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***Do Politicians Shirk when Reelection Is Certain?
Evidence from the German Parliament***

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Abstract

Does stiffer electoral competition reduce political rent-seeking behavior? For a micro-analysis of this question, I construct a new data set spanning the years 2005 to 2012 covering biographical and political information of German members of parliament (MPs) and including attendance rates in voting sessions for the first time. For the parliament elected in 2009, I show that indeed MPs who expect to face a close race in their district show significantly and relevantly lower absence rates in parliament beforehand. MPs of governing parties seem to react less to electoral competition. These results are confirmed by an analysis of the parliament elected in 2005, by several robustness checks, and also by employing an instrumental variable strategy exploiting convenient peculiarities of the German electoral system. This study is also the first to analyze how MPs elected via party lists react to different levels of electoral competition.

Key words: Accountability, Political Competition, Quality of Politicians, Rent-Seeking, Absences

JEL codes: D72, H11, J45

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1 Introduction

Instead of working for the people who elected them into office, politicians might often shirk and invest their time in leisure activities or opportunities to earn outside incomes (on top of their payments as politicians). A recent example that has been heatedly discussed in the German media is former Minister of Finance Peer Steinbrück who has been nominated the Social Democratic Party's candidate for becoming Federal Chancellor of Germany after the September 2013 election. He had missed several important parliamentary sessions in order to give paid speeches elsewhere.¹ Another example is Silvana Koch-Mehrin, a former German Vice President of the European Parliament, whose low attendance rate at sessions of the European Parliament was repeatedly discussed in the media as well.²

Since voters cannot directly influence politicians' effort levels, they have to rely on voting in elections as the main device to keep politicians accountable.³ The link between electoral competition and political performance therefore is a long-running theme in political economics⁴. One of the key questions is: Does harsher electoral pressure discipline politicians and reduce rent-seeking? This study provides micro-evidence on this topic by looking at election and new shirking data for politicians in Germany. The hypothesis is that stiffer electoral competition can discipline politicians for reelection motives: An MP (member of parliament) elected in her district with a very large vote margin can expect to be safely reelected in the next election even if her behavior in parliament is not exemplary. In contrast, an MP who was barely elected faces a higher risk that she might not be reelected next time. This might influence her rent-seeking behavior. In line with the examples given in the preceding paragraph, I operationalize rent-seeking by absence rates in parliament.

Regular debates about electoral reforms in a lot of countries demonstrate how relevant the analysis of the relation between electoral competition and shirking is. For instance, supporters of an electoral reform in Spain recently wanted to introduce an open-list system allowing voters "to pick and choose among individual candidates"⁵ and in Britain's recent debate about the possible (and in the end rejected) introduction of the so-called "alternative vote" it was claimed that this would "force 'lazy' politicians 'to work harder' by reducing the number of safe seats"⁶. But in the end this is an open empirical question: How do politicians really react do different levels of electoral competition? I answer this question and also suggest some policy implications for electoral reform. Existing evidence so far largely focuses on Italy which is arguably very different from Germany in terms of political system and culture. I also show in subsequent sections how different political mechanisms are relevant for Germany compared to Italy.

The basic setting of the paper is the following: Elected politicians derive utility from being in office, but not necessarily from taking part in parliamentary sessions. Therefore, a politician faces a trade-off between allocating time to political work (increasing her reelection probability)

¹For example, see Berliner Zeitung, 9th of October 2012, at <http://www.bz-berlin.de/aktuell/deutschland/steinbrueck-schwaenzte-bundestag-fuer-reden-article1558723.html>.

²For example, see Hamburger Abendblatt, 29th of September 2011 at, <http://www.abendblatt.de/politik/article2043500/Panorama-Koch-Mehrin-schwaenzte-alle-Sitzungen.html>.

³For standard models of accountability, see Persson and Tabellini (2000) or Besley (2006).

⁴Early contributions include Stigler (1972), Ferejohn (1986), and Wittman (1989).

⁵See "The Economist", 28th of May 2011, p. 13.

⁶See "The Economist", 30th of April 2011, p. 13.

and allocating time to other non-political activities (such as earning outside incomes on top of the fixed MP payment or just relaxing, for example). Different MPs are confronted with different levels of electoral competition. This results in different levels of marginal utility of time allocated to political work: A politician running for reelection in a district with low electoral competition (where she can be almost certain to be reelected) has a pretty low marginal utility of investing additional time in political work and vice versa. This should be reflected in the time shares different MPs spend on political work and thus in MP absence rates.⁷ Of course, there is also the theoretical possibility that an absent MP spends her time with voters in her district, potentially increasing her reelection probability this way. But empirically this seems not to be relevant, since the analysis reveals that absent MPs are indeed punished by voters in the next election. I also provide further evidence in favor of the rent-seeking interpretation of absences: MPs with high absence rates are at the same time the ones who do not answer their voters' questions asked at the leading political transparency website in Germany (www.abgeordnetenwatch.de).

The scope of this paper therefore is to estimate the effect of political competition on absence rates in parliament. The degree of political competition a politician faces is measured by her first vote margin in the past election (her own vote share minus the vote share of the runner-up in the same district) which is shown to be a proxy for the closeness of the coming election. A main contribution of this paper is the construction of a unique measure for parliamentary absence rates in Germany using the recorded votes of the German parliament. The absence rate measures the share of mandatory parliamentary session days on which an MP misses to vote. In the analysis, I control for MPs who are excused (e.g. because of health issues), MPs who have a lot of other obligations (such as government ministers), and other factors. The baseline estimation is done by OLS. However, the analysis faces potential endogeneity issues. One example is that an MP could be highly motivated leading to a large vote margin and high session attendance at the same time. This omitted variable bias would lead the OLS coefficient to underestimate the effect of competition on absences. The analysis is therefore complemented by 2SLS estimations. The instrument used for the vote margin is based on the special fact that in the German electoral system voters have two votes, one in the majoritarian tier of the system and another in the proportional tier of the system.

The key findings of the study are the following: There is a relevant and significant positive effect of vote margins on absence rates, i.e. MPs faced with low levels of electoral competition show higher absence rates in parliament. A closer look reveals that the effect is especially pronounced for opposition MPs while it is insignificant for MPs of governing parties. The explanation provided is that discipline enforcement by faction leaders is stronger within government parties since the government has to get its bills through parliament. For opposition MPs, an increase in the vote margin of 10 percentage points raises the absence rate by about 7 percentage points. This result is robust towards instrumenting the vote margin, measurement issues, and other factors. I extend the analysis of the effects of political competition on MPs elected via party lists and show that a safer list position implies a significantly higher absence rate.

The rest of the paper is organized as follows: The next section shortly reviews the related

⁷See Becker et al. (2009) for a very similar argument restricted to outside incomes of MPs.

literature. Section 3 explains the institutional background and lines out the empirical strategy. Section 4 presents the data and the construction of the absence rates measure. Sections 5 and 6 are devoted to results and robustness. Section 7 offers some extensions, Section 8 concludes.

2 Related Literature

There is a growing amount of empirical literature on the effects of political competition on economic outcomes in general. A first and very prominent example is Besley and Case (1995). Investigating data about US governors from 1950 to 1986, they find that gubernatorial term limits significantly affect economic policy choices. An example of a more recent contribution is Besley et al. (2010) analyzing how a lack of political competition (measured by dominance of one party in state-wide elections) in US states can lead to policies that are harmful for economic growth. More relevant for this paper is the strand of literature on the effects of political competition on political outcomes – on the aggregate and on the micro level.

Examples of studies that focus on aggregate political outcomes are Case (2001), Strömberg (2008), Dal Bó et al. (2009), or Svaleryd and Vlachos (2009). Case (2001) shows for the example of Albania that pivotal districts receive larger block grants. Strömberg (2008) analyzes the effect of political competition on campaign spending of US presidential candidates. Dal Bó et al. (2009) show that political dynasties are less likely to occur when political competition is more intense. Svaleryd and Vlachos (2009) illustrate that Swedish municipal councils are less likely to increase their wages and party funding when political competition between party blocs is larger. All these studies focus on political outcomes that are typically not solely decided upon by the individual politician.

In contrast, the literature on the micro level focuses on how individual politicians react to political competition by adjusting their rent-seeking behavior. A prominent recent example is Ferraz and Finan (2011) showing that Brazilian mayors who can be reelected are less corrupt. Another example is Snyder and Strömberg (2010) investigating how different levels of political competition induced by press coverage affect in versus against party line voting by members of the US Congress.⁸ Becker et al. (2009) analyze the effect of political competition on politicians' outside earnings, i.e. income earned on top of the MP salary. The latter study is close to mine in so far as it also looks at Germany and uses a similar methodology. Outside earnings are definitely a very natural and important first step, but likely not a sufficient measure to fully analyze rent-seeking by MPs. An MP may, for example, also simply enjoy the sun in her garden instead of going to parliament. This is why I suggest complementing their analysis by using another measure. I also look at a considerably longer time horizon and include an analysis of list MPs.⁹

The rent-seeking measure employed in this study is absence rates from parliamentary sessions. This measure has been used most prominently to analyze MP behavior in the Italian

⁸See Poole and Rosenthal (1996) for another example where politician's deviation from voters' interests is in terms of ideology. For a review of this literature, see Bender and Lott JR (1996).

⁹Another potential issue is that (unobservable) outside earnings opportunities may not be constant across MPs and may need some "reaction time" to unfold if they depend on an MP's reputation (and can therefore not adjust immediately to election results). Complementarity of absence rates to the measure of Becker et al. (2009) is supported by the fact that I find different results compared to theirs for MPs of governing parties.

and in the European Parliament.¹⁰ For the European Parliament, Mocan and Altindag (2013) use a pay scheme harmonization reform in 2009 to investigate the effects of MPs' salaries on attendance behavior in parliament. They find that a salary increase reduces attendance. Using the same reform, Fisman et al. (2012) find no effect of salary changes on absenteeism. Both papers focus on MP payment and do not look at political competition on the MP level. For Italy, Gagliarducci et al. (2010) show that larger absence rates of MPs are associated with larger outside earnings. Gagliarducci et al. (2011) use a regression discontinuity design to illustrate that Italian MPs elected through the majoritarian tier of the system have lower absence rates than their colleagues from the proportional tier. One explanation could be that majoritarian tier MPs are faced with stiffer competition compared to proportional tier MPs. However, the study does not investigate competition effects within an electoral system.

The two papers that are closest to my study are Galasso and Nannicini (2011) and Nannicini et al. (2013). Both again focus on the Italian case. Galasso and Nannicini (2011) present a model where party leaders allocate high quality candidates to more competitive districts and politicians elected in competitive districts are less absent in parliament. They check their hypotheses using data from 1994 to 2006 and find that the lower absence rates of MPs in competitive districts are more due to selection (high quality candidates are less absent) than to reelection motives (small vote margins encourage not to shirk too much). Galasso and Nannicini (2011) claim that high quality candidates (who are less absent anyway) are put in competitive districts by party leaders. However, in Germany who becomes district candidate of a party is not determined by party leaders, but by party conventions and thus more decentralized. I show how the German political setting is very different from the Italian one and that their result does not hold in general. In contrast to the finding of Galasso and Nannicini (2011) for Italy, reelection concerns seem to be the driving force of absences in Germany. Nannicini et al. (2013) show that in districts with higher social capital (measured via blood donations) MPs with high absence rates and criminal investigations are punished more by voters. Analyzing reelection chances of politicians facing criminal prosecution by itself already illustrates how the Italian case may be different from the German one (where it is hard to imagine such politicians to have any chance at all of being reelected).

To my best knowledge, this study is the first to create an absence rate measure for German MPs from parliamentary records. Abstracting from studies focusing on Italy, I am also the first to look at the effect of political competition on absence rates at the MP level. Italy seems to be very different in terms of political culture and system compared to Germany. My results confirm this conjecture and illustrate the need for studies looking at other countries also. This study is also the first to extend the analysis of the effects of political competition on MPs elected via party lists. Given the prevalence of proportional electoral rules in many countries, this seems to be a needed next step.

¹⁰Lott (1987) and Besley and Larcinese (2011) are examples looking at the US and the UK respectively. None of these analyzes the role of political competition.

3 Institutional Background and Empirical Strategy

3.1 Institutional Background

Elections for the German parliament (Bundestag) usually take place every four years. The electoral system is mixed: It has a majoritarian (299 parliamentary seats) and a proportional tier (at least 299 additional parliamentary seats, usually slightly above this number) which results in a total of at least 598 seats in parliament. There are 299 electoral districts (constituencies). Each voter has two votes. The first one is used to vote for one of the candidates running in the district. In each district, the candidate gaining the most of these first votes is elected to parliament (first-past-the-post). This makes in total 299 so-called “direct” or “district” MPs. This is the majoritarian tier of the system. The second vote is to be cast for one of the parties running in the election. Here, the parties get seats according to their overall vote share. Who is sent to parliament by the parties is determined by “party lists” that are agreed upon at the state level in each party before the election. These additional MPs are the so-called “list MPs”. This is the proportional tier of the system. The seats in the proportional tier are distributed in such a way that the parties’ overall parliamentary seat shares reflect the distribution of second vote shares in the election. This is why usually the second vote is considered the more important one. There is a threshold such that only parties gaining at least a share of 5 percent of the second votes or winning at least 3 districts with their candidates get into parliament.

In this study, I focus on the district MPs for the main part of the analysis and look at list MPs in an extension. Since in almost all cases a district winner runs again in the very same district in the next election, it is very reasonable to assume that a direct MP takes the closeness of the last election as a proxy for the closeness of the next one.¹¹ The higher an MP’s first vote margin, the smaller is the level of electoral pressure she is faced with. I measure the closeness of a district race by the first vote margin: The first vote margin is the first vote share of the district MP minus the first vote share of the runner-up. I computed the vote margins from data obtained from the German electoral management board: For example, in constituency number 141 the two candidates who got most votes in the 2009 election were Axel Schäfer (43.3% of the first votes) from the Social Democrats and Norbert Lammert (31% of the first votes) from the Christian Democrats. This gives Axel Schäfer a first vote margin of $43.3 - 31 = 12.3$ percentage points and made him a direct MP in the Bundestag. The vote margin is the first key variable in my analysis and the measure for electoral competition. Note that the “Social Democrats” and the “Christian Democrats” are the two large main parties in Germany. They win the vast majority of all districts and there has never been a chancellor from any other party. Most of my analysis focuses on MPs of these two parties.

Since Norbert Lammert was placed safely on the Christian Democrats’ party list, he nevertheless got into parliament through the proportional tier of the electoral system although having lost his district. This is an interesting feature of the German electoral system: Candidates can run for parliament in both tiers simultaneously. If they are elected in their constituency, they have to accept the majoritarian tier seat (“direct MP”), but if they do not

¹¹The within-candidate correlation of vote margins across elections is indeed high. For the large parties I focus on, it is about 0.65 and significant at any conventional level when looking at the elections of 2005 and 2009.

win their constituency, they might still have a chance to become an MP if they are placed high enough on the party list (“list MP”). Usually, party conventions on the state level decide upon the party list for their state and almost all candidates who are put on the list also run for election as a candidate in one of the constituencies. It is mainly an MP’s famousness and power within the party that determine her rank on the list. Yet, it is not quite clear how to determine the level of political competition that list MPs are faced with since this is mostly intra-party competition and hardly observable for voters and the researcher. This is why this study mostly looks at directly elected MPs. Nevertheless, I have a short extension on list MPs. I also exploit this peculiarity of the German electoral system – that candidates can run in both tiers simultaneously – to tackle potential endogeneity issues. It is also important to note that because of this feature of the system one has to control for party lists even in the analysis of district MPs: An MP with a first vote margin of only 1 percentage point might still not be under a lot of electoral pressure if she knows that she will be put on the first place of her party’s list (and therefore very likely be elected to parliament through the proportional tier anyway).

This leaves us with the second key variable which is absence rates. Usually, votes in the German Bundestag are taken by hand raising and not recorded at the MP level, but only at the faction level. Thus, absence rates at the MP level for these votes are unobservable to the researcher. This is why I use the so-called “namentliche Abstimmungen” (mandatory votes recorded at the individual level) that can be called for by a number of at least 5% of all MPs or by a whole faction. In this case, all individual votes are published in the official parliamentary records including those MPs who did not cast their vote with the remark “vote not casted”. From this remark one can conclude that an MP did not take part in the vote, but was instead absent. Recorded votes cover all kinds of possible policies and can presumably be regarded representative of overall votes taken in the Bundestag regarding topics.¹² No committee sessions are scheduled parallel to recorded votes. Since a recorded vote is usually only called for if a bill is considered important or controversial and therefore all MPs are required to attend these recorded votes, I expect absence rates at recorded votes to be rather small compared to overall absence rates. In that sense, my measure provides a conservative lower bound on parliamentary absences. While one may argue about whether absences in general reflect political shirking, it is safe to interpret absences as shirking in the case of recorded votes. Attendance is mandatory and the parliament administration is required by law to punish MPs for non-attendance via wage deductions. Missing a session day typically implies a wage deduction of 100 Euros.¹³ I show in an extension that also voters indeed punish MPs with high absence rates in the next election.

¹²Recent examples include Bundeswehr assignments, minimum wages, the budget, the inheritance tax, the commuter tax relief, the Lissabon Treaty, data retention, corporate taxation, health care reform and an anti-discrimination law.

¹³See §14(2) Abgeordnetengesetz.

3.2 Empirical Strategy

The hypothesis is that stiffer electoral competition leads to reduced political rent-seeking. The degree of competition an MP faces is measured by her vote margin in the past election.¹⁴ The assumption is that the past vote margin is a good proxy for the closeness of the upcoming electoral race. Table A2 in the Appendix uses controlled regressions of the vote margin on the past vote margin to clearly support this assumption. Rent-seeking is operationalized via absences at mandatory sessions. Other performance measures such as the number of speeches given by an MP or special appointments in parliament are difficult to use since they are not under direct control of the MP. For example, the party faction as a whole or the faction leaders usually decide on whom to appoint to committee chairman or who should speak in the party's name on a certain topic. These decisions may also result from bargaining that is unobservable to the researcher. A problem with using bill proposals as measure is that they may in fact often be written by administrative staff. At least for the European parliament, there is also clear evidence that higher attendance rates result in increased legislative output at the MP level and thus indeed attendance captures MP effort.¹⁵

Estimation is done by OLS in the baseline¹⁶:

$$absences_i = \alpha + \beta * margin_i + controls_i * \gamma + \epsilon_i$$

where *absences* denotes the % of mandatory session days at which an MP was absent, *margin* the vote margin in the preceding election, and *controls* a number of other variables at the MP level. These include demographic characteristics such as gender and age, children, university, and PhD dummies, but also variables related to the political biography of an MP such as party membership, number of terms served in parliament, and minister and leading position dummies. A complete description of all variables including data sources is given in Table A1 in the Appendix. If the hypothesis holds, one expects β to carry a positive sign: A large vote margin translates into a large expected vote margin in the next election, which means that electoral competition is expected to be weak resulting in high absence rates.

The reason for including dummies for ministers and leading positions (such as committee chairman) is that especially famous or influential MPs might gain large vote margins, but at the same time might obtain more special appointments and therefore have systematically less time to attend votes in parliament than other MPs. The number of terms served in parliament is included for similar reasons: An experienced MP might win her district with a relatively comfortable vote share, but might also change her behavior in parliament because of her experience.

With the outlined approach, we face two potential endogeneity problems: First, imagine

¹⁴Parker (1992) is the first one to use the vote margin of the previous election as a measure for political competition as an explanatory variable. He finds no significant effect on honoraria incomes of members of Congress.

¹⁵See Fisman et al. (2012).

¹⁶Since the dependent variable is a percentage that is bound between 0 and 100, as a robustness check I also estimated generalized linear regressions with the share of absent days (between 0 and 1) as dependent variable assumed to be binomially distributed and using a logit link function (to take the limited range of the dependent variable into account). Results are very similar.

an MP to be very motivated. This might drive up her first vote margin, but also increase her attendance rate in parliament. Since one cannot control for unobserved motivation, OLS estimates would be biased downwards (due to omitted variable bias). Second, imagine a high vote margin indeed leading to a high absence rate which in turn – in the next election – may lead to a low vote margin via punishment by voters. In that case, we may be faced with a sort of equilibrium relationship between absences and vote margins in which MPs optimize their absences such that they get barely reelected. This would again result in a downward bias of the OLS estimates (due to simultaneity bias). Therefore, I also employ an instrumental variable approach and estimate the coefficients of interest by 2SLS. The first stage regression is:

$$margin_i = \delta + \zeta * secondvoteshare_i + controls_i * \eta + \mu_i$$

where the share of second votes an MP’s party gets in her district is used to instrument for the vote margin (which is based on first votes). This instrument has been used first by Becker et al. (2009). Since the first and the second votes are cast at the same time and a lot of voters cast both votes according to party preferences, there is a high correlation between the two votes. If it also holds that voters’ decision about how to cast the second vote is solely determined by party preferences, the instrument is not correlated with ϵ_i and is valid. This is a reasonable assumption for the German electoral system. Of course, one can easily come up with stories that would invalidate the instrument based on voters also casting the second vote based on candidate preferences. However, this is typically not the case in Germany, the second vote is informally even known as the “party vote” among the population.

Note that the 2SLS approach itself may – if anything – underestimate the effect of interest: One finding of the analysis is that MPs whose parties are in government tend to be less absent. We also know that a higher second vote share for a party should increase its overall probability of becoming part of the government. These observations combined induce a negative relationship between the second vote share and absences. The first vote margin is positively related to the second vote share (which will be obvious from the first stage 2SLS regressions) and also positively related to absences (according to the hypothesis). The effect through the second vote share therefore counteracts the effect of interest. The 2SLS results therefore provide a conservative lower bound regarding the size of the effect.

Also note that there is the general possibility that party conventions at the district level punish absent MPs by not nominating them again as their candidate. This would weaken the observed relationship between absences and vote margins and lead my estimates to further underestimate the effect of interest.

4 Data

The period of analysis is September 2009 (election of the current parliament) until July 2012. In the parliament, there are 299 direct MPs, of which 289 have continuously been a member for the whole legislative period. Out of these, I focus on the MPs of the two large parties Christian Democrats and Social Democrats which leaves me with 228 observations for the baseline analysis. I exclude smaller parties since they usually only have very few MPs among the direct MPs which

makes identification of party-specific effects (which turn out to be important) impossible.¹⁷

The dependent variable is a measure of MP absence rates in parliament. I constructed the absences for each MP using the data on recorded votes publicly available at the website of the German parliament. I include virtually all recorded votes that have been conducted from September 2009 up to July 2012 which gives me a total number of 141 votes taken on 53 different days.¹⁸ The first recorded vote in the current parliament has been taken on the 3rd of December 2009, the last (up to the mid of July 2012) on the 29th of June 2012. Since there are up to 9 recorded votes per day, but sometimes only 1 or 2, I compute absence rates on a daily basis not to get my results biased or driven by single days: An MP is classified as absent on a certain day if she missed one or more of the recorded votes on that day. I divide the resulting number of missed days by the total number of days with recorded votes (53) to get the share of missed days for the whole legislative term up to July 2012.¹⁹ Of course, there are other ways to measure absences. Later checks show that my results are robust to using different absence measures. As outlined before, I expect this measure to be a lower bound on parliamentary absences. Figure 1 shows the distribution of absences across MPs.

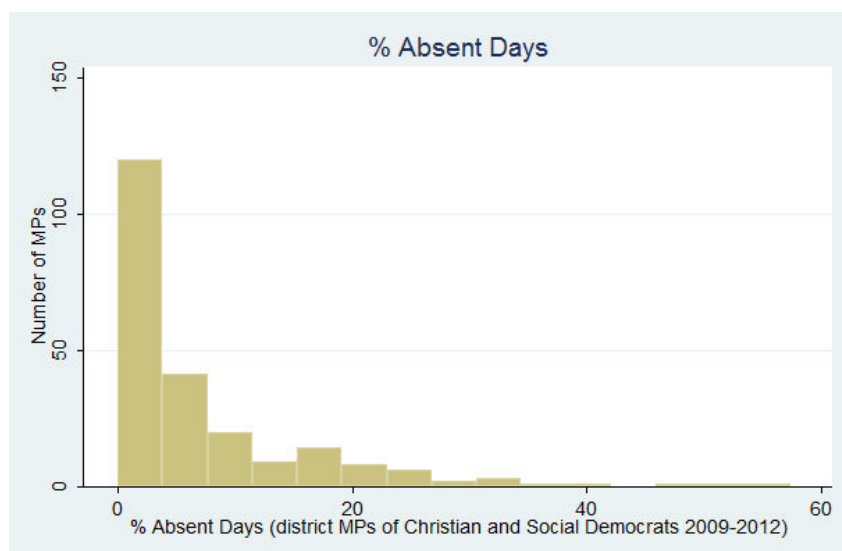


Figure 1: Distribution of % Absent Days in German Parliament

As expected, absence rates are not too high for many MPs. The majority actually has an absence rate lower than 5%. On the other hand, there are MPs who miss more than 50% of all mandatory sessions. Thus, there is quite some variation in MP absence rates. The average is at about 8%, the standard deviation is about 9%.

The main explanatory variable is an MP's vote margin as a measure of electoral competition. The average vote margin achieved is about 11 percentage points, but the standard deviation is more than 8 percentage points. Thus, there is also relevant variation in the level of political

¹⁷The main results remain unchanged when also including the largest of the smaller parties – the Christian Social Democrats – in the regressions. See Table A3 in the Appendix.

¹⁸I exclude all 23 votes taken on 10/28/2010 because of data availability issues. This day should be excluded anyway since on no other occasion such a large amount of very similar votes has been called for. According to the Bundestag administration, this is also why the data are not fully available for this day.

¹⁹There is no loss of information resulting from the aggregation over the years since checks reveal that there is no such thing as a political business cycle in absences over the legislative period.

competition across MPs. There are MPs who have won the district with more than 43 percentage points ahead of the runner-up, but also others who have barely captured victory. For example, Brigitte Zypries (a former German Minister of Justice) won her district with an absolute number of 45 votes ahead of the contestant.

The analysis also includes a range of demographic and political controls. About 21% of the MPs are female. The average age in 2012 is 53 years. Almost two thirds of the MPs have at least one child. More than 80% have attended university, more than 20% have a PhD. For the average MP the current legislative period is his or her third one served already. About one quarter of the MPs has taken a leading position in the current parliament (such as committee chairman or faction leader). For summary statistics and a full list of controls, see Table A1 in the Appendix.

5 Results

Table 1 presents the OLS baseline results. The dependent variable is the percentage of absent days. Specification (1) includes the vote margin as main explanatory variable and a Social Democrats dummy (Christian Democrats is the base category). The vote margin has a highly significant effect: A 10 percentage points higher vote margin implies a 2 percentage points higher absence rate. Being a Social Democrat increases your absence rate by about 8 percentage points compared to a Christian Democrat. Since both effects are significant, specification (2) checks an interaction term which allows the vote margin effect to be different for Social versus Christian Democrats. It turns out that while Christian Democrats' absences seem not to react to electoral competition, Social Democrats are strongly responsive to it: For a Social Democrat, a 10 percentage points larger vote margin implies an absence rate which is about 7 percentage points larger. In this specification, the main effect of vote margin and the Social Democrats dummy are no longer significant. The effect is stable in terms of size and significance when adding several demographic and political controls on the MP level in specifications (3) and (4). Social Democrats who are confident that they will be reelected attend fewer sessions. I argue that the non-effect for the Christian Democrats is related to the fact that this party is currently in government. Also in Italy MPs of governing parties are less absent.²⁰

In the most general specification all demographic characteristics are insignificant. Among the political controls, the minister dummy and the number of terms served are significant: Being a government minister increases your absence rate by about 11 percentage points, serving as an MP for one more legislative period increases it by about 1 percentage point. The former finding is easily explained by the fact that members of the executive have many obvious duties to perform outside the parliament which is why they cannot attend sessions. The latter finding fits the vote margin finding quite nicely: MPs who win their districts repeatedly are naturally very confident that they will also succeed the next time. Therefore, over time they attend fewer and fewer sessions.

As outlined before, the OLS estimates in Table 1 may be plagued by endogeneity issues. This is why Table 2 presents results from 2SLS regressions where the second vote share achieved

²⁰See, for example, Galasso and Nannicini (2011) or Gagliarducci et al. (2010).

by the MP's party in her district is used to instrument for her vote margin. The first stage regressions presented in Table A4 in the Appendix reveal that this is indeed a strong instrument. Table 2 shows specifications similar to the ones of Table 1. Results are in fact very similar to the OLS estimates. If anything, the coefficient of vote margin for Social Democrats gains a bit in size (which is in line with the expected downwards bias in OLS estimates due to simultaneity or omitted variable bias described in the empirical strategy section). The more certain a Social Democrats MP is of being reelected the fewer sessions she attends. A 10 percentage points increase in the vote margin implies an 8 percentage points larger absence rate. Or, equivalently, a one standard deviation increase in the vote margin results in an absence rate which is about 7 percentage points larger. For simplification and since the OLS estimates if anything slightly underestimate the effect of interest, I focus on OLS regressions in the next section.

6 Robustness

In this section, I explore the robustness of the results presented in the previous section. The first three specifications of Table 3 explore the measurement of the dependent variable. In the baseline from the previous section (replicated in specification (1)), I use the absence rate on a daily basis not to get my results biased. Let me illustrate what is exactly meant by that by providing an example: MP X misses 9 recorded votes (that possibly all take place within the same three hours) on day A, but attends the (single) vote on day B, the (single) vote on day C, and the (single) vote on day D. MP Y on the other hand attends the 9 votes on day A, but misses the votes on days B, C, and D. If you count absolute absences (meaning votes instead of days), MP X has an absence rate of 9 out of 12 and MP Y has an absence rate of 3 out of 12. This way of measuring absences would clearly not capture what we want to get at: MP X was away for three hours, MP Y for three days, and still MP X has an absence rate that is three times larger than the one of MP Y. With daily measurement I try to (admittedly not perfectly) take that into account: In that case, the resulting absence rates would be 1 out of 4 for MP X and 3 out of 4 for MP Y. This is probably a better measure than using the absolute absences. Nevertheless, one could argue that this is an equally bad measure that just falsifies in the other direction. To show that the result is not dependent on the daily measurement of absences, I use the absolute absences (i.e. absent votes) as the dependent variable in specification (2) in Table 3. The results are very similar compared to before.

Another potential problem regarding the absence measure is how to deal with excuses. Along with the debate records, the parliament administration publishes a list of excused MPs for each session day. One could easily argue that excused absences should not be counted as absences in the sense I do: An MP who had a heart attack, lies in hospital and therefore misses a recorded vote can hardly be considered shirking. The average absence rate is down from 7.8% to about 4.5% if you take only unexcused absences into account. But there are severe problems caused by a simple exclusion of the excused absences: MPs are in fact allowed to excuse themselves for any (!) reason. And even more striking: They do not even have to announce the reason to the parliament administration when they want their names to be put on the list of excused MPs. It is thus easily possible to have your name put on the list without reporting any reason and enjoy

some leisure time or give a paid speech somewhere else. For example, Peer Steinbrück who was mentioned as example in the introduction, excused himself from sessions when instead he talked elsewhere. And indeed, the published list of excused MPs does usually not give any reasons for the MPs' absences.²¹ Potentially for that reason, the parliament administration reduces the MP wage even in the case of excused absences.²² Overall, it can therefore be considered pretty arbitrary which names are on the list of excused MPs and I do not expect to cleanly identify the effect of the vote margin on absences when using the unexcused absences only. Specification (3) of Table 3 uses the percentage of unexcused absent days as dependent variable. Maybe surprisingly, even in this case there is still a significant vote margin effect for Social Democrats. It is of about half the size compared to before which makes perfect sense since the average absence rate is of about half the size compared to before now as well. Thus, even when using this noisy measure you can find the disciplining effect of narrow vote margins on absence rates.

Another concern with the analysis presented in the previous section is the following: If candidates in the German system can not only get into parliament by winning a district (majoritarian tier), but also by being put safely on a party list (proportional tier), an MP who won her district in a close race and does not have a safe place on her party's list might be systematically different from an MP who also won her district, but would have been elected to parliament anyway because of a safe place on the list: The degree of electoral pressure the two MPs are faced with is presumably way higher for the first one, since the latter is aware of the fact that she would have become an MP also in the case of a defeat in her district (which is not true for the former). If we assume that candidates who have been placed safely on a party's list in 2009 will also be placed safely in the next election (which seems to be very often the case in Germany), even a pretty narrow margin of victory in a district might not be a strong incentive to work a lot and to attend all the votes in parliament. This may lead to a biased estimation (most likely underestimation) of the effect I am investigating.

Therefore, I include a dummy variable called "safe" as an additional regressor (also interacted with vote margin) in specification (4) of Table 3. The dummy is assigned a value of one if – all other results of the 2009 election held constant – the MP would also be a member of parliament now in the case of a defeat in her district and zero otherwise. This is the right way to define this indicator if we assume that the results of the 2009 election are taken as proxies for the next election. In fact, neither the dummy nor the interaction with vote margin are significant and also all the other coefficients barely change compared to baseline specification (1). Thus, bias via party lists seems not to be of any concern for the analysis. I come back to list MPs in particular in the next section.

Absence rates are a very particular way of measuring whether an MP is working or not. In fact, one may argue, absent MPs may spend their time in their district and work on issues that are in the interest of their voters. I show evidence in the next section that this is very likely not the case since voters actually indeed punish MPs with high absence rates in the next

²¹On very rare occasions there is a comment like "attended parliamentary convention of the Western European Union" or something similar.

²²If you are on the list of MPs having excused themselves, the wage deduction drops from 100 Euros for a missed session day to 50 Euros. If you prove that you are in hospital, it drops further to 20 Euros. See §14(2) Abgeordnetengesetz.

election. As another check, I include a measure of “motivation” of the MP in specification (5) of Table 3 as another control. The measure chosen is the percentage of answered questions at the online transparency platform “abgeordnetenwatch.de” where citizens can ask their MPs all kinds of questions. A high answering percentage presumably indicates that an MP is highly active in trying to understand the worries of her voters and willing to work on the issues. In fact, this measure of MP motivation has a significant negative effect on absences in parliament: A 10 percentage points higher answering share is related to an absence rate that is about 5 percentage points lower. This shows that MPs with high absence rates are at the same time the ones who do not show a high motivation in terms of answering the questions of citizens.

A final concern may be that MPs’ absence rates are not driven by reelection incentives but by selection instead: In a model tailored to the Italian case, Galasso and Nannicini (2011) show that parties aim at winning contestable districts by putting the “good” candidates (who also have fewer absences) into exactly these districts. They find evidence in this flavor for the Italian parliament. In that case, MPs in contestable districts (i.e. with small vote margins) do not show few absences because of the high electoral competition, but instead are MPs who are not often absent anyway and just happen to have been put into a contestable district by the party leader. – I argue that their finding is definitely not applicable to the German case. In Germany, the recruitment of district candidates follows very much local patterns. Usually, it is local party conventions nominating the candidates. There is no way for German parties to allocate candidates all over Germany in a centralized fashion according to some “optimized master plan”. Galasso and Nannicini (2011) admit that in Italy very few MPs have local roots in their district. Quite the opposite is very often true for German MPs. Another fact is that in Germany MPs typically do not switch district, but stay within one electoral area for their whole political careers.

To further disperse doubts about a selection story potentially explaining my results, let us have a short look into the data. In their study, Galasso and Nannicini (2011) measure the quality of a politician by her pre-election income, previous political experience, and education level. I do not have data on the pre-election income, but I can investigate how MP education and previous experience in the parliament is related to the closeness of electoral races (measured by the vote margin in the previous election). Table 4 gives a descriptive overview of MP education and terms served in parliament by contestedness of the electoral district. If selection in the sense of party leaders putting good candidates in close districts was going on, we would expect the share of university graduates, the share of MPs with a PhD, and parliamentary experience to be increasing in the closeness of the race. The opposite seems in fact to be the case in German data: In the closest races, the shares of university graduates and MPs having a PhD are the lowest and the MPs have the least previous parliamentary experience.

7 Extensions

This section explores data base extensions to absence rates for list MPs and MPs of the parliament elected in 2005. When including absence rates for the previous parliament, one obvious issue to check is whether MPs who have been a member of both parliaments – the one

elected in 2005 and the one elected in 2009 – are indeed punished by voters for having been absent at many sessions. This is what Table 5 investigates. The dependent variable is the vote margin in the 2009 election. The explanatory variable of interest is the absence rate in the previous legislative term (i.e. absences in the parliament elected in 2005). When standard controls are included, absences indeed have a significant negative effect on the vote margin in the next election, i.e. voters punish absent MPs by giving them fewer votes. A 10 percentage points larger absence rate in the legislative period 2005-2009 reduces an MP's vote margin in the 2009 election by between 1 and 2 percentage points. This again supports the suspicion that MPs do not necessarily spend the time being absent from sessions with voters or working for them.

Table 6 repeats the whole baseline analysis of the effect of vote margins on absence rates for the parliament elected in 2005.²³ For the parliament elected in 2009, the result was a significant and relevant effect for Social Democrats MPs. There is no reason to expect Social Democrats per se to be in general systematically very different in terms of sessions attendance from Christian Democrats. Therefore, I argued before that the non-finding for Christian Democrats can instead be explained by the fact that they are part of the government coalition in the parliament elected in 2009. If this is really the case, this should be reflected as well in the findings for the parliament elected in 2005: From 2005 to 2009 there was a so called grand coalition – consisting of both large parties Christian AND Social Democrats – governing. If being in government indeed turns the competition-absence channel off, we should therefore not find any effect of competition on absences for the parliament elected in 2005. This is indeed what Table 6 shows: Repeating the exact same type of analysis conducted before for the parliament elected in 2009 does not reveal any significant effect of vote margins on absence rates. I argued before that being part of the government coalition may have a disciplining effect on MPs, e.g. since there is an obligation to get the government's bills through parliament. MPs of governing parties also seem to have lower absence rates in general: The average absence rate of the Social Democrats increases from 11% to 13% when comparing the two legislative periods (of which only in the first the Social Democrats were part of the government). Another example of this is the Liberal Democrats who are in government in the current legislative period, but have not been in the previous one. For them, the average absence rate has gone down from 15% to 7%.²⁴

Table 7 finally presents a very first extension of the analysis to list MPs of the parliament elected in 2009 Besley et al. (2012) seems to contain the first model of party list construction. But they focus on gender composition of party lists and the Swedish case. In Sweden, party leaders are the ones composing the lists. In contrast, in Germany typically there is a separate vote at party conventions for each position on the list (with often several candidates running for the same position). To my knowledge, this extension is the first work to analyze the effect of list position on MP behavior. As explained before, list MPs do not get into parliament via being directly elected in a district, but by being put high enough on a party list (proportional tier

²³I again include virtually all recorded votes that have been conducted: These are 151 votes taken on 70 different days. The first one has been taken on November, 8th in 2005, the last one on September, 8th in 2009. I have to exclude 05/28/2009 and 05/29/2009 because of data availability issues again.

²⁴The MPs of the Liberal Democrats are not included in the previous analysis since it only includes district MPs and the Liberals usually only have list MPs.

of the system). This implies that these MPs are confronted with a different type of electoral competition – which is within party competition for a promising position on the party list. While the first list position very often guarantees an MP being elected to parliament, positions further down on the list make it less and less likely that the party can grab enough votes for you to have a real chance of getting into parliament.

This extension uses an MP’s list position in the preceding election to measure the level of political competition she is faced with, i.e. a list position with a low number (i.e. on top of the list) implies safe reelection while a position with a high number (i.e. further down on the list) implies that an MP has to worry about reelection. Table 7 checks the effect of the list positions on absence rates for list MPs in the parliament elected in 2009. Specification (1) includes party controls. Note that this time several more parties are included in the analysis since the proportional tier of the system also allows smaller parties to enter parliament. Specifications (2) and (3) add demographic and political controls on the MP level. Specification (4) adds the percentage of platform answers discussed before, specification (5) uses unexcused absences only as dependent variable. Overall, there seems to be a significant negative effect of the list position on an MP’s absences: Being placed one position further down on the party list (implying a tougher struggle for reelection) reduces an MP’s absence rate by between 0.2 and 0.3 percentage points. This preliminary extension thus suggests that also for list MPs some kind of political competition seems to matter for attendance behavior in parliament.

8 Conclusion

In this paper, I investigated the relationship between political competition and rent-seeking: Does stiffer electoral competition reduce absences in parliament? – To answer this question, I constructed a novel data set on absence rates of German MPs also including election results and a wide range of MP specific controls. For opposition MPs, there indeed is a strong and significant effect: A 10 percentage points smaller vote margin implies a 7 percentage points smaller absence rate, i.e. MPs under high electoral pressure shirk less. MPs of governing parties are considerably less responsive to their vote margins and are also less absent in general. These results are robust to employing an IV strategy based on using the party vote share as an instrument for an MP’s vote margin, to the type of measurement of absences, to controlling for safe positions on party lists, to controlling for an MP’s motivation, to a selection story of putting high quality candidates in contestable districts, and to an extension to the parliament elected in 2005. One can also show that MPs with high absence rates are indeed punished by voters in subsequent elections. An extension shows that also MPs elected via party lists respond to stiffer electoral competition by attending more sessions. To my best knowledge, this is the first analysis to use recorded votes in the German parliament to create a measure for parliamentary absenteeism and the first in general to look at list MPs. It is also the first study to look at the relation between political competition and MP attendance behavior in a non-Italian context.

From a normative perspective, it seems worthwhile to enhance electoral competition wherever possible. One way of doing so, suggested by Galasso and Nannicini (2011), may be “optimal gerrymandering”, meaning to design constituency borders in a way to minimize

the number of districts one of the parties will win for sure in an election.²⁵ This study supports the view that political rent-seeking might indeed be reduced through adequate electoral reform. Examples for debates on electoral reform from Spain and Britain have been mentioned in the introduction. Also in Germany, redesigning the borders of constituencies is repeatedly being debated.²⁶ A recent census (the first one since 1987) may likely necessitate redesigning electoral borders anyway because of changed population size numbers per district. In California, an independent commission of citizens (instead of politicians themselves) has now taken control over drawing electoral boundaries to make elections more “competitive” since “in the 612 races of California’s last four elections only seven seats have changed from one party to another”.²⁷

References

- Becker, J., A. Peichl, and J. Rincke (2009). Politicians’ outside earnings and electoral competition. *Public Choice* 140(3-4), 379–394.
- Bender, B. and J. R. Lott JR (1996). Legislator voting and shirking: A critical review of the literature. *Public Choice* 87(1-2), 67–100.
- Besley, T. (2006). *Principled agents? : The political economy of good government*. Oxford; New York: Oxford University Press.
- Besley, T. and A. Case (1995). Does electoral accountability affect economic policy choices? evidence from gubernatorial term limits. *The Quarterly Journal of Economics* 110(3), 769–798.
- Besley, T., O. Folke, T. Persson, and J. Rickne (2012). Gender quotas and the crisis of the mediocre man: Theory and evidence from sweden. *Working Paper*.
- Besley, T. and V. Larcinese (2011). Working or shirking? expenses and attendance in the uk parliament. *Public Choice* 146(3), 291–317.
- Besley, T. and I. Preston (2007). Electoral bias and policy choice: Theory and evidence. *The Quarterly Journal of Economics* 122(4), 1473–1510.
- Besley, T. J., T. Persson, and D. M. Sturm (2010). Political competition, policy and growth: Theory and evidence from the us. *Review of Economic Studies* (4).
- Case, A. (2001). Election goals and income redistribution: Recent evidence from albania. *European Economic Review* 45(3), 405–423.
- Coate, S. and B. Knight (2007). Socially optimal districting: A theoretical and empirical exploration. *The Quarterly Journal of Economics* 122(4), 1409–1471.

²⁵Besley and Preston (2007) illustrate how electoral districting that is biased towards one party can lead to more extreme policy choices. Coate and Knight (2007) analyze potential welfare gains from optimal districting. Both papers, however, focus on a purely majoritarian system.

²⁶See, for example, “Handelsblatt”, 15th of June 2011, p. 14.

²⁷See “The Economist”, 18th of 2011, p. 49.

- Dal Bó, E., P. Dal Bó, and J. Snyder (2009). Political dynasties. *The Review of Economic Studies* 76(1), 115–142.
- Ferejohn, J. (1986). Incumbent performance and electoral control. *Public Choice* 50(1/3), 5–25.
- Ferraz, C. and F. Finan (2011). Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review* 101(4), 1274–1311.
- Fisman, R., N. A. Harmon, E. Kamenica, and I. Munk (2012). Labor supply of politicians. Working Paper 17726, National Bureau of Economic Research.
- Gagliarducci, S., T. Nannicini, and P. Naticchioni (2010). Moonlighting politicians. *Journal of Public Economics* 94(9-10), 688–699.
- Gagliarducci, S., T. Nannicini, and P. Naticchioni (2011). Electoral rules and politicians' behavior: A micro test. *American Economic Journal: Economic Policy* 3(3), 144–74.
- Galasso, V. and T. Nannicini (2011). Competing on good politicians. *American Political Science Review* 105, 79–99.
- Lott, John R, J. (1987). Political cheating. *Public Choice* 52(2), 169–186.
- Mocan, N. and D. T. Altindag (2013). Salaries and work effort: An analysis of the european union parliamentarians. *The Economic Journal*, forthcoming.
- Nannicini, T., A. Stella, G. Tabellini, and U. Troiano (2013). Social capital and political accountability. *American Economic Journal: Economic Policy* 5(2), 222–50.
- Parker, G. (1992). The distribution of honoraria income in the u.s. congress: Who gets rents in legislatures and why? *Public Choice* 73(2), 167–181.
- Persson, T. and G. E. Tabellini (2000). *Political economics : explaining economic policy*. Zeuthen lecture book series. Cambridge, Mass.: MIT Press.
- Poole, K. T. and H. Rosenthal (1996). Are legislators ideologues or the agents of constituents? *European Economic Review* 40(3–5), 707 – 717.
- Snyder, J. M. and D. Strömberg (2010). Press coverage and political accountability. *Journal of Political Economy* 118(2), pp. 355–408.
- Stigler, G. J. (1972). Economic competition and political competition. *Public Choice* 13, 91–106.
- Strömberg, D. (2008). How the electoral college influences campaigns and policy: The probability of being florida. *American Economic Review* 98(3), 769–807.
- Svaleryd, H. and J. Vlachos (2009). Political rents in a non-corrupt democracy. *Journal of Public Economics* 93(3–4), 355 – 372.
- Wittman, D. (1989). Why democracies produce efficient results. *Journal of Political Economy* 97(6), 1395–1424.

Table 1: Effect of vote margin on absent days (OLS)

	(1)	(2)	(3)	(4)
Dependent variable: % Absent days				
Vote margin * Social Democrat		0.664** (0.267)	0.664** (0.271)	0.733** (0.288)
Vote margin	0.192*** (0.0714)	0.0994 (0.0714)	0.104 (0.0675)	-0.0172 (0.0562)
Social Democrat	8.115*** (1.602)	3.010 (1.907)	3.070 (2.016)	2.183 (2.119)
Female			2.474 (2.003)	1.871 (1.734)
Age			0.158** (0.0654)	-0.00214 (0.0686)
Partner			2.647 (2.041)	2.679 (1.921)
Children			-2.382 (1.879)	-1.644 (1.681)
University			2.768** (1.239)	1.290 (1.245)
PhD			3.301** (1.660)	1.863 (1.427)
Number of terms				0.984*** (0.333)
Minister				11.16*** (4.123)
Leading position				2.476 (1.513)
Observations	228	228	228	228
R-squared	0.138	0.177	0.252	0.352

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote). All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table 2: Effect of vote margin on absent days (2SLS)

	(1)	(2)	(3)	(4)
Dependent variable: % Absent days				
Vote margin * Social Democrat		0.623** (0.276)	0.767*** (0.293)	0.809*** (0.307)
Vote margin	0.119 (0.0822)	-0.00841 (0.0684)	0.0462 (0.0785)	-0.0473 (0.0655)
Social Democrat	7.675*** (1.667)	2.643 (2.175)	2.019 (2.260)	1.465 (2.401)
Female			2.383 (2.091)	1.847 (1.806)
Age			0.159** (0.0651)	-0.00615 (0.0686)
Partner			2.685 (1.996)	2.675 (1.891)
Children			-2.478 (1.868)	-1.677 (1.670)
University			2.663** (1.225)	1.203 (1.247)
PhD			3.360** (1.684)	1.891 (1.434)
Number of terms				1.005*** (0.331)
Minister				11.26*** (4.137)
Leading position				2.585* (1.526)
Observations	228	228	228	228
R-squared	0.134	0.167	0.250	0.351

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote). All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level. The instruments for vote margin and vote margin * Social Democrat are second vote share and second vote share * Social Democrat. Both instruments are highly relevant and significant in explaining vote margin and vote margin * Social Democrat, respectively. The first stage regressions are reported in the Appendix.

Table 3: Effect of vote margin on absent days (Robustness)

Dependent variable:	(1) Absent days	(2) Absent votes	(3) Absent w/o excuse	(4) Absent days	(5) Absent days
Vote margin * Social Democrat	0.733** (0.288)	0.646** (0.258)	0.285* (0.167)	0.665** (0.281)	0.758*** (0.277)
Vote margin	-0.0172 (0.0562)	-0.0259 (0.0548)	-0.0342 (0.0379)	0.0453 (0.0874)	-0.0203 (0.0554)
Social Democrat	2.183 (2.119)	1.192 (1.962)	1.770 (1.305)	2.700 (2.145)	2.822 (2.053)
Female	1.871 (1.734)	1.817 (1.638)	0.459 (0.981)	1.595 (1.704)	1.733 (1.643)
Age	-0.00214 (0.0686)	0.00235 (0.0677)	0.0589 (0.0410)	-0.00693 (0.0687)	-0.00486 (0.0670)
Partner	2.679 (1.921)	2.547 (1.621)	2.291 (1.406)	2.413 (1.935)	2.541 (1.843)
Children	-1.644 (1.681)	-1.633 (1.547)	-2.547** (1.258)	-1.470 (1.708)	-1.602 (1.635)
University	1.290 (1.245)	0.938 (1.282)	0.197 (0.785)	1.515 (1.262)	1.476 (1.247)
PhD	1.863 (1.427)	1.238 (1.184)	1.573 (0.998)	1.600 (1.402)	1.639 (1.421)
Number of terms	0.984*** (0.333)	0.978*** (0.296)	0.523** (0.236)	1.004*** (0.337)	0.820** (0.328)
Minister	11.16*** (4.123)	8.920*** (3.098)	9.463*** (3.368)	10.82*** (4.067)	10.24** (4.030)
Leading position	2.476 (1.513)	1.474 (1.329)	2.280** (1.051)	2.387 (1.521)	2.774* (1.477)
Safe				-0.847 (1.782)	
Vote margin * safe				-0.0708 (0.121)	
% Platform Answers					-0.0463*** (0.0141)
Observations	228	228	228	228	228
R-squared	0.352	0.325	0.334	0.360	0.385

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote) in specifications (1), (4), and (5). In specification (2), the dependent variable is the percentage of recorded votes the MP missed. In specification (3), the dependent variable is alike the one in specification (1), but does not count days as absent when the MP excused herself. Safe denotes that the MP would have been elected to parliament via the party list if she had lost her district. % Platform answers refers to the share of answered questions at the German transparency platform abgeordnetenwatch.de where citizens can ask MPs all kinds of questions. All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table 4: MP Characteristics by Closeness of Vote Margin

Closeness	Observations	University	PhD	Number of terms
Full sample	228	83.77%	20.61%	2.96
Vote margin < 10%	117	82.91%	22.22%	2.63
Vote margin < 5%	70	80.00%	15.71%	2.44
Vote margin < 2%	25	76.00%	8.00%	2.4

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2009 (excluding early leavers and late entrants). University is a dummy that is equal to one if the MP has a university degree. PhD is a dummy that is equal to one if the MP has a PhD. Number of terms gives the number of terms (legislative periods) an MP has served in parliament.

Table 5: Effect of past absent days on vote margin

	(1)	(2)	(3)
Dependent variable: Vote margin in the 2009 election			
% Absent days 2005-2009	-0.109 (0.0755)	-0.202*** (0.0681)	-0.129** (0.0510)
Female		-5.393*** (1.933)	-3.566*** (1.283)
Age		-0.183* (0.108)	-0.0864 (0.0753)
Children		1.694 (1.912)	-0.715 (1.306)
University		-1.420 (2.252)	-0.930 (1.866)
PhD		-2.719 (2.863)	-2.241 (2.238)
Number of terms		1.623*** (0.506)	0.821* (0.424)
Minister		15.25*** (4.569)	10.20*** (3.291)
Leading position		3.740 (2.329)	3.741** (1.730)
Social Democrat			-10.59*** (1.284)
Christian Social Democrat			9.158*** (1.740)
Observations	169	169	169
R-squared	0.011	0.217	0.594

Notes: Sample includes district MPs of Social Democratic, Christian Democratic, and Christian Social Party who have been members of both the parliament elected in 2005 and the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the vote margin in the 2009 election. All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table 6: Effect of vote margin on absent days (parliament elected 2005)

	(1)	(2)	(3)	(4)
Dependent variable: % Absent days				
Vote margin * Social Democrat		0.105 (0.146)	0.0850 (0.142)	0.209 (0.130)
Vote margin	0.0626 (0.0722)	-0.00633 (0.113)	0.0318 (0.113)	-0.0872 (0.105)
Social Democrat	1.209 (1.181)	-0.00335 (2.020)	-0.262 (1.967)	-0.883 (1.838)
Female			2.486* (1.416)	1.580 (1.163)
Age			0.125* (0.0730)	-0.123** (0.0590)
Partner			1.425 (1.479)	2.611** (1.194)
Children			-3.694** (1.527)	-3.361*** (1.279)
University			2.175 (1.444)	0.479 (1.302)
PhD			1.806 (1.891)	0.312 (1.593)
Number of terms				1.994*** (0.352)
Minister				17.03*** (4.382)
Leading position				-2.161* (1.184)
Observations	239	239	239	239
R-squared	0.007	0.009	0.071	0.301

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2005 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote). All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table 7: Effect of party list position on absent days

Dependent variable:	(1)	(2)	(3)	(4)	(5)
	Absent days				Absent w/o excuse
Party list position	-0.316*** (0.0997)	-0.324*** (0.110)	-0.226** (0.113)	-0.228** (0.113)	-0.195*** (0.0658)
Social Democrat	4.422** (2.007)	4.963** (2.185)	5.446** (2.100)	5.316** (2.178)	1.171 (1.694)
Liberal Democrat	0.395 (1.817)	0.577 (1.840)	1.389 (1.746)	1.274 (1.810)	-0.618 (1.493)
Green party member	1.723 (1.905)	1.599 (1.953)	2.936 (1.879)	2.827 (1.931)	-0.0328 (1.520)
Leftist party member	8.101*** (2.122)	8.060*** (2.258)	9.872*** (2.275)	9.771*** (2.301)	2.450 (1.645)
Female		1.016 (1.071)	1.047 (1.063)	1.063 (1.070)	-0.919 (0.597)
Age		0.0106 (0.0560)	-0.0356 (0.0601)	-0.0315 (0.0615)	0.0211 (0.0346)
Partner		0.732 (1.500)	0.639 (1.506)	0.662 (1.507)	0.579 (0.703)
Children		0.739 (1.262)	1.214 (1.227)	1.164 (1.241)	-0.124 (0.647)
University		0.856 (1.410)	0.705 (1.421)	0.709 (1.424)	0.876 (0.762)
PhD		-2.040 (1.345)	-2.194* (1.301)	-2.220* (1.311)	-0.817 (0.791)
Number of terms			0.658* (0.356)	0.674* (0.359)	0.227 (0.218)
Minister			6.652* (3.997)	6.832* (4.127)	4.509* (2.659)
Leading position			-0.0812 (1.144)	-0.0574 (1.135)	0.324 (0.718)
% Platform answers				0.632 (1.771)	
Observations	309	258	258	258	258
R-squared	0.150	0.166	0.188	0.189	0.132

Notes: Sample includes all party list MPs of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote) in specifications (1) to (4). In specification (5), the dependent variable is alike the one in specification (1) to (4), but does not count days as absent when the MP excused herself. Party list position is the MP's number in the party list ranking of her party in her state. % Platform answers refers to the share of answered questions at the German transparency platform abgeordnetenwatch.de where citizens can ask MPs all kinds of questions. All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table A1: Summary statistics for district MPs of Social Democratic and Christian Democratic Party in parliament elected in 2009

Variable	Mean	Std. Dev.	Description	Source
% Absent days	7.740416	9.29397	% of days with at least one missed vote (27/10/2009-29/06/2013)	own calculations; www.bundestag.de
% Absent days w/o excuse	4.49155	6.20641	% of unexcused days with at least one missed vote (27/10/2009-29/06/2013)	own calculations; www.bundestag.de
% Absent votes	6.49496	8.13203	% of votes missed (27/2009-29/06/2013)	own calculations; www.bundestag.de
Vote margin	11.23728	8.417271	votes distance to electoral district runner-up candidate in percentage points	www.bundeswahlleiter.de
Second vote share	33.79518	4.559091	votes to own party in electoral district in percentage points	www.bundeswahlleiter.de
Social Democrat	.2675439	.4436524	1 if being member of Social Democratic Party	www.bundestag.de
Female	.2149123	.4116652	1 if being female	www.bundestag.de
Age	50.95614	9.051872	age in year 2010	www.bundestag.de
Partner	.7368421	.4413162	1 if having partner	www.bundestag.de
Children	.6578947	.4754585	1 if having children	www.bundestag.de
University	.8377193	.3695194	1 if having university degree	www.bundestag.de
PhD	.2061404	.4054225	1 if having phd	www.bundestag.de
Terms	2.960526	1.953924	number of legislative periods served in parliament	www.bundestag.de
Minister	.0394737	.1951475	1 if minister in Angela Merkel's 2009-2013 cabinet	www.bundestag.de
Leading position	.2675439	.4436524	1 if having a leading position in parliament*	www.bundestag.de
Safe	.3640351	.4822172	1 if would have been elected to parliament in 2009 via the party list if lost district	own calculations; www.bundeswahlleiter.de
% Platform Answers	65.89912	38.38242	% answered questions at transparency platform abgeordnetenwatch.de	www.abgeordnetenwatch.de

Notes: The number of observations is 228. All variables are defined on the MP level. *The following positions are considered for the leading position dummy: chairman or vice chairman of the parliament, a committee, a party, a faction, faction manager, party general secretary. Summary statistics for list MPs or MPs in the parliament elected in 2005 are available from the author upon request.

Table A2: Effect of the 2005 vote margin on the 2009 vote margin

	(1)	(2)	(3)	(4)
<hr/> Dependent variable: Vote margin in the 2009 election <hr/>				
Vote margin in the 2005 election	0.638*** (0.0509)	0.669*** (0.0344)	0.664*** (0.0338)	0.664*** (0.0336)
Social Democrat		-15.36*** (0.551)	-15.12*** (0.586)	-14.92*** (0.628)
Female			-0.532 (0.904)	-0.775 (0.934)
Age			-0.0379 (0.0373)	-0.0381 (0.0381)
Partner			0.459 (0.856)	0.580 (0.853)
Children			0.267 (0.748)	0.321 (0.750)
University			-0.705 (0.784)	-0.757 (0.800)
PhD			-0.0735 (0.782)	-0.398 (0.860)
Number of terms				-0.0460 (0.210)
Minister				2.300** (1.086)
Leading position				1.034* (0.608)
Observations	162	162	162	162
R-squared	0.416	0.880	0.883	0.886

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party who have been members of both the parliament elected in 2005 and the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the vote margin in the 2009 election. All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table A3: Effect of vote margin on absent days (including Christian Social Democrats)

	(1)	(2)	(3)	(4)
Dependent variable: % Absent days				
Vote margin * Social Democrat		0.744*** (0.270)	0.731*** (0.275)	0.788*** (0.297)
Vote margin	0.0977 (0.0773)	0.0192 (0.0802)	0.0317 (0.0775)	-0.0715 (0.0726)
Social Democrat	7.549*** (1.637)	1.980 (2.003)	2.069 (2.113)	1.296 (2.274)
Christian Social Democrat	1.996 (2.631)	3.143 (2.656)	2.985 (2.495)	2.840 (2.387)
Female			2.997 (1.872)	2.234 (1.677)
Age			0.154** (0.0674)	-0.0171 (0.0708)
Partner			3.243* (1.892)	3.194* (1.776)
Children			-2.434 (1.771)	-1.765 (1.608)
University			0.882 (1.367)	-0.0441 (1.348)
PhD			4.223** (1.678)	2.986* (1.579)
Number of terms				1.049*** (0.385)
Minister				9.349*** (3.207)
Leading position				2.816* (1.560)
Observations	272	272	272	272
R-squared	0.095	0.134	0.206	0.300

Notes: Sample includes district MPs of Social Democratic, Christian Democratic, and Christian Social Party of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variable is the percentage of days when the MP missed at least one recorded vote (out of all days with a recorded vote). All regressions include a constant. Robust standard errors are reported in parentheses. *, **, *** denote significance at the 10, 5, 1 % level.

Table A4: Effect of vote margin on absent days (first stage)

Dependent variable:	(1) Vote margin	(2a) Vote margin	(2b) Vote margin*SD	(3a) Vote margin	(3b) Vote margin*SD	(4a) Vote margin	(4b) Vote margin*SD
Second vote share	1.357*** (0.0830)	1.526*** (0.0965)	-1.90e-13 (0.0360)	1.535*** (0.0975)	0.00198 (0.0360)	1.467*** (0.0949)	-0.00269 (0.0366)
Second vote share*SD		-0.554*** (0.180)	0.972*** (0.0673)	-0.533*** (0.180)	0.979*** (0.0662)	-0.458*** (0.174)	0.981*** (0.0669)
Social Democrat (SD)	-1.497* (0.853)	16.405*** (5.886)	-23.654*** (2.198)	16.026*** (5.870)	-23.699*** (2.166)	13.156** (5.686)	-23.837*** (2.193)
Female				-0.229 (0.914)	0.167 (0.337)	-0.174 (0.884)	0.211 (0.341)
Age				0.0835** (0.0422)	0.0319** (0.0156)	-0.0215 (0.0475)	0.0201 (0.0183)
Partner				2.009** (1.004)	1.012*** (0.371)	1.936** (0.969)	0.971** (0.374)
Children				-2.234** (0.942)	-0.229 (0.348)	-1.829** (0.917)	-0.177 (0.354)
University				0.612 (0.991)	0.387 (0.366)	-0.359 (0.972)	0.308 (0.375)
PhD				1.155 (0.898)	0.333 (0.331)	1.080 (0.902)	0.392 (0.348)
Number of terms						0.714*** (0.211)	0.110 (0.0815)
Minister						0.877 (1.857)	-0.475 (0.716)
Leading position						1.977** (0.793)	-0.0416 (0.306)
F statistic	162.92	115.83	275.79	40.94	98.57	35.27	73.78
Observations	228	228	228	228	228	228	228
R-squared	0.592	0.608	0.787	0.628	0.803	0.663	0.805

Notes: Sample includes district MPs of Social Democratic and Christian Democratic Party of the parliament elected in 2009 (excluding early leavers and late entrants). Dependent variables are the vote margin in the 2009 election and the vote margin in the 2009 election interacted with a Social Democrat dummy. All regressions include a constant. Robust standard errors are reported in parentheses. The table presents the first stages of the 2SLS regressions presented in Table 2: (1) is the first stage regression of specification (1) in Table 2, (2a) and (2b) are the first stage regressions of specification (2) in Table 2 etc. *, **, *** denote significance at the 10, 5, 1 % level.