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PLURALITY RULE, PROPORTIONAL REPRESENTATION, AND THE GERMAN BUNDESTAG: HOW INCENTIVES TO PORK-BARREL DIFFER ACROSS ELECTORAL SYSTEMS

Abstract

This paper examines the importance of electoral rules for legislators' behavior. The German electoral system includes a mechanism which assigns whether legislators are elected under the "first-past-the-post" (FPTP), or the proportional representation (PR) electoral rule. Using this institution, we identify the effect of electoral rules on legislators' behavior and disentangle whether so-called pork barrel politics are due to political climate in a country or due to the electoral rule employed. We find significant differences in committee membership, depending whether the legislator is elected though FPTP or PR. legislators elected through FPTP system are members of committees that allows them to service their geographically based constituency. Legislators elected through PR are members of committees that service the party constituencies, which are not necessarily geographically based.

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I. Introduction

Legislative behavior models posit that legislators obtain central government funds for their constituencies in order to win reelection. In principle, the incentive to service voters by channeling resources to their constituents is independent of the electoral system. As is widely discussed within the United States, when the electoral system is set up as a plurality rule, also referred to as "first-past-the-post" (FPTP), legislators have incentives to obtain funds, for example, for bridges and harbors, for the benefit of their home districts. While this so-called pork barrel activity has been documented in the United States, it is not clear whether it is primarily attributable to the electoral rule FPTP, used for electing U.S. legislators, or to other characteristics of American politics.[1]

The potential to confound country effects with electoral rules effects arises when examining the behavior of legislators in countries who are elected solely through one electoral system. In the case of a country using solely proportional representation (PR) or solely FPTP, it is impossible to disentangle the effect of country specifics on legislative behavior from the effect of the electoral rule on legislative behavior, because unobserved country characteristics may be correlated with the electoral rule adopted. An ideal test of whether legislative behavior differs according to electoral rules would either examine outcomes in countries that randomly changed their electoral rules over time, or countries where some legislators are elected through one electoral method and others through a different method. In German electoral system (Additional Member System) some legislators are elected through PR and others are elected through FPTP. Thus, two legislator types exist simultaneously in Germany. This situation allows one to

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[1]Within the context of the United States, politicians' incentives to secure federal funds for their home districts has been modeled, for example, by Weingast 1979; Weingast, Shepsle, and Johnsen (1981); Ferejohn and Krehbiel (1987); and Inman and Fitts (1990).

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distinguish between the incentive effects of first-past-the-post and proportional representation, and to test for differing incentive effects between both electoral systems.

The literature on the German parliamentary system has claimed that there are no significant behavioral differences between both legislator types in Germany (Nohlen 1990, Ismayr 1992 Thaysen 1990). For example, using survey data, Ismayr (1992) finds that PR legislators are approximately as likely to be active in their geographic district as are FPTP legislators, lending support to the hypothesis that there is little behavioral difference between the legislator types and electoral systems. One survey study, however, shows that FPTP legislators perceive it as more important to provide projects for reelection purposes than do PR legislators (Lancaster and Patterson 1990).[2]

This paper examines whether German legislators who are elected through FPTP are member of different committees than legislators elected through PR. Examining differences in committee assignments provides a meaningful test for differences in legislators' behavior, because legislative committees are arenas where legislation is drafted and where the language of the legislation can be modified to benefit constituencies. Also, committee members have frequent contacts with the departments and bureaucrats that implement legislation; thus committee membership provides an additional opportunity to define who will benefit from the legislation. We hypothesize that some committees are more valuable to FPTP legislators than to PR legislators, and vice versa, resulting in different committee choices by legislator types.

We find that FPTP legislators are predominantly on committees where they have influence over the allocation of benefits to their geographic reelection constituency, and that PR legislators stay away from those committees. PR legislators select committees that have control

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[2]FPTP members more frequently claimed success in influencing project allocations than PR legislators (Lancaster and Patterson 1990).

over funds that benefit party reelection constituencies. Thus, electoral rules have a significant influence on day-to-day legislative behavior, which in turn effects government policy.

II. Institutional Background

A. Electoral System

A German voter casts a candidate ballot (Erststimme) for the district candidate and party-list ballot (Zweitstimme) for the party.[3] The candidate ballots are totaled at the district level (Wahlkreis), and the district candidate with the largest number of votes wins and becomes a member of parliament. Thus, the plurality rule aspect of the German election system stems from the fact that the winner of the election in each of the n single member districts becomes a member of parliament.[4]

The overall share of parliamentary seats obtained by each party is proportional to the percent of votes that the party receives on the party-list ballot. Winners of district races take some of the seats allocated to their parties through the party-list ballot. If the party receives more seats through the party-list ballot than it can fill with winners in district races, party members with the highest rank on the state party list fill those slots. Thus, the number of district races won does not tend to influence the overall number of seats obtained by the party. District candidates may also appear on the party-list ballot. If those candidates win in the district election, they enter the parliament based on winning the district election, not based on having a slot on the party list.

The party ballots are totaled at the state level. Suppose the state of Baden-Württemberg

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[3]For an analysis of voters' responses to this two-vote system see Bawn (1999).

[4]Similar to the German electoral system, Japan, Mexico, and Russia also have mixed member systems but there the number of district seats obtained by a party are affected by district outcomes (Grofman, Mickel, Taagepera 1999, Grofman 1999).

contributes 100 seats to the parliament, which are divided into 50 district seats (implying that this state has 50 district races) and 50 party-list seats. Further, suppose the CDU wins 45 percent of the party-list ballot votes, the SPD win 42 percent, and the FDP and Greens receive 7 and 6 percent, respectively. Lastly, assume that the CDU wins in 40 of the 50 district races while the SPD wins in the remaining 10 races. In this case the CDU's district winners fill 40 of the 45 seats and 5 individuals are chosen (those with the highest rank) from the CDU's state party list. Similarly, the SPD district winners fill 10 of the 42 seats allocated to the SPD, and the remaining seats are filled from the top spots of the SPD's state party list. Thus, the larger the number of FPTP seats won by a party, the fewer the PR seats it receives; therefore the mix of FPTP and PR seats differs for each party. In this example, the FDP and Greens draw their 7 and 6 representatives entirely from their state lists.

If a party has more FPTP seats than it has representatives through the PR system, it can keep these extra seats (Überhangsmandate). In the previous example, if the CDU receives 47 seats through the candidate ballot, it can keep the extra two seats and no individuals are chosen from the state party list.[5] For the purpose of the subsequent empirical analysis of committee assignments, this circumstance is of little or no quantitative importance.[6]

In summary, the legislature has $n + m$ seats, where m is the number of legislators chosen from state party lists, and n is the number of plurality rule winners in the district races. Since n is roughly equal to m, approximately half of the legislators are elected by plurality rule (n

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[5]In this case, the overall number of seats in the legislature is adjusted.

[6]In the 1998, 1994 and 1990 elections the SPD had 13, 4, and 0 extra seats, and the CDU had 0, 12, and 6 extra seats, respectively. Neglecting those extra seats, the German parliament has 656 legislators. Prior to the German unification, the West German parliament had 496 seats.

legislators) and the other half is elected by proportional representation from state (Länder) party-lists. Germany is divided into 16 states. Each state (s) contributes k_s seats to the legislature, where $\Sigma k_s = n + m$. The number of seats for each state is determined by the state's population size. The party-list ballot determines the final distribution of the $n+m$ seats in the legislature. That is, the mix of FPTP and PR seats differs for each party, depending on the number of district races won, since each party's overall number of seats is determined by the party-list ballot. Legislators who are elected through PR or FPTP have identical rights and obligations within the legislature.

The m members are chosen from state party-lists made up prior to the election. State party congresses determine candidates' ranking on the lists (Conradt 1986). The higher a party member's rank on the list, the higher the probability that she or he will become a member of parliament.

B. Committee System

The German legislature, the Bundestag, does much of its business through its permanent (standing) committees. In addition to standing committees the Bundestag also has special committees and investigatory committees. The issue areas of standing committees mirror, for the most part, the policy issues for which the government ministries are responsible.

Bills originate from the executive and from the parliamentary parties. Legislation is referred to the committees from these two sources, and committees are required to make a recommendation, which may include amendments to the legislation, regarding passage of the bill to the entire legislature. About 60 percent of the bills are modified at the committee stage. Committees are entitled, but not required, to hold public hearings during which they can invite experts and affected parties to provide input. In addition to modifying legislation, committees provide "infrastructure for communications and information between members of parliament,

government ministers, bureaucrats, and interest groups" (Saalfeld 1998, p.58).[7]

"Committees [in the German legislature] play a major part in giving ... legislative output its final shape" (Johnson, p.135, 1979). As in the United States, committee members' decisions are typically influenced by party positions. Organized interests attempt to influence legislation by lobbying committee members. Interests also have influence, in part, because committee members are often interest group officials. In fact, appointments to committees are often made so as to match legislators who are members of pressure groups with the jurisdiction of committees (Saalfeld 1998, p.58). For example, the education committee has been dominated by members from the academic community (Johnson 1979).

Committees are assigned after the election, at the beginning of a new legislative session. Legislators indicate their committee preferences to their party, and the party caucus determines the final committee assignments (Kaack 1990). Legislators can be fairly independent in choosing their specialization (Hübner 1995). Parties allocate seats according to personal preferences of legislators, representativeness of various political groups within the party, and representativeness of the various German regions (Johnson 1979, Ismayr 1992, p.189). Once each legislator has voiced his preference, party whips formulate a proposal for committee assignments which requires consent by the party caucus (Fraktion). If there exists a greater demand for seats on a particular committee than there are slots, intra-party bargaining occurs to achieve an agreement. FPTP members appear to be in a better bargaining position and are more likely to obtain their first choice of committee seat. "Where they [FPTP members] really want to have it their way, mostly in matters of interest to their voting districts, they can mobilize considerable bargaining power within their parliamentary groups" (Patzelt 2000, p.38).

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[7]In international comparison, German committees are more powerful than British House of Commons committees, and less powerful than American congressional committees.

The number of seats for each party on each committee is proportional to the share of seats in the Bundestag. Each committee has one chairperson who can be from any party. A party's overall number of committee chairs is determined by its share of party-list ballot votes. For example, if the Christian Democratic Party receives 40 percent of the popular vote, 40 percent of all committee chairpersons come from that party.

III. Hypotheses

Models that assume that legislators develop policies to get reelected predict that legislators are working to obtain benefits for their constituencies. This incentive is independent of the electoral system and holds for politicians regardless of whether they are elected through PR or through FPTP. The models predict that FPTP legislators have incentives to appease their geographic reelection constituencies (Rae 1971), while PR legislators have incentives to support the interests of their reelection constituencies, which are not necessarily geographically based (Blais and Massicotte 1996).[8]

Differences in behavior between German legislators elected through PR or FPTP cannot easily be measured in voting behavior, since voting decisions in the legislature are generally made along party lines. More promising is the examination of differences in legislators' committee choices. If so-called pork barrel politics are important, then FPTP legislators will be members of committees that help them to support specific projects in the interest of their geographic reelection constituencies. Thus, committees where FPTP legislators can obtain extra money for the home district are especially attractive to them, and they will avoid committees where they cannot secure specific benefits for their home constituencies. Servicing their

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[8]This prediction assumes that the motivation to obtain committee assignments is prospective, that meaning legislators want to please the appropriate set of voters in anticipation of the next election, and that PR legislators expect to remain PR legislators and FPTP legislators expect to remain FPTP legislators.

constituency does not solely imply having seats on pork barrel committees; it also implies membership on committees where an ombudsman role can be played.

PR legislators depend on their state party, not on voters, for a seat in the legislature. Therefore, PR legislators have incentives to service the constituency supporting their party. This can be done by being a member of specific committees. As noted previously, interest groups have an influence on the ranking of candidates on the party-lists. Given their influence, a PR legislator has an incentive to service these groups by sitting on a committee that addresses their interests. Also, PR legislators have incentives to obtain committee assignments where they can develop a national reputation. Ceteris paribus, a national reputation is more valuable for list-legislators than for FPTP legislators, because national recognition is one criteria which boosts the rank on the party list (Conrad 1986).

We classify the Construction Committee (Ausschuß für Raumordnung, Bauwesen und Städtebau), Traffic Committee (Ausschuß für Verkehr), and Agriculture Committee (Ausschuß für Ernährung, Landwirtschaft und Forsten) as district committees, because these committees are perhaps the most clear cut examples of committees where funds can be channeled to the home district.[9] Thus, we predict that FPTP legislators are more than proportionally represented on these committees. One caveat applies to the Agriculture Committee, since many of the decisions regarding agriculture are not made at the national legislative level, but on the European level.

The prediction that FPTP legislators are on the Agriculture Committee only applies if a FPTP legislator has a farm population in his or her district and if the legislator has a reputation of representing farm interests. In German politics, the farm population tends to support the CDU/CSU overwhelmingly, and this party has a reputation of working for farm interest. Thus we

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[9]Examples of Construction Committee and Traffic Committee work are legislation regarding the building of public housing and streets, and the allocation of subsidies for public transportation. Examples of Agriculture Committee work are legislation regarding marketing issues in German regions; how to implement European Union regulations within Germany; and whether to restrict some agricultural imports.

predict that CDU/CSU FPTP members, as opposed to SPD FPTP members, are on the Agriculture Committee. SPD FPTP members are elected primarily from urban areas, and they can not dispense special benefits to urban areas if they are on the Agriculture Committee. Thus, we predict that FPTP SPD members will avoid membership on the Agriculture Committee.

We classify the Defense Committee (Verteidigungsausschuß) and the Development Committee (Ausschuß für wirtschaftliche Zusammenarbeit und Entwicklung), which addresses issues related to Less Developed Countries, as party committees, because they are the most clear-cut cases where few funds can be channeled to the geographic reelection constituency.

Contrary to the defense committee in the United States, the German Defense Committee is "not concerned primarily with legislation" (www.bundestag.de). This committee was established in conjunction with the German army (Bundeswehr) in order to guarantee effective parliamentary control of the army. An important function of committee members is to conduct high-profile public inquires, and to make recommendations to the government regarding security, including NATO, policies. Given the set up of this committee, there are relatively few ways for members to direct funds to legislators' home districts.

We classify the 'Women and Youth Committee' (Ausschuß für Frauen und Jugend) and the 'Family and Elderly Committee' (Ausschuß für Familie und Senioren) as party committees, because they have most clearly group-specific redistributive functions. Both committees were merged into the 'Family Committee' (Ausschuß für Familie, Senioren, Frauen und Jugend) in the last two legislative sessions.[10] Legislators elected because they ranked relatively high on the party-list have an incentive to work for the party's reelection constituency. Thus, we predict that PR legislators will be committee members on the Family Committee and its predecessors.

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[10]The Family Committee works on legislation regarding women's rights in the work place, and gender discrimination issues.

There are some committees on which legislators cannot engage in active pork barrel politics, but they can act on behalf of their party's reelection constituency. For example, the CDU can represent the elderly constituency on the Health Committee, which we classify as a party committee. In Germany, the Health Committee (Ausschuß für Gesundheit) helps determine national health care prices, serving primarily as an advisory body to the executive government, with respect to national health care laws. This committee provides FPTP legislators with few opportunities to channel geographically concentrated benefits to their districts.[11] Thus, we predict that FPTP legislators will avoid this committee. By contrast, since the elderly population comprises a large part of the CDU's reelection constituency, we predict that PR legislators from the CDU will be committee members on the Health Committee.

We classify the remaining committees as "neutral," because they allow for only limited possibilities in terms of either services in the district or party constituency or because they are low prestige committees with limited redistributive functions. We found no statistically significant differences in PR or FPTP legislator membership on the Budget, Finance, Interior, Foreign Affairs, Economics, Environment, Sports, European Union, Election, Labor, Law, and Technology Committees. We found a more than proportionate representation of PR legislators on the Petition Committee and the Education and Science Committee.

We hypothesized that the differences in committee membership result from legislator choices. However, if parties chose for the legislators, similar predictions as the previous predictions are obtained. For example, the party may place local notables in districts, and party interest group experts on lists. Additionally, party leaders may use committee assignments as a reward for consistent district winners or a resource to help marginal FPTP legislators win. As for PR legislators, parties may trade high positions on the list for service on party committees,

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[11]Among other issues, the Health committee discusses issues of pricing of prescription drugs, and what services should be provided by disability insurance.

meaning that legislators with high list positions work on party committees in exchange for a high position on the list. The "legislator- choice" model and the "party-choice" model arrive at similar predictions regarding committee membership, and in the empirical work we will attempt to determine whether the results lend more support to one than the other.

IV. Data

We study the allocation of seats on committees in three legislative periods (1990-94, 1994-98, 1998-2002).[12] Thus, we examine the current legislature, which has elected the Schröder government, and the two previous legislatures, which elected the Kohl governments.

Five parties have been elected to the German parliament over the last three election cycles: the CDU (Christian Democratic Party outside of Bavaria), the CSU (Christian Democratic Party in Bavaria), the SPD (Social Democratic Party), the Grüne (Green Party), the PDS (Socialist Party), and the FDP (Liberal Party). The Grüne and the FDP legislators have only PR seats. Legislators from the CDU, CSU, SPD, and PDS have obtained their seats either through the FPTP or the PR electoral system. To test for differences in behavior between representatives elected through FPTP and PR, the focus can thus only be on these four parties. Of these parties, we will not examine the PDS, because there is little variation with respect to the FPTP and PR distinction. Only 8 of the 85 PDS members over three sessions (1990-94, 1994-98, 1998-2002) were elected through FPTP. Further, in some tests less emphasis will be placed on the CSU, because 84 percent of its approximately 50 representatives in each session have FPTP seats. Thus, the focus of the analysis is on the two main parties of German politics, namely the CDU,

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[12]Data were obtained from *Amliches Handbuch des Deutschen Bundestages* (1994, 1998), the web site www.bundestag.de, and *Bevölkerung und Erwerbstätigkeit* (1990, 1994, 1998). We can examine the allocation of committee seats in the 1998-2002 session because committee seats are allocated at the beginning of each legislative session.

which is a right-of-center party, with reelection constituencies including the elderly, farmers, and the upper middle class, and the SPD, which is a left-of-center party whose constituency includes lower income groups, and the population in urban centers.

The data includes all legislators who have been elected to the German parliament during the three sessions. In the data examined, thirteen percent of the members in the German legislature won the election in their district but were not placed on the party-list. Five percent of the members did not run for election in a district but became a member of parliament because they were ranked above the cut-off number on the state party-lists. The remaining eighty-two percent of the members ran in a district for election and had a place on the state party-list. Fifty percent of those legislators lost the district election and obtained a seat through the PR electoral rule. The fact that losers in district elections often obtain a seat in parliament via the state party-list weakens FPTP legislators' incentives to provide direct geographic constituency service because they have a "safety-net" in case they lose the election.[13] Table 1 describes the data of the pooled sample.

In Germany, the government is formed from members of parliament, but these legislators (Minister and Staatssekretäre) are not members of any committees in the legislature. Thus, we exclude legislators who are part of the executive branch from the statistical analysis of committee membership.

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[13]Similarly, PR legislators who run in districts and lose the election sometimes maintain a district office.

Table 1
Means, Standard Deviations, and number of observations

Variable	Mean (Standard deviation)
FPTP=1 PR=0	56.7 (50.0) n=1603
Defense committee member=1, 0 otherwise	5.8 (23.4) n=1603
Development committee member=1, 0 otherwise	4.8 (21.4) n=1603
Health committee member=1, 0 otherwise	4.6 (21.0) n=1603
Family committee member=1, 0 otherwise, (1994, 98)	5.3 (22.5) n=1049
Family committee member=1, 0 otherwise, (1990, 94, 98)	6.4 (24.5) n=1603
Agriculture committee member=1, 0 otherwise	4.7 (21.3) n=1603
Construction committee member=1, 0 otherwise, (1990, 94)	4.7 (21.2) n=1082
Construction committee member=1, 0 otherwise, (1990, 94, 98)	5.3 (22.4) n=1603
Traffic committee member=1, 0 otherwise, (1990, 94)	6.0 (23.8) n=1082
Traffic committee member=1, 0 otherwise, (1990, 94, 98)	6.2 (24.1) n=1603

Note:
The means are expressed in percentages. Standard deviations are in parentheses. When no dates are indicated, the data include the 1990, 1994, and 1998 legislature.

V. Results

Table 2 presents t-tests for differences of Construction, Traffic, and Agriculture

Committee membership means. In 1990 and 1994 the Construction Committee and the Traffic

Committee exist separately, and a new joint Construction and Traffic Committee was formed in

1998. We present one set of estimates for the 1990 and 1994 Traffic Committee and another set

of estimates where we combine those data with the 1998 joint committee. We proceed in an

analogous way in the Construction Committee analysis. The first row presents results for the

CDU, CSU, and SPD, the second for the CDU and CSU, the third for the CDU, and the fourth

row for the SPD. For example, the first upper left hand cell in Table 2 indicates that 78 percent of

the Construction Committee members in 1990 and 1994 are FPTP legislators, while 55 percent of

the remaining legislators are elected through FPTP.[14] Thus, the FPTP legislator type is more than

proportionally represented on the Construction Committee, and the percentage difference is

statistically significant with a t-statistic of 3.4.[15]

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[14]The second number in each cell is the percentage of FPTP legislators in the entire
parliament, counting only those legislators who are not on the committee.

[15]The statistical test assumes that committee assignments are independent is problematic
if legislators can chose only one committee assignment, and if there are only PR committees and
FPTP committees. In this case, the choices of some are dictated by the assignments of others.
There are some reasons that support the assumption of committee assignments. First, there are
over 10 other committees a legislator may choose from, which do not have the hypothesized
attractiveness to PR or FPTP legislators. Thus when all PR slots are filled, FPTP legislators do
not become automatically a member of a FPTP committee. Secondly, legislators can have
multiple committee assignments. Furthermore, some legislators have no committee assignments.

Table 2
Distribution First Past the Post (FPTP) Seats on Committees vs. the Legislature:
Committees with Emphasis on Service to the Geographic Constituency

Parties included in the sample	Construction Committee 1990, 1994	Construction Committee 1990, 94, 98	Traffic Committee 1990, 1994	Traffic Committee 1990, 94, 98	Agriculture Committee
CDU CSU SPD	78 % Cmte 55 % Legisl. n=1082 t=3.4	73 % Cmte 56 % Legisl. n=1603 t=3.1	74 % Cmte 55 % Legisl. n=1082 t=3.0	71 % Cmte 56 % Legisl. n=1603 t=2.9	58 % Cmte 57 % Legisl. n=1603 t=0.2
CDU SPD	80 % Cmte 52 % Legisl. n=995 t=3.8	74 % Cmte 54 % Legisl. n=1468 t=3.5	71 % Cmte 53 % Legisl. n=995 t=2.8	69 % Cmte 54 % Legisl. n=1468 t=2.8	57 % Cmte 54% Legisl. n=1468 t=0.5
CDU	83 % Cmte 70 % Legisl. n=485 t=1.3	66 % Cmte 60 % Legisl. n=684 t=0.6	87 % Cmte 69 % Legisl. n=485 t=2.1	71 % Cmte 60 % Legisl. n=684 t=1.5	78 % Cmte 60 % Legisl. n=684 t=2.1
SPD	78 % Cmte 36 % Legisl. n=510 t=4.2	81 % Cmte 48 % Legisl. n=784 t=4.3	55 % Cmte 37 % Legisl. n=510 t=2.0	67 % Cmte 48 % Legisl. n=784 t=2.5	39 % Cmte 50 % Legisl. n=784 t=1.3

Note:
In each cell the first number represents the percent of FPTP legislators on the committee and the second number represents the percent of FPTP legislators in the legislature, excluding members on that committee.
The letter *n* indicates number of observations and *t* indicates the value of the t-statistic for a difference in means test.

On the Agriculture Committee, the distribution of both legislator types is similar.

Breaking the sample into CDU and SPD legislators reveals that the CDU has more FPTP

legislators on the Agriculture Committee while the SPD has more PR legislators on that

committee. This finding reflects that SPD FPTP legislators come disproportionally from urban

areas, while CDU FPTP representatives come disproportionally from rural areas. Thus, while

FPTP legislators from the CDU can serve their rural constituencies well on the Agriculture

Committee, and are therefore drawn to it, this committee is not attractive to SPD FPTP

legislators, because they can not service their urban reelection constituency on the Agriculture

Committee.

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Support for the hypothesis that FPTP legislators are members of committees that are most valuable for their reelection constituencies is also shown by the fact that the difference in means for the Construction Committee is driven to a large part by SPD FPTP members. Beneficiaries of jobs in the construction industry are likely SPD voters.

The results in Table 3 support the hypothesis that PR legislators are members of committees that service the party reelection constituency. For the entire sample as well as for each party, PR legislators are more likely to be Defense Committee members than FPTP legislators. For example, 39 percent of Defense Committee members have FPTP seats while 56 percent of the remaining legislators in the Bundestag, who are not on the Defense Committee, have PR seats (Table 3, column 2).

As noted previously, the Family Committee was formed in 1994 and replaced the 1992 Committee for Youth and Women and the 1992 Committee for Families and Senior Citizens. To include the 1992 committees in the entire analysis, in one specification we combine the 1992 committees with the Family Committee of 1994 and 1998. The results for the Health Committee and the Family Committee show that these committees have a larger share of PR legislators. The overall results for the Health Committee are driven primarily by the CDU. The latter finding is consistent with the hypothesis that CDU PR legislators find the Health Committee attractive because the elderly population, which comprises a large part of the CDU's reelection constituency, has a particular interest in health care issues.

Table 3
Distribution First Past the Post (FPTP) Seats on Committees vs. the Legislature:
Committees with Emphasis on Service to the Party Constituency

Parties included in the sample	Defense Committee	Development Committee	Health Committee	Family Committee 1994, 1998	Family Committee 1990, 94, 98
CDU CSU SPD	45 % Cmte 58 % Legisl. n=1603 t = 2.3	44 % Cmte 57 % Legisl. n=1603 t = 2.3	42 % Cmte 58 % Legisl. n=1603 t=2.6	39 % Cmte 59 % Legisl. n=1049 t = 2.9	38 % Cmte 58 % Legisl. n=1603 t = 4.0
CDU SPD	39 % Cmte 56 % Legisl. n=1468 t = 2.9	41 % Cmte 55 % Legisl. n=1468 t = 2.4	40 % Cmte 55 % Legisl. n=1468 t=2.4	41 % Cmte 57 % Legisl. n=957 t = 2.2	39 % Cmte 56 % Legisl. n=1468 t = 3.1
CDU	43 % Cmte 62 % Legisl. n=684 t = 2.4	46 % Cmte 61 % Legisl. n=684 t = 1.8	36 % Cmte 62 % Legisl. n=684 t=2.9	39 % Cmte 57 % Legisl. n=425 t = 1.7	41 % Cmte 62 % Legisl. n=684 t = 2.8
SPD	36 % Cmte 50 % Legisl. n=784 t=1.8	36 % Cmte 50 % Legisl. n=784 t = 1.63	44 % Cmte 50 % Legisl. n=784 t=0.6	43 % Cmte 57 % Legisl. n=532 t = 1.4	38 % Cmte 50 % Legisl. n=784 t = 1.7

Note:
In each cell the first number represents the percent of FPTP legislators on the committee and the second number represents the percent of FPTP legislators in the legislature, excluding members on that committee.
The letter *n* indicates number of observations and *t* indicates the value of the t-statistic for a difference in means test.

Not reported in the tables is our analysis of the committees that we classified as "neutral."
We find no statistically significant differences in FPTP and PR membership in 13 of the 14
neutral committees. The exception is the Petition Committee which a committee that does not
work on any legislation but only responds to written individuals' or organizations' concerns
regarding federal legislation and administration. Fifty-eight percent of members on the Petition
Committee are PR legislators, where PR legislators comprise 42 percent in remaining legislators.

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The previous findings in Table 2 and Table 3 are consistent with a model that posits that legislators seek committee assignments that are more advantageous to them, but is also consistent with a model that posits that choose seats for PR and FPTP legislators. However, this interpretation of the findings is not consistent with descriptions of how the committee assignment process works in the German Bundestag, namely, that legislators can voice their preferences, and that those preferences are adhered to, as long as there is no excess demand for a committee seat. In the case of conflict, bargaining over seats occurs among legislators (Patzelt 2000).

We examine whether that "FPTP-only" legislators, i.e. without a place on the party-list, are more likely to sit on a pork barrel committee than FPTP legislators with a place on the list. Because there are relatively few legislators who are "pure" FPTP legislators, i.e. those who are elected without having a place on the party-list (15 percent), we pooled the pork barrel committees, namely the Construction, Traffic, and Agriculture Committees. We find that 20 percent of the seats on the pooled committees are made up of FPTP-only legislators, while they represent about 15 percent of the entire legislature (which, in this case, includes FPTP legislators with a place on the party-list). The difference is significant at the 10 percent level, Further, we created a category of legislators who are either "FPTP-only and "PR-only" legislators and compared their committee assignments. Consistent with our predictions, we find that FPTP- only are more likely to be members of FPTP committees and that PR-only legislators are likely to be members of party committees, although the former correlation coefficient is not statistically significant.

Further we created a legislator group who might win in one tier or the other, and has a realistic chance to be elected through either tier. In this group are FPTP legislators who won with less than the median percentage of all FPTP legislators, and PR legislators who lost with more than the median percentage of all PR legislators. We find that FPTP legislators in this group are significantly more likely to enter a FPTP committee, and that PR legislators significantly more

likely to enter a party committee. When we examined the committee assignment of the group of legislators that does not fit into the previously described categories, we find that those FPTP legislators have a significantly larger share of seats on FPTP committees and that PR legislators have a significantly larger share of seats on PR committees. Thus is appears that the findings that are reported in Tables 3 and 4 are robust, and can be found in almost all subgroups.

Table 4 presents estimation results from a multiple regression analysis, that addresses potential shortcomings of the comparison of means in the previous tables. To increase the variation in the data set, we pooled the committees which we hypothesized were of primary interest to FPTP legislators. In Table 4 we refer to this pooled sample as the District Committee. We also pooled the Defense and Development committees and we pooled the Health and Family committees.[16] The first set of regressions includes the rank of the legislator on the state party-list. This variable measures a legislator's power and prestige, and thus controls for the fact that some legislators may not chose to sit on a committee they consider to be of too little importance, given their standing in their party.

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[16]Two percent of the FPTP legislators who are on district committees are also members of the Defense or Development Committee, three percent are also members of the Health and Family Committee, and two percent have more than one post on a district committee. Four percent of the PR legislators who are on a PR committee are members of two PR committees and 1.5 percent of these PR legislators have a seat on a FPTP committee.

Table 4
Determinants of Committee Memberships
Probit Marginal Effects and Asymptotic Standard Errors

Dependent Variable	FPTP Legislator	Party-List Rank	Percent in election	Service Employment	Industry Employment	Farm Employment	Female	Seniority	Age	N	Log-Likelihood
District Committees	0.0542 (0.0173)	0.3627 (0.0312)	—	—	—	—	—	—	—	1603	-480.4
District Committees	0.0820 (0.0204)	0.0480 (0.0310)	-0.0018 (0.0008)	—	—	—	—	—	—	1603	-477.5
District Committees	0.0580 (0.0171)	0.0509 (0.0298)	—	-0.4758 (0.3531)	-0.4518 (0.3031)	-0.0481 (0.4033)	—	—	—	1426	-413.2
District Committees	0.0696 (0.0206)	0.0581 (0.0311)	-0.0011 (0.0015)	-0.5221 (0.3617)	-0.4787 (0.3073)	-0.0745 (0.4050)	—	—	—	1426	-412.8
District Committees	0.0647 (0.0205)	0.0517 (0.0312)	-0.0011 (0.0015)	-0.5309 (0.3476)	-0.4707 (0.3001)	-0.0425 (0.4132)	-0.0057 (0.0235)	-0.0143 (0.0057)	0.0015 (0.0013)	1426	-408.0
Defense and Development committees	-0.0550 (0.0210)	0.0192 (0.0364)	—	—	—	—	—	—	—	1603	-534.5
Defense and Development committees	-0.0603 (0.0254)	0.0169 (0.0361)	0.0003 (0.0008)	—	—	—	—	—	—	1603	534.4
Defense and Development committees	-0.0615 (0.0234)	0.0224 (0.0387)	—	0.5531 (0.3657)	0.3608 (0.3228)	0.2546 (0.4542)	—	—	—	1426	478.3
Defense and Development committees	-0.0563 (0.0281)	0.0252 (0.0382)	-0.0004 (0.0014)	0.5350 (0.3677)	0.3490 (0.3223)	0.2353 (0.4584)	—	—	—	1426	478.3
Defense and Development committees	-0.0580 (0.0284)	0.0206 (0.0398)	-0.0005 (0.0015)	0.5442 (0.3661)	0.3706 (0.3202)	0.2491 (0.4593)	-0.0238 (0.0263)	-0.0070 (0.0065)	0.0022 (0.0017)	1426	475.9
Health and Family	-0.0766 (0.0222)	0.0155 (0.0358)	—	—	—	—	—	—	—	1603	-539.8

Dependent Variable	FPTP Legislator	Party-List Rank	Percent in election	Service Employment	Industry Employment	Farm Employment	Female	Seniority	Age	N	Log-Likelihood
committees											

Dependent Variable	FPTP Legislator	Party-List Rank	Percent in election	Service Employment	Industry Employment	Farm Employment	Female	Seniority	Age	N	Log-Likelihood
Health and Family committees	-0.0275 (0.0271)	0.0348 (0.0353)	-0.0028 (0.0008)	—	—	—	—	—	—	1603	-531.5
Health and Family committees	-0.0607 (0.0229)	0.0160 (0.0347)	—	-0.0650 (0.3987)	0.0549 (0.3290)	-0.1771 (0.4335)	—	—	—	1426	450.2
Health and Family committees	-0.0423 (0.0286)	0.0255 (0.0344)	-0.0015 (0.0014)	-0.1302 (0.3994)	0.0120 (0.3284)	-0.2458 (0.4408)	—	—	—	1426	449.5
Health and Family committees	-0.0318 (0.0246)	0.0472 (0.0306)	-0.0004 (0.0012)	-0.2432 (0.3392)	-0.0309 (0.2868)	0.1743 (0.3793)	0.1359 (0.0322)	-0.0255 (0.0058)	-0.0033 (0.0013)	1426	404.5
Health and Family committees	-0.0357 (0.0197)	0.0451 (0.0310)	—	-0.2296 (0.3384)	-0.0215 (0.2888)	0.1903 (0.3750)	0.1363 (0.0322)	-0.0256 (0.0057)	-0.0033 (0.0013)	1426	404.5

Note:
Regressions are adjusted for clustering by legislator.
The mean (standard deviation) for the district committee is 0.0917 (0.2887), for the defense and development committee 0.1054 (0.3072), and for the Health and Family committee 0.1086 (0.3112). Means and standard deviations for the constituency variables are for the service employment 37.843 (7.796), industry employment 41.545 (9.500) and for agricultural employment 1.986 (2.069). Means and standard deviations for the legislator characteristics are for female 0.2383 (0.4262), where females are coded as 1 and males are coded as 0, for age 49.631 (8.876), measured as the age of the legislator in the first year of each legislative period, and for seniority 1.839 (1.916). Seniority equals zero for newcomers (freshmen), one for legislators who have been a member for two periods, two for legislators who have been a member for three periods, and so forth.
The regression with constituency data has fewer observations because no constituency data are available for legislators from the former East Germany who were elected in 1990, and because some legislators did not run for election in any electoral district.

Including the rank in the regression also allows us to determine whether the data are consisted with the hypothesis that parties trade high positions on the list for service on party committees. Those legislators who won the district election without having been nominated to the state party-list are coded to have a rank of 88, the lowest rank with which an election loser obtained a seat in the legislature. Dropping these legislators from the regressions did not affect the results.

The next set of regressions in Table 4 adds the percentage of votes obtained in the district election. We include this variable because legislators might prefer some types of committee assignments if they are from marginal or hopeless districts as opposed to safe districts. Furthermore, party leaders may use committee assignments as a reward for consistent winners or a resource to help marginal FPTP legislators win. The third set of regressions controls for district characteristics that may influence committee membership. Since there are no constituency characteristics associated with legislators who do not run in a district and are entering the parliament through the state-list, we had to drop these observations from the regression runs when we use district characteristics as control variables. The German statistical office does not gather a large number of data by electoral district, but we have included as many available constituency characteristics as appear relevant to committee choices. The last set of regressions adds personal legislator characteristics, such as gender, age, and seniority.[17] We correct the estimated standard errors for clustering by legislator in all regressions

The estimation results in Table 4 support the previously reported results. When we control variables we find that FPTP legislators are members on committees that help their district constituency. The coefficients on the FPTP legislator variable in all district committee regressions are statistically significant. For example, the coefficient in Table 4, row 2 indicates

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[17]It has been shown that these personal characteristics explain the probability of winning a German district election (Lancaster 1998).

that FPTP legislators are 8.2 percent more likely to be a member of a district committee than PR legislators.[18]

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[18]We also examined whether the CDU/CSU sends PR legislators from rural areas to the Agriculture Committee. We did so by running a separate regression explaining farm committee membership, and interacting the farm population variable with a dummy for CDU/CSU party membership. We did not find that the CDU/CSU sends more PR legislators from rural areas to the Agriculture Committee (relative to the SPD).

The coefficients on the legislator-type variable have the hypothesized signs and are statistically significant in all of the Defense and Development Committee specifications and most of the Health and Family Committee specifications. For example, the estimated coefficients in the Defense and Development Committee regressions indicate that PR legislators are between 5.5 percent and 6.2 percent more likely to be on these committees than FPTP legislators.[19, 20]

It is difficult to tease out of the results whether parties assign committees, or whether legislators seek committees they consider to be optimal for their future careers. However, we believe that there are some clues indicating that legislators play a larger role in the committee selection process than parties. For example, if parties "trade" high spots on the list for work on PR committees, one expects that legislators with higher spots on the party-list are members of PR committees. However, the regression coefficients on the rank in Table 4 do not show a statistically significant negative correlation between rank and PR committee membership, lending no support to the hypothesis that parties trade high spots on the list for committee assignments on PR committees.

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[19]When we include a variable that measures the state-list length the results are similar to those reported in Table 4.

[20]We examined the committee assignments of legislators who entered the Bundestag for the fist time, yielding 495 unique observations. Using these observations, our correlation analysis found that FPTP legislators are significantly more likely to be members of FPTP committees, and that PR legislators are significantly more likely to be members of the Health and Family Committees, and that PR legislators are more likely to be on the Defense and Development Committees, but that this correlation is not statistically significant.

Lastly, we examine whether the findings are robust when accounting for district homogeneity. If, for example, the entire district population would consist of the elderly, a FPTP legislator can serve his or her constituency just as easily on the Elderly Committee as on a committee that helps distribute geographically based benefits. Legislators running in districts with a heterogeneous population thus have a stronger incentive to obtain assignment on a committee that can distribute geographically concentrated benefits. To test this hypothesis we construct a Hirfendahl index based on employment shares.[21] Table 5 shows that the central results regarding the behavior of FPTP and PR legislators are robust with respect to this new specification The results show that legislators who have been running for election in more homogeneous districts are significantly less likely to serve on district committees, while the homogeneity variable is statistically insignificant in the other committee equations. Thus legislators from heterogeneous districts are on committees that help to provide geographically based benefits.

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[21]The Hirfendahl index is the sum of the squared shares of district farm, services, industry, and trade/traffic (Handel und Verkehr) employment.

Table 5
Determinants of Committee Memberships and District Homogeneity
Probit Marginal Effects and Asymptotic Standard Errors

Dependent Variable	FPTP Legislator	Party-List Rank	Percent in election	Homogeneity	Female	Seniority	Age	N	Log-Likelihood
District Committees	0.0690 (0.0207)	0.0574 (0.0316)	-0.0010 (0.0015)	-0.6085 (0.3189)	—	—	—	1426	-412.5
District Committees	0.0635 (0.0207)	0.0530 (0.0317)	-0.0005 (0.0014)	-0.6000 (0.3075)	-0.0045 (0.2373)	-0.1409 (0.0057)	0.0016 (0.0013)	1426	-407.8
Defense and Development committees	-0.0514 (0.0274)	0.0343 (0.0373)	-0.0010 (0.0014)	-0.3973 (0.2819)	—	—	—	1426	479.0
Defense and Development committees	-0.0534 (0.0276)	0.0316 (0.0391)	-0.0011 (0.0015)	-0.3801 (0.2806)	-0.0209 (0.0268)	-0.0074 (0.0066)	0.0022 (0.0016)	1426	476.7
Health and Family committees	-0.0482 (0.0297)	0.0241 (0.0327)	-0.0011 (0.0013)	0.3908 (0.3822)	—	—	—	1426	449.4
Health and Family committees	-0.0398 (0.0251)	0.0504 (0.0298)	-1.7E-5 (0.0012)	0.2503 (0.3802)	0.1286 (0.0315)	-0.0250 (0.0059)	0.0030 (0.0013)	1426	406.7

Note:
Regressions are adjusted for clustering by legislator.
Means and standard deviations of the dependent variables are given in Table 4. The mean (standard deviation) of the homogeneity index is 0.3677 (0.0302).

VI. Conclusions

This paper documents that the selection of committees is motivated by legislators' attempts to get into a position enabling them to engage in redistributive activities that increase their chances of reelection. We show that these attempts exist under both the FPTP and the PR electoral rules, without confounding country effects with electoral rule effects, which arises when examining the behavior of legislators in countries that use only one electoral rule. The paper overcomes this potential problem by examining committee selection behavior of legislators in Germany who are subject to differing rules. By analyzing the behavior of German legislators, we can distinguish between the incentive effects of plurality rule and proportional representation.

We find that FPTP have different committee assignments than legislators elected through PR. While FPTP legislators are members of committees where they have influence over the allocation of benefits to their geographic reelection constituency, PR legislators are members of committees that have control over funds that benefit their party's reelection constituencies. Contrary to the previous literature on the German legislature, we find that there are indeed significant differences between both legislator types. Thus, electoral rules have a significant influence on day-to-day legislative behavior, which in turn affects government policy.

While the notion that the FPTP system is most likely to lead to pork barrel politics also suggests that government size is larger under this electoral rule, we find that incentives for pork barrel politics also exist under PR. In fact, many European governments that employ the PR system have a larger government than FPTP countries. Our findings point to one reason that European countries that employ PR do not have a smaller government size than countries that employ FPTP, namely that PR legislators have incentives to direct spending to constituencies that are potential supporters of their party, regardless of their geographic location.

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