A transferable incumbency effect at local level elections:
Why it is important for parties to hold the mayor

Björn Egner / Michael Stoiber

Abstract
In this paper we contribute to the exploration of the role of mayors’ party affiliation on party competition and electoral outcome in quasi-presidential systems at the local level. We want to test whether findings from the divided government literature and contamination or incumbency effects observed at the national level can be transferred at the local level. In particular, we will analyse the effect for a party which holds the incumbent mayor on the outcome of the next council election. Our main hypothesis is that the party of the incumbent mayor systematically gains votes at the next council elections. For our case of the German state Hesse we find a transferable incumbency effect since the introduction of the direct election of the mayor in 1991 of about 3 percentage points. A more sophisticated model with several interaction-effects specifies the incumbency effect. The longer the time period between the two elections and the more often a mayor was re-elected the more the incumbency effect declines. In contrast, if we find a mood of change and a party has newly occupied the mayor’s seat the victorious party will gain additional votes beyond the incumbency effect at the forthcoming council election. On the other hand, parties who have lost the mayor’s seat will not only lose the incumbency bonus, but will additionally get punished by the electorate. But this effect also dwindles over time.

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1. Introduction

The influence and importance of institutional settings as a constraint to voting behaviour is a widely stated and analysed topic in comparative politics. But at the local level we have relatively little knowledge about the effects of specific institutional and political constellations on voting behaviour and outcomes. In this paper we intend to contribute to the exploration of the role of mayors’ party affiliation on party competition and electoral outcome in quasi-presidential systems at the local level. We want to test whether findings from the divided government literature and contamination or incumbency effects observed at the national level can be transferred at the local level. In particular, we will analyse the effect for a party which holds the incumbent mayor on the outcome of the next council election. Our main hypothesis is that the party of the incumbent mayor systematically gains additional votes at the next council elections and that there are various interaction effects with this incumbency bonus.

We start with an overview on the literature about institutional effects already identified within voting behaviour research (namely incumbency effects, coattail effects and contamination effects) and combine them with findings on voter’s regime preferences for setting up an analytic framework (Ch. 2). Accordingly, the result of the theoretical discussion is used to derive hypotheses for testing election result data for incumbency effects in quasi-presidential local government systems (Ch. 3). Thereafter, we briefly describe the institutional settings in our case study – the German state of Hesse – to frame the empirical analysis. Hesse is an interesting case, because the direct elections of mayors were introduced in the scrutinized time period between 1989 and 2001, which makes is possible to directly observe the effects of institutional change (Ch. 4). In the main section of the paper, we define the incumbency effect variable and some interactive effects and test the hypotheses by conducting two different OLS regression models. Additionally, we will present an example for the political impact of our estimation model by predicting one local election outcome(Ch. 5). We will reconsider concepts and the results of the empirical analysis in the conclusion and also show some future applications of the concept of a transferable mayoral incumbency bonus (Ch. 6).

2. Incumbency, contamination effects and divided government

In order to analyse the effect of mayor elections on the outcome of council elections, we draw from several sources which provide conceptual input for the derivations of hypotheses. Because our focus is on how the party of the incumbent mayor is affected, we have to start with the electoral literature on incumbency effects. We have to relate this phenomenon to
findings about the so called contamination effects, because the impact of mayor incumbency is on council elections. The specific institutional arrangement on the local level mirrors a quasi-presidential setting and thus we also should consider findings from the divided government literature.

We find the incumbency effect in elections at the national or state level, where the incumbent has an advantage over his or her contender. For congressional elections this effect has been analysed in detail. Erikson (1971) was the first who systematically identified the incumbency advantage in House elections. He showed that the effect increased from about 2 percentage points in the 1950s to 5 percentage points in 1966. Gelman and King (1990) introduced an unbiased estimation and showed for the first time, that there was a small incumbency effect of about 1 to 2 percentage points before 1950. Since 1966, the effect has oscillated around 10 percentage points.\(^1\) Latest research confirms that incumbency is still at work at all level of U.S. politics. Not only Representatives and Senators, but also Governors and State legislators benefit from being in office. On average, the effect is still as strong as in the 1970ies, namely about 8 percentage points (Ansolabehere and Snyder 2002).\(^2\) Even at the local level incumbent city councillors have an enormous advantage. Krebs (1998) finds a positive incumbency effect of additional 20 percentage points in Chicago City Council elections. But also outside the U.S. this effect has been identified. In Canada, the effect is smaller at the federal level than in provincial elections. The effect varies over time and achieves about 3 to 4 percentage points on average, also depending on the party (Krashinsky and Milne 1985). In Great Britain, where we have stronger parties, this effect seems to be less distinctive and with 0.5 to 3 percentage points very small (Gaines 1998; Katz and King 1999). For the German first vote at elections of the Bundestag the personal incumbency advantage is rather limited due to the dominant party competition (Bawn 1999; Hainmüller and Kern 2005).

Which are the reasons that incumbents have an advantage over their challengers? The higher visibility of the incumbent is his or her main advantage, because a voter is more likely to support a candidate on which he has some information. Another reason are his or her higher resources resulting from being in office. The so called officeholder benefits comprise franking privileges, media exposure, fund-raising advantages and pork-barrel spending. Voters expect higher benefits from incumbents, especially from senior legislators in the U.S. congress (McKelvey and Reizman 1992). Also the decline of party attachment may have strengthened

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\(^1\) One main argument for the increase in the electoral advantage of incumbency was, that there was a retirement slump and a sophomore surge, i.e. more incumbents campaigned for a second time and less incumbents retired.

\(^2\) According to Levernier (1992: 72) the incumbency effect is especially strong in gubernatorial elections, where the incumbency increases the vote share by about 18 percentage points above its normal share.
the position of the incumbent, because independent voters are more open to candidate issues (Erikson 1972). Additionally, the growth of the effect since the 1960ies is caused by the ability of incumbents to deter high-quality challengers (Cox and Katz 1996; Levitt and Wolfram 1999). But as Ansolabehere and Snyder (2002) show, none of the identified reasons can explain the dramatic increase of the incumbency effect in the 1960s and ‘70s.

On the other hand, we find a negative incumbency effect in parliamentary systems. Rose and Mackie (1983) show that participating in government mostly is a liability for parties at the next election. Even at the local level governing parties loose support at the next election, as Martinussen (2004) shows for Norway, where in the 1990ies the negative incumbency effect was about three percentage points. Such losses are founded in the hypothesis that voters hold governments responsible for the development of the economy.

But holding an office not only affects the vote share of the incumbent or the incumbent party, but may also influence other elections. We try to find out whether the incumbency of the mayor has an impact on the vote share of his or her party at the following council election. If there is an observable interdependence between two different electoral tiers, this is called contamination. “At the aggregate level, contamination is observed, when a particular outcome produced in one tier […] is affected by the institutional features of the other tier” (Ferrara et al. 2005: 8-9). The effect is grounded at the individual level where the behaviour of a voter is affected by institutional features of another tier.

Contamination effects can be observed in mixed electoral systems, where single member districts (SMD) and proportional representation (PR) tiers are combined like in Germany, Italy or Japan. In these systems small parties run candidates in the SMDs even if they have no chance of winning, because they expect a positive effect on their PR vote share (Cox and Schoppa 2002; Ferrara et al. 2005). Parties want to increase the voters’ awareness of their programs and try to give their party a human face. Thus, in mixed electoral systems the number of parties in the SMD tier is larger than in pure SMD systems (Herron and Nishikawa 2001).

Another possibility of contamination is given in multi-level systems. In the German federal system state elections are often addressed as “second-order elections” (Reif and Schmitt 1980) or “test elections” (Dinkel 1977; Decker and von Blumenthal 2002). Dinkel (1977)
shows that until 1976 there was a regular electoral cycle where the governing parties at the federal level lost most votes at state elections in the middle of their term in government. Burkhart (2005) finds no such cycle, but an impact of the government’s popularity. The political mood on the federal level affects gains and losses at the state level. The tailwind of a popular federal government raises the chances of the governing parties at the state level while an unpopular government may be a burden for the state parties.

In the U.S., contamination appears as the so called “coattail” effect. This effect occurs when the popularity of a candidate for one office spills over to other candidates of the same party who are seeking other offices. Empirically, this has been found for congressional elections when a popular presidential candidate enhances the chances for congressional candidates of his party (Jacobsen 1976; Calvert and Ferejohn 1983). The decision of individuals in congressional elections in those years when both presidential and congressional elections are held is influenced by the evaluation of the presidential candidate because voters may base their decisions for lower offices (Congress) on their decisions for higher offices (President). Even a popular Senator positively affects the vote share of a candidate of the same party who runs for the State Governor (Chubb 1988). Some analyses show that both coattail and incumbency effects are at work. Krashinsky and Milne (1993) confirm the strong positive effect of incumbency but additionally find that the effect depends on the point of time of the elections. They detect that in years with presidential elections the incumbent benefits about two percentage points less because of presidential coattails. This means that an incumbent also benefits from a popular president of his party, but the incumbency effect is much stronger (Kritzer and Eubank 1979; Levernier 1992).

But the incumbency effect of a person may also be transferred to party votes. For Germany, it has been shown that parties benefit in their vote share (second vote) from having incumbents in the constituencies (first vote) (Hainmüller et al. 2006; Hainmüller and Kern 2006). In this case, incumbency exerts a contamination effect in one election with two different tiers. Hainmüller et al. (2006) identified a party vote increase of 1.5 percentage points if a party member was also incumbent in the respective constituency. They argue that the German incumbent legislator has four years to afford advantages to his constituency.

But contamination seems not only to work in a positive way. In the U.S., we have the “puzzle of midterm loss” (Erikson 1988). The losses of the president’s party at midterm elections are more than withdrawn presidential coattails. The electorate penalizes the president’s party for being in power. This development reflects the electoral cycle argument brought forward by

\^\^ A significant effect of having a popular president for candidates running for State Governor has not been found (Levernier 1992).
Dinkel (1977) in the context of German federal and state elections. Interestingly, the strength of vote losses at midterm elections does not depend on the popularity of the president (Erikson 1988: 1015).7

The reasons for this regular punishment have to be discussed in the context of the divided government logic because not only the popularity of a government or a person may influence voters’ considerations how to vote at another election. In the neo-institutional literature we find the concept of balancing or moderating elections where voters try to reach deviant or concurrent majorities in the different tiers according to their preferences (Fiorina 1992, Gschwend and Leuffen 2005, Kedar 2006).

In the U.S. there are indications that moderate voters (voters without strong party identification) prefer divided over unified government in order to emphasize the checks and balances logic of the system (Alesina and Rosenthal 1995, Fiorina 1992). But Gschwend and Leuffen (2005) show for the French elections of 2002 that there were more moderate voters with preferences for unified than for divided government. Voters will prefer divided government, if they emphasize representation and the control of state power as their motivation for elections – the ideal of checks and balances described in the Federalist Papers. They will prefer unified government if they emphasize efficiency and accountability of the political process. Voters want to know who is responsible for policy outcomes and they want to give the winning political actors the opportunity to realise their policy ideas.

3. Incumbency as a contamination effect at the local level

Having to transfer these findings to the local level we conclude that the institutional arrangement in municipalities where a directly elected major stands in front of the council reflects a quasi-presidential setting. Both, mayor and council, are elected independently from each other and – even more important – the mayor cannot dissolve the council and the council can not overturn the mayor. We hypothesize that contamination and incumbency effects can be transferred to local level elections in these settings if party politics influences at least the electoral competition. The voter has to be aware of the party affiliation of the mayor, otherwise he or she would make the voting decision at council elections independently from the outcome of the election of the mayor.

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7 This ‘referendum on presidential performance’ argument seems to be at work in German state elections since 1990 where the losses of the parties of the federal government depend on the popularity of the latter (Burkhart 2005).
Which are the incentives for voters to consider the outcome of the last election of the mayor when casting their vote at the next council election? If we suppose to find a contamination effect we have to decide which election influences the other, i.e. which election is ranked higher by the voter. We expect the direction of contamination from the mayor elections to the council elections. Our main argument is the visibility and outstanding position of the executive leader in systems with a directly elected mayor. Given this direction, voters without a strong party alignment are more open to include their “regime preference” (Gschwend and Leuffen 2005) in their decision of whom to vote for. While anchored voters will cast their vote for their preferred party at council elections independently from the party affiliation of the mayor, unanchored voters are more sensitive to the question of unified or divided government. If the council is elected in a PR-system, the representation argument in favour of divided government is obsolete and only the checks and balances argument is still on the table. But we expect that voters’ preferences at the local level are influenced more by aspects of efficiency and accountability. Thus voters favour more likely unified over divided government. This mode of government should lead to an efficient and transparent situation, where the mayor takes the lead in local decision-making, which seems to be more a prerequisite for local problem-solving.

Unlike the U.S. congressional and French parliamentary elections the council elections are held in the same constituency as the election of the executive leader. There is no hierarchical subordination of the council elections. Therefore, we call our expected effect a transferable incumbency effect and not a direct coattail effect. If we assume that the transferable incumbency effect is true for parties running in council elections and if we assume that a majority of voters at the local level prefers unified government we can formulate our following main hypothesis:

\[ H_1: \text{If a party holds the incumbent mayor it will receive a higher vote share at the next council election than its normal vote.}\]

Obviously, the degree of this effect depends on different factors. One important factor identified in the literature is a time-effect already discussed in the case of U.S. midterm-losses.

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8 Especially the local media concentrates on the person of the mayor and pushes him or her in the front line of public discussions about local politics. In general, German mayors hold the highest formal rank within the elite in a municipality (Wehling 1985: 165f), they control the biggest power resources (Siewert 1979: 166) and are the most trusted actors (Vetter 1997: 32).

9 In most West European local government systems the council elections are held in PR-tiers on the basis of party lists. This situation resembles rather the combination of a personal and a list vote in mixed electoral systems.
and the impact of federal elections on state elections in Germany. The positive dynamic of the victory of the mayor withers the longer the mayor is in office, the mayor’s coattails diminish.

\[H_2: \text{The longer the period of time between the mayoral and council election the weaker the positive incumbency effect for the party which holds the mayor.}\]

But we also expect a ‘negative incumbency effect’ (Rose and Mackie 1983), which can be interpreted as a depletion of parties or persons in government. If a mayor was re-elected the positive dynamic of his or her victory is lower than if she or he is elected for the first time. We assume that especially unanchored voters are more aware of a new person in office and are more likely to support his or her party at the council election, because they have higher expectations towards new office-holders than towards established ones.

\[H_3: \text{The more often a mayor was re-elected the weaker the positive incumbency effect for the party which holds the mayor.}\]

However, the assumed majority of preferences for unified government should strengthen the incumbency effect in those cases, where a party has occupied the mayor from another party. Voters called for a change in policy-making by replacing the responsible executive leader and they will confirm this trend in the next council election.

\[H_4: \text{If a party has won the mayor from another party the victorious party will receive an additional surplus of votes in excess of its incumbency bonus.}\]

Accordingly, a party which lost the mayor should be punished by the electorate at the next council election:

\[H_5: \text{If a party has lost the mayor to another party, the inferior party should get a lower vote share than its normal vote share.}\]

Analogous to hypothesis 2, a time factor should also be detected in such a situation. The negative dynamic of the defeat at the last election of the mayor diminishes in the public perception the longer the election has taken place:
4. The Case of Hesse

In all German states (‘Länder’), we find quasi-presidential systems at the local level, characterized by a dual construction consisting of a directly elected mayor and a proportionally elected council. As the definition of checks and balances at the local level is set forth by state legislatures in Germany, there is still remarkable variance between the institutional settings in German municipalities (Buß 2002; Holtkamp 2005) even though the horizontal power balance in the different states seems quite similar compared to variance within Europe (Heinelt and Hlepas 2006: 37). As a result of the discussion about rising requests for participation, a convergence of municipal codes took place during a wave of reforms in the early 1990ies (Haus 2005: 63; Holtkamp 2005: 13). One key element of the reforms was the introduction of directly elected mayors in all states.

A special case is the state of Hesse where the Prussian ‘pseudo magistrate model’ was reinstalled in 1950 (Dreßler 2002). According to the model, there are two powers in each municipality, namely (i) the council (‘Gemeindevertretung’ or ‘Stadtverordnetenversammlung’) – as the representative body of the citizens which is responsible for important decisions including the city budget and for creating (ii) the executive board (‘Gemeindevorstand’ or ‘Magistrat’) which is collectively leading the municipal administration. Before the municipal code reform in 1993, the mayor was picked by the council by majority vote like the other full-time members of the board, giving him the position of primus inter pares. After the municipal code for Hesse was reformed in 1993 and 1999, mayors in Hessian municipalities are directly elected by the citizenry. Although the mayor (i) is the most visible person in local politics, (ii) is considered the head of the municipality due to the direct personal legitimation and (iii) is the only politician in the municipality who is doing a full-time job by definition, he is still neither the head of the legislative, nor the head of the executive branch, but simply the only directly-elected member of the executive board. Interestingly, unlike in other German

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10 The three city-states Berlin, Bremen and Hamburg are excluded from discussion due to their special design as ‘city’ and ‘state’ at the same time.
11 A key element of the ‘magistrate model’ is that the spheres of legislation and administration are strictly separated. Thus, no member of the council may hold the mayor’s office or another office within the executive board at the same time (§65 HGO). This rule also applies to honorary members of the executive board.
12 Hesse is an exception in Germany. In most states, the mayor is indeed comprising the functions of the head of the administration and the council president. For a detailed comparison see Egner (2007: 76ff).
states elections for council and mayor are not automatically organized the same day (Egner 2007: 85). Council elections in all Hessian municipalities are taking place at the same date every five years (§36 HGO), whereas the election period for mayors is six years (§39 HGO). Additionally, the exact date of the mayoral election can be set by the council within a certain time limit (§42 HGO; §42 KWG). When the direct election of mayors became effective as Hesse state law in 1993, a long transitional period was allowed for the councils to decide upon the date for the first direct election. Thus, the first direct mayor election in Hesse took place in May 1993 where six front-runner towns held their first direct mayoral election, while the citizens of the last municipality in Hesse which introduced direct mayoral elections had to wait until November 1998 to cast their votes in their first mayoral election.

Getting back to the concepts of unified vs. divided government voting and the incumbency effect, an interesting question arises which relates to the already mentioned institutional reforms. Before 1993, party membership congruence between the mayor and the council majority was quite common since the mayor was selected by the council. Thus, constellations of divided government could occur only rarely. After the reform, and therefore with respect to both direct elections of mayor and council, a party congruence between mayor and council majority can not automatically be assumed, especially because the chances for independent candidates have heavily increased, leaving any council party group without an incumbent mayor if winning the mayoral election. In Addition, divided government constellations are possible where either the party with an incumbent mayor represents the council opposition or an ‘enemy’ council majority is formed on purpose to ‘block’ an incumbent mayor (for examples in Lower Saxony see Gissendanner 2005: 93ff). If we assume that institutions matter changes in the institutional design (from council-elected mayor to directly elected mayor) must have an influence on a possible incumbency effect. Therefore, the hypothesis reads as follows:

\[ H_1: \text{In municipalities with a mayor selected by the council the party which holds the mayor has no gain from this incumbency at council elections. In contrast, directly elected mayors increase their party’s vote share at council elections.} \]

13 In fact, after the introduction of the direct elections for mayors in Hesse, the share of mayors not belonging to one of the nationally relevant parties or the Free Voters’ Associations has increased from 19% to 31%.
5. **Empirical Findings**

*Data and regression results*

In order to test the hypotheses a database was constructed. To identify effects of mayor incumbency on the respective party vote share in council elections it is appropriate to select parties as cases provided that they were running for two consecutive local elections in the same municipality. Covering all 426 municipalities in Hesse and using the results of four local council elections (as of 1993, 1997, 2001, 2006), the database consists of 4,865 cases.

Firstly, the institutional hypothesis \( H_I \) will be tested. For that purpose, we try to estimate the share of votes a party will be collecting in the forthcoming council election \( (v_1) \) with an OLS regression by using two possible determinants, namely the party’s vote share in the previous council election \( (v_0) \) as a proxy for the normal vote\(^{14} \) and a dummy for incumbency \( (i) \). \( i = 1 \) if a party is holding the mayor of the respective municipality, otherwise \( i = 0 \).

Table 1: Testing Incumbency Effect with Council-Elected and Directly Elected Mayors

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>std. error</th>
<th>( \beta ) (std.)</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Council-Elected Mayor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(constant)</td>
<td>-.925</td>
<td>.585</td>
<td>-1.580</td>
<td>.116</td>
<td></td>
</tr>
<tr>
<td>vote share at previous election ( (v_0) )</td>
<td>1.024</td>
<td>.028</td>
<td>.983</td>
<td>36.113</td>
<td>.000</td>
</tr>
<tr>
<td>incumbent mayor ( (i) )</td>
<td>-.470</td>
<td>1.063</td>
<td>-.012</td>
<td>-.442</td>
<td>.659</td>
</tr>
<tr>
<td><strong>Directly Elected Mayor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(constant)</td>
<td>.909</td>
<td>.130</td>
<td>6.996</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>vote share at previous election ( (v_0) )</td>
<td>.933</td>
<td>.005</td>
<td>.913</td>
<td>176.364</td>
<td>.000</td>
</tr>
<tr>
<td>incumbent mayor ( (i) )</td>
<td>3.133</td>
<td>.219</td>
<td>.074</td>
<td>14.282</td>
<td>.000</td>
</tr>
</tbody>
</table>

With \( N=191 \), adj. \( R^2=.947 \) for council-elected mayors and \( N=4,674 \), adj. \( R^2=.921 \) for directly elected mayors.

As Table 1 depicts, there is no significant difference between parties with and without an incumbent council-elected mayor. But for the cases with a directly elected mayor involved there is a highly significant and positive effect of mayor incumbency on the council election result of the corresponding party, adding a mean of 3.1 percentage points to the council election result of the mayor’s party at the forthcoming council election. Thus, the institutional hypothesis is affirmed: a change of institutions matters. For parties which control the council majority a council-elected mayor does not contribute to the following council elections. But if there exists a possibility for ‘odd’ majorities or divided government constellations voters give parties holding the mayor an extra bonus in the council election that follows the direct election of the mayor. Contrary to the bulk of the U.S. incumbency literature, this result

\(^{14}\) Most models which try to identify incumbency or coattail effects include the normal vote as the most important control variable (Gelman and King 1990).
indicates that the reasons for the incumbency effect are not attached to the office-holding advantages of the incumbent. In the quasi-parliamentary setting before the introduction of the direct election of the mayor, the party of the incumbent mayor – in most of the cases connected with a majority support in the council – could not benefit from pork barrel spending or other strategic policy-making. After the electoral reform, the voters seem to be more aware of the mayor and the political constellation because they have been endowed with the possibility to decide about unified or divided government.

With regard to the concept of the incumbency effect, the hypotheses related to this effect can be tested also by our empirical data. For this purpose the impact of five more determinants have been analysed for in order to develop a more sophisticated model of incumbency effects. We run an OLS regression analysis for which we have to take into account that within one municipality the vote shares of the parties depend on each other: One party gains what other parties loose, and vice versa. But also the vote share of party X in municipality Y may not be independent from the vote share of the performance of party X in municipality Z because there is an overall state-wide trend of winning or losing for party X. Therefore, we apply a panel-corrected estimation (Beck and Katz 1995) to obtain effects with robust standard errors. Once again, the regression is based on the normal vote \( v_0 \) and the dummy for the incumbency effect \( i \). As before, we also expect for the sophisticated model the \( \beta_2 \) of the incumbency effect to be positive (hypothesis 1). The following additional independent variables for the estimation of a party’s vote share \( v_j \) at \( t_j \) are included in the analysis:

- ‘Incumbent mayor time margin’ \((\Delta t_m t_m)\) is an interaction-effect for mayor incumbency and the number of years derived from the date of the successful mayoral election \((t_m)\) and the date of the forthcoming council elections \((t_j)\), ranging from 0.13 to 6.44 with a mean of 2.9 years. According to hypothesis 2, we expect the \( \beta_3 \) of this effect to be negative.

- ‘Incumbent mayor depletion’ \((d)\) is the interaction-effect for mayor incumbency and the number of re-elections for that incumbent; \( d = 0 \) for a mayor who is newly elected. There are 649 cases with an incumbent mayor directly elected the first time, 239 cases with mayors re-elected once \((d = 1)\) and 18 cases with a mayor re-elected twice \((d = 2)\). The depletion \( d \) of the incumbent mayor is expected to be negative.

- ‘Gain of mayor’ \((g)\) is a dummy for an additional interaction-effect for incumbency. \( g = 1 \) if the party of the incumbent mayor has gained the mayor’s seat from another party between the council elections at \( t_0 \) and \( t_j \), otherwise \( g = 0 \). The \( \beta_5 \) of this ‘changing mood’
hypothesis 4 should be positive. There were 156 gains for the mayor’s seat since the introduction of direct mayoral elections in 1993.

- ‘Loss of mayor’ \((l)\) is a dummy with \(l = 1\) if a party has lost the mayor’s seat between the council elections at \(t_0\) and \(t_1\). In total, there were 169 losses.\(^{15}\) According to hypothesis 5, we expect the \(\beta_6\) of this punishing effect to be negative.

- ‘Loss of mayor time margin’ \((\Delta t_{tm})\) is an interaction-effect for parties which lost the mayor seat describing the time margin derived from the date of the mayoral seat loss \((t_m)\) and the date of the forthcoming council elections \((t_1)\), ranging from 0.11 to 6.17 with a mean of 2.6 years. In accordance with the ‘Incumbent mayor time margin’, this effect should reduce the main effect (hypothesis 6). Because for \(l = 1\) the expected \(\beta_6\) is negative the \(\beta_7\) should be positive.

Therefore, the formula for the estimation of a party’s vote share \(v_i\) in the upcoming council election is:

\[
v_i = \beta_0 + \beta_1 v_0 + [\beta_2 + \beta_3 (\Delta t_{tm}) + \beta_4 d + \beta_5 g] \cdot i + [\beta_6 + \beta_7 (\Delta t_{tm})] \cdot l
\]

We find statistically significant effects for all of the mentioned variables on the party’s vote share at \(t_1\) (see Table 2).

| Table 2: Testing Various Incumbency Effects with Directly Elected Mayors |
|---------------------------------|-----|----------|-----|-----|
| (constant)                      | B     | robust std. error | \(\beta\) (std.) | T   | p   |
| vote share at previous election \((v_0)\) | .625 | .109 | .933 | 5.72 | .000 |
| incumbent mayor \((i)\)        | 4.313 | .496 | .101 | 8.70 | .000 |
| incumbent mayor time margin \((\Delta t_{tm})\) | -.740 | .119 | -.060 | -6.20 | .000 |
| incumbent mayor depletion \((d)\) | -.716 | .360 | -.011 | -1.99 | .047 |
| gain of mayor \((g)\)           | 3.122 | .575 | .034 | 5.43 | .000 |
| loss of mayor \((l)\)           | -4.906 | 1.114 | -.055 | -4.40 | .000 |
| loss of mayor time margin \((\Delta t_{tm})\) | .976 | .334 | .034 | 2.91 | .004 |

With \(N=4,628\)^{16}, number of clusters = 1,252, adj. \(R^2=.924\).

As the standardized \(\beta\)s show, the main effect for the high \(R^2\) of 0.924 is the normal vote \(v_0\). This indicates that the electorate in German local elections is very stable and the volatility is

\(^{15}\) The total numbers for ‘loss of mayors’ and ‘gain of mayors’ do not match exactly because some ‘multiple party memberships’ had to be assigned to some mayors in the database since the candidate was officially nominated by more than one party. Thus, in a single mayoral election two parties may lose the same mayor and only one party gains the seat or vice versa.

\(^{16}\) In 48 cases we miss data about a potential depletion effect because for some municipalities we did not get the name of the incumbent mayor before 1993.
low. Thus, the $R^2$ is higher than in similar regression models which estimate the incumbency effect in the U.S.. Thus, the share of votes a party in Hesse will receive at the next council election can be estimated by the following determinants: The socket for each party is 95.2% of the vote share of the respective party at the previous council elections plus 0.625 percentage points from the model constant. The mean bonus for a party holding the mayor ($i = 1$) is 4.3 percentage points. Even though all interaction-effects are significant the main positive effect of incumbency according to hypothesis 1 is still at work. But there are two factors reducing the genuine incumbency bonus. First, for each year between the successful mayoral election and the next council election the party vote share of the party holding the mayor is reduced by 0.7 percentage points ($\Delta t_{i,t_{m}}$, if $i = 1$). This means that the incumbency bonus vanishes nearly completely if the period between the mayoral election and the council election comes near to the maximum of six years. Second, each time an incumbent mayor is re-elected ($d$), the incumbency bonus is reduced by another 0.7 percentage points. Taking into account a mean time margin of 2.9 years, this means that the incumbency bonus disappears if the mayor is facing his fourth office term. Thus, both interaction-effects work in the hypothesized direction ($H_2$ and $H_3$).

Additionally, if a party has newly gained the mayor in the last direct election (i.e. the party had no incumbent mayor before, $g = 1$), there is an additional mean reward of 3.1 percentage points at the next council elections. Gaining the mayor’s seat from another party leads to a mood of change in this municipality. The voters follow this mood and in accordance with hypothesis 4 the victorious party gains in addition to the incumbency bonus. With regard to the micro-foundation of our argument this result indicates that the assumed existence of a majority of voters preferring unified over divided government seems to be plausible.

A party losing an incumbent mayor ($l = 1$) is in double trouble. Of course, the party loses an information source for local politics and power over the municipal administration but in accordance with hypothesis 5, it also has to face a significant loss in its vote share at the next council elections, namely 4.9 percentage points on average. But again, there is a time factor: With each year elapsing since the loss of the mayor’s seat covers the loss is covered by approximately one percentage point ($\Delta t_{i,t_{m}}$, if $l = 1$, $H_6$). The results of the regression analysis show that there is an incumbency effect of mayors on council election results as formulated and specified in our hypotheses. To sum up, a party’s vote share at the next council election can be calculated from:

$$
\nu_i = 0.625 + 0.952\nu_o + [4.313 - 0.74(\Delta t_{i,t_{m}}) - 0.716d + 3.122g] \cdot i + [-4.906 + 0.976(\Delta t_{i,t_{m}})] \cdot l
$$
The political impact of the model

In order to illustrate the impact of the model which takes into account the right of the council to choose the exact date of mayoral elections within a six-month timeframe, different scenarios can be set up for different time orders of council and direct mayoral elections. Let us take the case of the City of Darmstadt as an example where the last mayoral election in March 2005 was won by the social-democratic candidate who was inaugurated in June 2005. Accordingly, the next direct election of the mayor will be between December 2010 and September 2011. The last council election in March 2006 resulted in 29.0 per cent for his party while the Christian democrats received 30.1 per cent of the votes. The next council elections will take place in March 2011. There are four different scenarios which we can sketch on the basis of the formula of our model for the prediction of a party’s vote share in the upcoming council election:

- **Scenario 1**: The council decides to hold the mayor elections after the council election. In this case, the social democratic party will not benefit from the incumbent mayor ($i = 1$) since the time between the mayoral election and the council election ($\Delta t_{tm}$) is approximately six years why the incumbency bonus is gone; we predict a social democratic vote share of 28.1 per cent. The Christian democrats will attain 29.3 per cent with no incumbency bonus or malus at all ($i = 0; l = 0$).

- **Scenario 2**: The council decides to hold the mayor election shortly before the council election, and the social democratic incumbent mayor succeeds to be re-election. In this case, the social democrats can benefit from a newly elected incumbent mayor with a very tiny time margin in-between ($\Delta t_{tm} \approx 0$) but some depletion damage on the other hand ($d = 1$); we predict 31.8 per cent of the votes for social democrats. Of course, Christian democrats will receive 29.3 per cent in this scenario again.

- **Scenario 3**: The council decides to hold the mayor election shortly before the council election, but another social democratic candidate wins the mayor election. In this case, social democrats will attain 32.5 per cent of the vote ($\Delta t_{tm} \approx 0; d = 0$); Christian democrats are once again at 29.3 per cent.

- **Scenario 4**: The council decides to hold the mayor election shortly before the council election, and a Christian democratic candidate is successful. In this case, the social

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17 For reasons of simplification, we assume that no candidate of another party (Greens or Liberals) will have a realistic chance to win the mayor’s seat.

18 The model has a standard error of the estimate of $s=4.612$, which means that the estimated vote share for a party in the upcoming council election is in our model within the given margin of the predicted value at a probability of 75%. Therefore, the aim of our prediction is not to foresee the exact outcome of the next council elections in Darmstadt but to show the political explosiveness of the incumbency effect for the decision of the council when to hold the next election of the mayor.
democratic party share will be cut down to 23.4 per cent because the party has no incumbent mayor \((i = 0)\) and is at the same time punished for the loss \((l = 1)\) without any lessening time effect \((\Delta t_{1m} \approx 0)\). In contrast, the Christian democrats can fully benefit from the mayoral election. They have the incumbency bonus \((i = 1)\) and additionally benefit from occupying the mayor’s seat from the social democrats \((g = 1)\); therefore, we predict that the Christian democrats will earn 36.7 per cent of the vote.

Table 3 shows that the Christian democrats would benefit most from holding the mayoral election before the subsequent council election if they succeed in occupying the mayor’s seat (Scenario 4). They could initiate a mood of change and establish themselves as the leading political force. But if they lose the mayor’s race they would also lose the position as the strongest party in the council (Scenario 2 and 3). The Social democrats may become the strongest party in the council after defending the mayor’s seat, but they run the risk to get punished very hard if they lose. In the end, the decision of the parties depend on their assessment of winning the next election of the mayor and their willingness to take a risk.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Social democrats</th>
<th>Christian democrats</th>
<th>Christian democratic gain (Δ)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(v_1)</td>
<td>(\Delta v_0v_1)</td>
<td>(v_1)</td>
</tr>
<tr>
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</tr>
<tr>
<td>4</td>
<td>23.4</td>
<td>-5.6</td>
<td>36.7</td>
</tr>
</tbody>
</table>

**Conclusion**

Our empirical findings depict two major results. Firstly, the change of institutional settings matters. The introduction of the direct election of the mayor in Hesse influenced the voters’electoral behaviour. With a council-elected mayor voters did not consider the mayor’s party affiliation when casting their vote at council elections. The introduction of direct elections of the mayor changed the political environment for the voters and in addition, regime preferences regarding unified or divided government become relevant when coming to a voting decision. We found that there is an interdependent relationship between both electoral arenas. There is a contamination effect between mayor and council elections in terms of a transferable incumbency effect where the party holding the mayor gains additional votes, on average about three percentage percentage points in the unspecified model.

Secondly, we can specify the identified incumbency effect. The longer the time between the two elections and the more often a mayor was re-elected the more the incumbency effect
declines. In contrast, if we find a mood of change and a party has newly occupied the mayor’s seat, the victorious party will gain additional votes beyond the incumbency effect at the forthcoming council election. This result also backs up our assumption that a majority of voters are in favour of unified government. On the other hand, parties who have lost the mayor’s seat will not only lose the incumbency bonus, but will additionally get punished by the electorate. But this effect also dwindles over time.

What remains for future research? Firstly, we have conducted a quantitative single case study. It remains to be tested whether the transferable incumbency effect at the local level can also be detected in other German states or in other countries where we find a quasi-presidential setting. Additionally, we may find institutional variation. Is the size of the incumbency effect depending on the specific power distribution between the mayor and the council? Also an empirical testing of our micro-foundation may be tempting. Can we empirically validate that regime preferences matter for voting decisions at the local level? For such a testing we would need new survey data. Until now, regime preferences are no matter of interest in surveys of local level elections yet.

References


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