2506, 2509, 2510, 2581-2583, 2649, 2913-2915, 3030, 3031, 3120, 3167, and 3169.
- Gunlicks, A. 2003. *The Länder and German Federalism*. Manchester: Manchester University Press.
- Holbrook, T. M. and E. Van Dunk. 1993. "Electoral Competition in the American States." *American Political Science Review* 87 (4): 955-962.
- Iversen, T. 1994. "The Logics of Electoral Politics: Spatial, Directional, and Mobilizational Effects." *Comparative Political Studies*, 27: 155-189.
- Jeffery, C. and D. Hough. 2002. "The Electoral Cycle and Multi-Level Voting in Germany" *German Politics* 10:2.
- Key, V. O. 1949. *Southern Politics in State and Nation*. New York: Knopf.
- Lijphart, A. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven: Yale University Press.
- Lipset, S. M. 2000. "The Indispensability of Political Parties." *Journal of Democracy* 11:1.
- Lohmann, S., D. W. Brady, and D. Rivers 1997. "Party Identification, Retrospective Voting, and Moderating Elections in a Federal System: West Germany, 1961-1989." *Comparative Political Studies*, Vol. 30: 420-449
- Lowry, R. C., J. E. Alt, and K. Ferree. 1998. "Fiscal Policy Outcomes and Electoral Accountability in the American States." *American Political Science Review* 92 (4): 759-774.
- Przeworski, A. 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. Cambridge: Cambridge University Press.
- Putnam, R. D. 1993. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Ranney, A. 1976. "Parties in State Politics." in H. Jacob and K. N. Vines (eds.). *Politics in the American States: A Comparative Analysis*. Boston: Little, Brown.
- Statistische Landesamt Baden-Wrttemberg. Website [www.statistik-bw.de](http://www.statistik-bw.de). Annual region-level GDP data.
- Statistisches Landesamt Berlin. Annual unemployment rates, Berlin.

- Stoner-Weiss, K. 1997. *Local Heroes: The Political Economy of Russian Regional Governance*. Princeton: Princeton University Press.
- Taagepera, R. and M. Shugart. 1989. *Seats and Votes: The Effects and Determinants of Electoral Systems*. New Haven: Yale University Press.
- van Houten, P. 2000. "Regional Assertiveness in Western Europe: A Statistical Exploration." Paper prepared for meeting of the Laboratory in Comparative Ethnic Processes, Duke University.
- Waldow, J. 2002. "Die Unternehmerfreundlichkeit der Bundesländer im Vergleich. Kurzfassung." Summary of report "Standortattraktivitt," Cap Gemini Ernst Young, Dsseldorf.
- Wooldridge, J. M. 2000. *Introductory Econometrics: A Modern Approach*. Cincinnati: South-Western College.
- Wright, V. 1998. "Intergovernmental relations and regional government in Europe: A skeptical view" in P. Le Gals and C. Lequesne (eds.) *Regions in Europe*. London: Routledge.