# The Electoral Costs of Reforming Political Institutions 

Lukas Haffert ${ }^{\dagger} \quad$ Amy Pond ${ }^{\ddagger} \quad$ Tobias Rommel ${ }^{\S}$

March 19, 2024


#### Abstract

Biased political institutions can privilege one party over others, helping to assure that party's future electoral success. Yet, despite controlling enough votes to make reforms, parties frequently abstain from reforming institutions. What explains their forbearance? We elaborate a formal model in which citizens punish parties for any sort of reform, as they believe that parties could benefit themselves with biased reforms. Even if citizens are not informed about the content of the reform, they anticipate that biased parties are likely to implement biased reforms and they punish parties for any reform at all. Drawing on a survey experiment, we then evaluate the model using real proposals for electoral reforms in Germany. In line with the model, citizens become less supportive of the opposition and the opposition's proposed electoral reform, when they are informed that the opposition is associated with the reform. By contrast, the coalition government's proposal is perceived as less biased, arguably because it is already a compromise of three parties. The model thus helps explain the endurance of inefficient electoral institutions: if any reform is punished, even unbiased reforms are untenable.


## Keywords

Political institutions, democratic norms, electoral reform, partisan politics

Word Count 10,003 (excluding title page and online appendices)

[^0]
## 1 Introduction

Since the establishment of the 5th Republic in 1958, the French National Assembly has been elected with a two-round majoritarian system. There is one exception, however: in 1986, the French lower house was elected by proportional representation, following a reform that President Mitterrand and his socialist government introduced a year before. This reform is generally interpreted as a highly opportunistic move (Eatwell, 1986, 316). The Socialists, who had won the election of 1981, were far behind in the polls and anticipated a heavy defeat in 1986. The reform promised to limit their seat losses and to split the right (Renwick, 2010, 102). For the very same reasons, the reform was strongly opposed by the opposition parties and was unpopular with the public (Knapp, 1987, 92). ${ }^{1}$

After the 1986 electoral loss by the Socialists, the new conservative government quickly changed the system back to the old majoritarian system. The Socialists then won the election of 1988; yet, the Socialist government quickly became deeply unpopular again. Thus, the situation before the 1993 election in many ways resembled the situation in 1985/86. Faced with another defeat, the Socialists contemplated whether to use the same tool again: "the situation was very similar to that of 1985, and, correspondingly, Mitterrand gave serious consideration in late 1991 and early 1992 to the adoption either of full PR or of a mixed-member majoritarian (MMM) system" (Renwick, 2010, 104). And yet, the Socialists decided against repeating the same maneuver.

What explains this reluctance to repeat the same opportunistic maneuver and reform electoral law in a way that had increased the party's vote share in the past? In our view, this case points to a much broader question. After all, the 1986 French election is a standard example in the literature on electoral reform, because such cases of opportunistic behavior are so rare.

[^1]Although opportunistic electoral reform seems to offer obvious advantages, incumbents almost always refrain from using this tool, although reforms of electoral laws often require little more than a bare majority of votes in a country's legislature. ${ }^{2}$ This is all the more surprising, since the rational choice literature on the origin of electoral systems typically describes electoral system choice as a supremely tactical maneuver in which parties seek to maximize their own electoral chances (Boix, 1999). As Richard Katz put the question: "If the parties in power could give themselves an advantage, why do they not do so more often?" (Katz, 2005, 60).

In the case of the French non-reform of 1993, the literature typically points to the resistance within the Socialist party (Renwick, 2010). This resistance had a variety of reasons, but one was the concern that "the mere fact that the party would be repeating an old trick may have made it harder to execute the maneuver without high cost to voter affect" (Renwick, 2010, 105) and that "tinkering again with the electoral system would discredit the PS more than it would benefit it" (Goldey, 1993).

In the following pages, we elaborate a formal model in which we formalize this intuition. Using this model, we explore reform incentives by politicians and pay special attention to the effects electoral reforms have for the politician's electorate. We argue that voters are busy, and the average voter likely does not have the time or interest to investigate and understand every reform put forward by parties (Lupia and McCubbins, 1998; Canes-Wrone, Herron, and Shotts, 2001). It is thus difficult for voters to inform themselves about the quality of electoral reforms and to punish parties only when they implement a biased reform. However, even though voters do not necessarily understand reforms in full, they do know that parties likely benefit from instituting biased reforms. As long as the existing institutions are not too bad, a biased party thus has more to gain from instituting a reform than an unbiased party. Under

[^2]these conditions, an unbiased type can only distinguish himself by refraining from reforms. For this reason, voters tend to assume that a party and the reform are biased, when they observe a reform and they punish the party by not supporting them electorally. The model helps us form expectations about how information about a political party's support for a proposed electoral reform affects citizen perceptions of the reform and support for the party.

We test these predictions using survey data from Germany. Germany has several attractive attributes for testing our theory. First, contemporary Germany is widely recognized as having stable democratic institutions, with a mixed-member proportional electoral system that satisfies the joint goals of general proportionality and district representation. Second, the German government just reformed the electoral system, after many years of dicussion, and against the resistance of the opposition parties, which are now challenging the reform in the German constitutional court (Behnke, 2022; Faas and Roßteutscher, 2022). The mixed-member proportional system has posed challenges in recent years, as some parties win a disproportionate number of electoral districts - the district seats that are won beyond those that would be granted by proportionality are called 'overhang seats'. ${ }^{3}$ In order to maintain proportionality, so-called 'compensation seats' must be added to the Bundestag, which are awarded to parties who won larger shares (or proportions) of votes but relatively few districts. The need to create these compensation seats has led to a massive increase in the size of the Bundestag. The current Bundestag is more than $20 \%$ bigger than its statutory size.

The two main political actors, the parties that form the incumbent coalition government (SPD, Bündnis 90/Die Grünen, and the FDP) and the biggest opposition party (CDU/CSU), ${ }^{4}$

[^3]each put forward reform proposals during the summer of 2022 (Deutscher Bundestag, 2022). Each proposal would reduce the size of the Bundestag, but they do so in different ways. The coalition proposal would maintain proportionality at the expense of district representation, eliminating overhang seats. The opposition proposal favors district representation over proportionality, eliminating compensation seats while introducing a system of parallel voting (which would have turned the mixed member proportional into a mixed member majoritarian system).

Administering our survey in Germany thus allows us to investigate how voters respond to proposals to reform institutions in an otherwise stable political environment. We conducted a survey of 1693 Germans in October 2022, i.e., after the reform proposals became public in June 2022, but before the Bundestag decided on any reform in March 2023. We randomly assign respondents to one of four experimental groups based on whether they receive information about a specific real reform proposal (cutting overhang seats as proposed by the coalition parties, or parallel voting as proposed by the CDU/CSU) and which political parties introduced the proposal (with party cue or not). We then ask respondents about the quality of the proposals and about which political parties are likely to get their votes in future elections. This research design thus allows us to evaluate whether voters are less supportive of parties and reform proposals, when they know that the parties are responsible for the proposals.

In line with our formal model, we show that voters are less supportive of the parallel voting proposal (introduced by the opposition) and less likely to vote for the opposition in future elections, when they are informed that the CDU/CSU introduced the proposal. Although conservative voters may be more resistant to change in general, their general resistance does not explain why they would also become less supportive of the proposal when it is attributed to their political party. This pattern is consistent with our theory. Citizens learn - from the attribution to the opposition party which, because of the electoral geography, has much to gain from parallel voting - that the reform is likely to be biased, and they punish the party accordingly. Even voters who voted for the opposition in the 2021 federal election follow the predicted
pattern: They become less supportive of the reform proposal, when they learn that their own party proposed it.

Conversely, we find the opposite for the proposal to cut overhang seats introduced by the governing coalition. Here, cuing respondents that three parties are jointly responsible for the proposal actually makes respondents more supportive of both the proposal and the coalition parties. We discuss this finding in the context of the formal model: if the reform is made jointly by multiple, different parties, voters may perceive this coalition as less biased - biases of small and large parties, biases of urban versus rural parties, or biases of left and right parties may cancel each other out. When bias is sufficiently small, the predicted equilibrium changes and both parties support the electoral reform: unbiased parties feel no need to abstain from reforms, because even the biased reform is not so bad. The results from the survey experiment for the coalition's proposal to cut overhang seats are consistent with voters perceiving that coalitions are less biased than individual parties, and they do not punish coalitions for reforms.

Explaining how and when stable political institutions emerge as well as under which conditions they endure remains one of the most important challenges for political science (Tsebelis, 1995; Pierskalla, 2010; Bermeo, 2016; Graham and Svolik, 2020). Using data on electoral reform in Europe and constitutional reforms worldwide, we additionally show that introducing a new reform is consistently negatively associated with the vote-share of the incumbent government. Importantly, the negative association becomes smaller in magnitude and loses statistical significance when the country is governed by a coalition of two or more political parties. Against this background, our theory has several broader implications that travel beyond the case of electoral reform in Germany. First, we contribute to the emerging literature on citizen preferences for electoral institutions (Aldrich, Reifler, and Munger 2014). Our results are consistent with research showing that citizens consider both their own self-interest (Blais et al., 2015; Weber, 2020) as well as their values as they evaluate electoral institutions. Citizens may for example support reform when trying to end a crisis (Shugart, 2001), or they
may also support institutions that incorporate progressive values like inclusiveness and fairness (Bol, 2016; Riambau, Stillman, and Boe-Gibson, 2021; Virgin, 2023; Bol et al., 2023). Our results suggest that citizens are also concerned about politicians' use of reforms to erode the quality of representation. The results thus suggest a caveat to Blais et al. (2015), who show that right-wing voters support reforms that benefit their party and they prefer voting for a single party. While they may, they are also willing to punish their own party for reforms that they believe are biased.

Second, the theory suggests a crucial role for voters in maintaining the stability of democratic institutions. Even uninformed voters can play their part if they punish parties for electoral reforms. The evidence nevertheless also suggests that parties can make electoral reforms more palatable to voters by introducing them through a coalition of several, meaningfully different, parties. This insight is consistent with the historical development of political institutions in Germany. Previous reform attempts have failed because parties in the Bundestag sought to find unanimous support for the reforms. Unanimous support is a high bar, but it also communicates a lack of bias to voters and prevents voters from punishing any single party for reforms.

Third, the argument helps explain the endurance of modestly inefficient institutions. If parties are punished for any reform, they cannot make biased reforms but they are also prevented from instituting unbiased reforms that would make the electoral system more efficient. That voters assume parties and politicians are biased when they observe reform attempts could help explain the lack of political will for electoral reforms.

## 2 Theoretical Argument

We elaborate a formal model that captures the following intuition: We assume that parties can be biased or unbiased, a difference that is not directly observable to voters, as biased parties benefit from being misidentified as unbiased. Biased parties would prefer to implement a
biased institutional reform while unbiased parties prefer unbiased reforms. This distinction is consistent with Virgin (2023) who finds survey evidence that electoral reforms are motivated by core values, which would be unbiased, and by partisan self-interest, which would be biased.

We further assume that voters do not fully understand the details and consequences of any specific reform proposal. But they do assume that biased parties could benefit from instituting a biased reform - for example an electoral reform that would increase a specific party's representation in the legislature. As long as the existing institutions are not too bad, a biased party has more to gain from instituting a reform than an unbiased party. For this reason, in countries with otherwise stable electoral institutions, voters tend to assume that both the party and its reform are biased, when they observe reforms, and they subsequently punish the party by not supporting it electorally.

Based on this model, we expect that citizens are (a) less supportive of electoral reform proposals that are associated with a specific party and (b) less supportive of and less likely to vote for the specific political party that proposed the reform in future elections - when they are informed that a specific political party proposed the reform, relative to when they only read about the content of the reform with no party cue.

### 2.1 Formal model

In this section, we consider a simple signaling model to motivate our experimental analysis. There are two actors in the game: an incumbent party and a pivotal voter. The incumbent party may be one of two types, biased or unbiased. We are interested in the potential for electoral reform in stable democratic systems, so we assume that the pivotal voter is the median voter under the status quo electoral institutions. If the biased type of incumbent reforms political institutions, he selects a new pivotal voter. ${ }^{5}$ To allow for punishing and rewarding party actions, the stage game is played two times. Second period payoffs are discounted by $\delta \in(0,1)$

[^4]The sequence of play in each stage game is as follows.
Stage 1

1. Nature selects either the biased party, with probability $p$, or the unbiased party, with probability $1-p$. The incumbent observes its type; the voter does not.
2. The incumbent decides whether to reform the electoral law or not. The voter observes the reform decision, but, if a reform is made, the voter does not observe the bias of the reform.
3. The voter decides whether to retain or remove the incumbent.

## Stage 2

1. The incumbent, the same if retained and a new incumbent drawn by nature if removed, decides whether to reform the electoral law.

The biased party gains from making biased reforms. It receives $\beta$ from reforming political institutions in a biased way. In the discussion below, $\beta$ is often referred to as the extent of the political bias. Without a reform or if the unbiased party reforms, the biased party's payoff is zero. The unbiased party gains $b$ from its own reform, $-\beta$ from the biased party's reform, and 0 if no reforms are made. This assumption is consistent with an unbiased politician seeking to make modest reforms that are more efficient and seeking to prevent biased reforms that undermine the integrity of the electoral process. Both parties receive some political rents from being retained in office, $\delta r .^{6}$

Similar to the unbiased politician, the pivotal voter gets a payoff of $b$ from unbiased reforms, $-\beta$ from biased reforms, and 0 from no reforms. We assume however that a biased reform also alters the identity of the pivotal voter; we call this new pivotal voter the 'potential pivotal voter'. The potential voter shares some affinity, $\alpha$, with the biased party (but only if the biased party has made the reform and thus changed the identity of the pivotal voter). $\alpha$ could for example capture transfers and other privileges that the voter receives from his preferred party's policies.

[^5]Figure 1 Model Primitives


Figure 1 displays the tree representation of the game. The payoffs include both the first period realized payoffs and the second period anticipated payoffs. ${ }^{7}$ As is the case in these sorts of games, there is no meaningful cost to reforms in the second stage, and both types of party reform institutions and select their ideal points in the second stage. The tree includes these anticipated payoffs from second-stage play, and the discussion here focuses on equilibrium play in the first stage of the game.

Consistent with institutional design in many countries, there is no direct cost to electoral law reform; for instance, incumbents are usually not required to hold elections immediately after changing electoral rules. ${ }^{8}$ The decision to reform an electoral law can however trigger a response from voters later on. The model assumes that the voter knows when electoral laws are reformed, but he lacks the specialist knowledge and time to discern the bias of the reform.

[^6]He instead is likely to make assumptions about the bias of the reform and the bias of the party when he observes politically supported reforms.

### 2.2 Discussion

Before proceeding with our main theoretical insights, it is necessary to derive scope conditions for the theory. If enough voters do not value democratic institutions, then the biased party is able to reform institutions such that the new pivotal voter is their core supporter and thus guarantees their future electoral success. We are interested in the case where voters value democratic institutions and would thus be willing to take actions to prevent backsliding, even if only at the ballot box. The phenomenon that our model stresses is the voter's lack of information about the bias of electoral reforms - which may require highly specialized knowledge. To hone in on this aspect of the reform process and rule out biased reforms that are supported by biased voters, we make the following assumption.

Assumption 1. The magnitude of the potential pivotal voter's affinity for the party is less than the difference between the voter's payoff from the two parties' reforms. $\alpha<\beta+b$

In other words, the potential pivotal voter must care about preventing biased reforms more than he benefits from his preferred party being in power. This condition is related to shared democratic norms (Levitsky and Ziblatt, 2018; Invernizzi and Ting, 2024). If this condition does not hold, democratic institutions unravel, and the biased incumbent reforms institutions to ensure that he is accountable only to his own supporters. In other words, this condition is necessary to prevent biased politicians from having a dominant strategy to reform electoral institutions to consolidate their political power - regardless of political opposition. Because we are interested in allowing for the possibility that politicians abstain from reforms due to concern about political opposition, we assume that the condition holds. ${ }^{9}$

[^7]
### 2.3 Equilibrium and Model Insights

We use the Perfect Bayesian Nash equilibrium concept, which is appropriate for a sequential move game of imperfect information. We apply the D1 refinement in order to identify the plausible equilibrium for each set of parameter values (the Intuitive Criterion produces the same predictions, as is common in these sort of models Cho and Kreps, 1987; Fudenberg and Tirole, 1991, 446-450). Formal derivations of the equilibria are in the Appendix.

There are three possible equilibria to this model. In the first equilibrium, emphasized here, both the biased and the unbiased type refrain from reforming electoral law. We call this stable electoral rule. In this equilibrium, the unbiased type abstains from reform in order to ensure that they are retained (and to prevent the biased type from having the opportunity to make a biased reform). The biased type abstains from reform, because reform would reveal their type and they would be removed from office. We argue that this equilibrium prevails in many stable democracies, where reforms to electoral institutions only occur infrequently if at all.

In the second equilibrium, both the biased and the unbiased types reform the electoral law. This equilibrium prevails whenever the unbiased type is willing to reform: when the bias is so small that even reforms by the biased type are non-problematic or when the existing rule is so biased that immediate efficient reforms are necessary (even from the voter's and unbiased type's perspectives).

The final equilibrium is fully separating, where the biased type reforms the electoral laws and the unbiased type does not. This separating equilibrium prevails when the benefits of biased institutions are so large that the biased type is unconstrained by the threat of impending electoral punishment.
have one last election to punish parties for reforms. Or, there could be a cost to reforms, such that more biased reforms are more costly, which would incentivize modest reforms. This could also be combined with uncertainty. We opted to not assume costs to reform and instead derive them endogenously.

In general, the biased type benefits from being misidentified as the unbiased type by voters. For this reason, it will often mimic the strategy of the unbiased type. In the only equilibrium where the electoral law retains its independence from political interference and neither type reforms, voters always remove the incumbent following reforms. Following no reform, voters believe the incumbent is unbiased with probability $p$ and retain the incumbent. ${ }^{10}$ Following reform, the voter believes the incumbent is unbiased with probability less than $p$ and removes the incumbent. The only way to prevent biased electoral reforms is when parties would be removed from office if they reformed.

Proposition 1. Stable electoral rules, where both types of party refrain from reform, are only possible when reform is punished by the voter.

Voters thus derive information from the decision to reform, even without observing the precise bias of the reform: When a party introduces a reform, they believe that the reform is likely to be biased and that the party introducing it is likely to be of the biased type. We return to this point in the empirical analysis below. If the theory is correct, then voters increase their belief that the party and its associated reform are biased - when a party proposes electoral reforms.

Proposition 2. In the equilibrium with stable electoral rules, voters believe that the party and the associated electoral reform are biased when they observe an electoral reform.

The two propositions provide insights that are important for the empirical analysis here. Voters punish parties for reform of electoral rules where two conditions hold: First, bias must exist. Voters must be able to perceive that parties could derive substantial personal or partisan benefit, at the expense of the public, from reforms. Second, voters must believe that parties are biased when they observe electoral reforms, and they must punish parties for reforms to their electoral rules. Because voters believe that the party is biased when they observe electoral

[^8]reforms, they also believe that their reform is biased. Only under these conditions do parties of both types abstain from reforms, producing stable electoral systems.

### 2.4 Testable Hypotheses

In the following, we propose an empirical strategy to evaluate the following hypotheses.

H1. Voters believe that political parties are more biased and become less supportive of parties who propose changes to electoral laws.

H2. Voters believe that reforms to electoral laws are more biased and become less supportive of the reforms when they are associated with a specific political party.

## 3 Empirics

In order to evaluate the theory, we elaborate a research design that captures whether proposing electoral reforms affects support for 1) political parties and 2) the electoral reforms themselves. In a political system with stable electoral institutions, ${ }^{11}$ we expect that proposing biased reforms will degrade support for both the reforms and the political parties that are associated with the reforms.

We draw on a survey experiment in Germany to test our expectations. Germany has a Mixed-Member Proportional electoral system, with some seats in the Bundestag - the main national legislative body - elected in specific electoral districts, while others are drawn from party lists (precise details about the current electoral system are presented below). Germany provides an appropriate case study for our analysis, because the electoral system was recently

[^9]reformed after multiyear discussions. Before the reform was voted on in March 2023, the current coalition government - the Social Democrats (SPD), Green Party (Bündnis 90/Die Grünen) and the Free Democrats (FDP) - had made one proposal, while the opposition conservative block (Christian Democratic Union and Christian Social Union in Bavaria, CDU/CSU) had introduced an alternative proposal. As assumed in the theoretical model above, the content of both reforms is highly specialized, but many Germans were generally aware that politicians were considering reforming the electoral system.

### 3.1 Experimental Design

We fielded an online survey in October 2022 that contains a sample of 1693 German respondents. The survey was programmed using the Qualtrics platform, and participants were recruited through the Bilendi company. ${ }^{12}$ We selected participants that are at least 18 years old, reside in Germany, and are eligible to vote in German federal elections. We used quotas with regard to gender, age, and education to ensure the representativeness of our sample for the German population aged 18-74. The survey was pre-registered with OSF, and the pre-registration is included in the Appendix (Section A.3).

Respondents first answered a standard set of questions on demographics, political interest, voting behavior in the 2021 federal election, and on basic knowledge about German election

[^10]law. Next, we presented all respondents with information and follow-up questions regarding the current Bundestag election law, and asked for respondents' evaluation of the status quo as well as the need to reform. We then assigned respondents to four different treatment groups of roughly equal size. The treatments described one of the two reform proposals that were discussed and either attached the party to the reform proposal (or not). These treatments allow us to assess whether the direct association of a specific proposal with its party proposer affects support for the party and support for the proposal.

### 3.1.1 Information Received by All Respondents

All respondents received a simplified description of the current electoral system in Germany and were then asked to evaluate the quality of the current Bundestag election law and the urgency of reforming the current law. Because the Bundestag election law is non-intuitive, especially outside of Germany, we duplicate the information provided to respondents about the status quo electoral law here.

Information for all respondents "The law for electing the Bundestag is as follows: The share of second votes a party wins determines how many seats that party receives in the Bundestag. A party that wins $20 \%$ of the second votes should therefore also receive about $20 \%$ of the seats in the Bundestag. The federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. Every person who wins one of the constituencies is guaranteed to enter the Bundestag. Sometimes, a party wins more constituency seats than it is entitled to according to the proportion of second votes. These additional seats are called overhang seats. To ensure that this party's share of seats corresponds to its share of second votes, all other parties receive additional seats in this case, so-called compensation seats. As a consequence of the overhang and compensation seats, the Bundestag regularly exceeds the size of 598 members. This is why the Bundestag has grown significantly in recent years to its current 736 members."

After reading this information, respondents were then presented with a hypothetical election outcome and asked a factual question about the number of seats that a party would have
in the Bundestag based on this hypothetical. The respondents were then informed about the correct answer.

### 3.1.2 Treatment Groups

We then randomly assigned respondents to one of four experimental treatment groups. Groups 1 and 2 received information about the parallel voting proposal, but only Group 2 was informed that it was introduced by the opposition. Similarly, Groups 3 and 4 received information about the proposal to cut overhang seats, but only Group 4 was informed that it was introduced by the coalition.

Table 1 Treatment Groups

|  |  | Party cue |  |
| :--- | :---: | :---: | :---: |
|  |  | No | Yes |
| Proposal | Parallel voting (proposed by opposition) | Group 1 | Group 2 |
|  | Cut overhang seats (proposed by coalition) | Group 3 | Group 4 |
|  |  |  |  |

By comparing support for the reform and support for the associated party across Group 1 and Group 2 and then across Group 3 and Group 4, we can identify the effect of associating a party with the reform - holding the reform itself constant. Because the information on the reforms is highly specialized and pertinent, we again report the text read by the respondents here.

Every respondent read "At the moment, there are discussions to change the current Bundestag election law." They then read one of the treatment or control conditions.

Group 1: Information about the parallel voting proposal.
"One proposal is as follows: Only half of the seats in the Bundestag (299 out of 598) will be divided among the parties according to the proportion of second votes. The other 299 will be determined exclusively by districts. A party that wins $20 \%$ of the second votes thus does not have to receive $20 \%$ of the seats in the Bundestag. As before, the federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. Every person who wins one of the districts is guaranteed to enter the Bundestag. Since the second votes now only determine the other half of
the seats, a party always receives one seat for each constituency it wins. There will no longer be any overhang or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, the share of seats that the party receives in the Bundestag will no longer correspond to its share of the second votes if it wins very many or very few districts."
Group 2: Information about the proposal and the party cue "The proposal of the CDU/CSU [...]" instead of "One proposal [...]".
Group 3: Information about the proposal to cut overhang seats.
"One proposal is as follows: As before, the share of second votes that a party wins determines how many seats that party receives in the Bundestag. A party that wins $20 \%$ of the second votes should therefore also receive about $20 \%$ of the seats in the Bundestag. As before, the federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. However, not every person who wins one of the districts is guaranteed to enter the Bundestag. If a party wins more districts than it is entitled to according to the proportion of second votes, it may not fill these overhang seats. There will no longer be any overhang or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, not all candidates who win a district will receive a seat in the Bundestag if their party wins more constituencies than it is entitled to according to second votes."

## Group 4: Information about the proposal and the parties cue

"The proposal of the SPD, Bündnis 90/Die Grünen, and FDP [...]' instead of ‘One proposal [...]".

### 3.1.3 Dependent Variable

Following the reform description, respondents were asked to evaluate the election law proposals. They were also asked about which political parties are likely to get their votes. These questions allow us to assess whether the association of a proposal with a specific party affects the perceived quality of the proposal and the likelihood to vote for the party in the future.

## Quality of proposal.

"How do you evaluate the election law reform proposal?" [7-point scale, ranging from 'very bad' to 'very good'].

## Party support.

"There are a number of political parties in Germany, each of which would like to get your vote. For each of the following parties, please indicate how likely it is that you will vote for them." [10-point scale for each of the following parties: SPD, CDU/CSU,

Bündnis 90/Die Grünen, FDP, AfD, Die Linke].

We concluded the survey with questions on income, the economic situation of the household, place of residence, as well as a question about the last time respondents preoccupied themselves with details regarding German election law.

### 3.1.4 Discussion

The proposed research design has several attractive attributes. First, the electoral laws are real, as is the bias of the political parties. The parallel voting proposal for example would plausibly increase the share of seats in the Bundestag granted to the opposition parties. ${ }^{13}$ Indeed, Germans perceive the potential for reforms to electoral laws to benefit some parties over others. In a recent survey, the Bertelsmann foundation found that the top priority of respondents was that "no party gains an advantage over other parties."14

Second, our research design allows us to assess the effects of the party association, independent of the quality of the proposal. We expect that respondents may have different reactions to the proposals. For example, if one of the proposals is of lower quality, we expect that support for that proposal would be lower. However, we still anticipate that associating that proposal with a specific party will reduce this baseline level of support.

This would also be the case if perceptions of quality-differences between the proposals would arise from the quality of our descriptions, since we use almost identical language across the treatment and control groups (holding the proposal constant): the only difference is whether

[^11]the party cue is given. Thus, even if the description of one of the proposals is much better, it could affect the baseline level of support, but it should have little effect on the difference between the level of support across the treatment and control groups.

Third, we can also isolate effects for both support for political parties and support for the proposals. This is important here, because the quality of the proposal could directly affect support for the associated party (rather than through the information mechanism presented above). For example, if one proposal is of lower quality, associating a party with the proposal may directly reduce support for that party. Voters would thus learn about the quality of the party from the quality of their proposal. By looking at support for the proposals directly, we can assess whether associating the proposal with a specific party lowers support for the proposal (not just support for the party).

Finally, we can examine which respondents are more sensitive to the association, which could depend on their party identification. For example, conservative voters might be adverse to policy change and thus be less supportive of reform in general. We can assess whether they are less supportive of reforms on average, but this assessment is separate from the effect of the party cue - which we anticipate will make voters less supportive of the party associated with the reform.

### 3.2 Empirical Findings

The main expectation from our formal model is that popular support for an electoral reform proposal should decrease when the proposal itself is politicized. As voters perceive the proposal to be biased towards the party that proposes it, this should also translate into less support for that party in future elections.

Figure 2 Effect of Opposition Party Cue on Support for the Proposal and Party


Note: Average support including $95 \%$ confidence interval for two experimental groups.

### 3.2.1 Parallel Voting

We start by discussing the findings regarding the proposal to introduce parallel voting. The left panel of Figure 2 shows the difference in support for the this electoral law reform proposal, as proposed by the major opposition parties, between two of the treatment groups: Group 1 only read about the contents of the proposal, while Group 2 additionally received information about the fact that this reform was proposed by the CDU/CSU. Average support shrinks by .20 points for respondents that receive a party cue, a statistically significant difference. Informing people not only about the contents of the reform proposal, but also about the proposer reduces support for the proposal. The right panel shows the likelihood to vote for the CDU/CSU in the

Figure 3 Heterogeneous Effects of Party Cue on Opposition Support


Note: Average support including 95\% confidence interval for two experimental groups.
future among those in Group 1 and Group 2. ${ }^{15}$ In line with our expectations, the likelihood to vote for the party also drops by 7 percentage points for respondents that receive the party cue.

Figure 3 investigates whether the negative effect of receiving a party cue for this reform proposal is conditional on whether respondents supported the opposition or one of the coalition parties in the 2021 federal election in Germany. The left panel shows that respondents provide less support for the opposition party proposal regardless of who they voted for previously. Both opposition and coalition party supporters are less supportive of the reform proposal when they receive the party cue.

In the right panel of Figure 3 we go one step further and investigate whether the decrease

[^12]in proposal support translates into a lower probability to vote for one of the opposition parties in future elections. While the probability to vote for the opposition is - as expected - much higher for respondents who previously vote for the opposition (about 92\%, compared to 43\%) it decreases by about 12 percentage points to about $80 \%$. We detect the same pattern for respondents that previously voted for one of the coalition parties. Hence, politicizing institutional reforms leads to heavy electoral costs if voters perceive a possible reform as biased, even among their core supporters. In addition, this is perhaps evidence that Assumption 1 is likely to hold in the German context: at least some CSU/CDU partisans seem to value democratic institutions more than their affinity for their party.

### 3.2.2 Cutting Overhang Seats

Next, we discuss the finding regarding the proposal to cut overhang seats, as introduced jointly by the three coalition parties. When examining this proposal, our findings were at first glance quite surprising, because they run counter to our main expectations. We first present the findings and then discuss them in the context of the theoretical model.

In the left panel of Figure 4, we compare support for the proposal to cut overhang seats, as proposed by the coalition parties, between one group who only read about the proposal, and a second group who was additionally given the party cue. For this proposal, average support increases by .18 for respondents receiving the party cue. The likelihood to vote for any of the three coalition parties also increases by 5 percentage points for respondents that receive the party cue. ${ }^{16}$ Hence, receiving the party, or more accurately 'coalition', cue in this case makes voters more supportive of the proposal and more likely to vote for the coalition in the future.

[^13]Figure 4 Effect of Coalition Party Cue on Support for the Proposal and Party


Note: Average support including $95 \%$ confidence interval for two experimental groups.

### 3.3 Results in Context

The propositions and hypotheses discussed above came from the equilibrium with stable electoral rules, where the two types of party pool on no reform. In this section, we consider the plausibility of the conditions that are necessary for this equilibrium prediction. Stable electoral rules emerge when the incentive compatibility conditions are met: $\beta \geq \frac{b(1-\delta p)-\delta r}{\delta p}$ for the unbiased party and $\beta \leq \frac{\delta r}{1-\delta+\delta p}$ for the biased party. Bias must be sufficiently large that the unbiased party abstains from reforms in order to prevent a biased party from being elected. At the same time, bias must be sufficiently small that the biased party is also willing to abstain from reform. Thus, stable electoral rules result only at middling levels of bias.

If voters do not perceive large partisan gains from a biased reform, they will not punish
parties for reforms. Anticipating this, both types of parties will reform and the both reform equilibrium will result. This could help explain the lack of voter punishment for the coalition proposal to eliminate overhang seats. If voters perceive that a coalition of parties is less likely to be biased, because their positions represent a compromise among several different parties, then voters have no reason to punish the parties for reforms.

More formally, we briefly consider the game above when a coalition of $n$ parties is in power. We parameterize the bias of each political party in the coalition as $\rho$. We assume that each party's $\rho$ is independently drawn from a distribution with mean zero. The bias of the coalition is just the average of the biases of each of the coalition members, $\beta=\frac{\rho_{1}+\rho_{2}+\ldots+\rho_{n}}{n}$. The game is then played with the coalition as the incumbent party. All players observe the bias for each political party and the potential coalition bias, $\beta$, but they do not know the type realization, $\theta$. As before, they believe the incumbent coalition is of the biased type, $\theta=\beta$, with probability $p$ and the unbiased type, $\theta=0$, with probability $1-p$. The game described above is then played by the incumbent coalition.

In accordance with these assumptions, the bias of coalition party members could go in the same direction or opposite directions. However, as more and more parties join the coalition, their biases cancel each other out, on-average. For example, when considering a reform about altering a threshold for representation in an elected body, small parties often benefit from a lower threshold, while large parties benefit from a higher threshold. A reform that lowers the voting age, might benefit left parties (at the expense of right parties), while a reform that favors district representation might benefit parties with concentrated support (at the expense of those with diffuse support). Because there are a finite number of votes, any reform that benefits one party comes at the expense of other parties. If these sorts of varied parties are in the coalition, their biases should cancel each other out, yielding a mean bias that approaches zero as the number of parties increase.

Proposition 3. The magnitude of the coalition bias decreases (and converges to zero) as the
number of parties in the coalition increases.

Since coalitions should have smaller biases, we now consider how an incumbent coalition would affect equilibrium selection. When considering a context with stable electoral institutions, a reduction in bias could tip the equilibrium out of the stable electoral rule equilibrium and into the both reform equilibrium.

Proposition 4. The both reform equilibrium becomes more likely as the number of parties in the coalition increases.

When a coalition is responsible for the electoral reform, voters believe that they are less biased and they introduce a less biased reform. Because of this, there is no need for voters to punish coalitions for reforms. Following a similar logic, Klüver et al. (2023) find that information from coalitions of interest groups is viewed as more credible (less biased) than information from single interest groups.

These propositions provide some insight into the differing results for the coalition's and the opposition's proposals. We do not expect punishment at the ballot box when voters have few reasons to perceive an actor as biased. Here, we argue that voters tend to associate a coalition of parties with lower levels of bias, because their policy positions already represent a compromise, making the both reform equilibrium more likely. Voters then are less likely to perceive that the coalition proposal is biased and less likely to punish the coalition for making a proposal.

The fact that we find seemingly contradictory effects with regard to the two reform proposals that were debated thus makes sense for the German case. One proposal comes from a single political entity. When respondents learn that only the opposition party is associated with a proposal, they are more likely to expect that the proposal is biased. The coalition's proposal alternatively has plausibly emerged from a compromise between three (very different) political parties. The coalition proposal has the support of the SPD (center-left), the Green party, and

Figure 5 Popularity of Proposals, without Political Cues Popularity of German Electoral System Reform Proposals


Note: Average support including 95\% confidence interval.
the FDP (free-market). Knowing this, we find it plausible that voters perceive the coalition and the coalition proposal to be less biased.

Consistent with this interpretation, the proposal to cut overhang seats seems to be less biased in general. Figure 5 displays the average popularity of the two reform proposals as well as the status quo. Voters in the control group, who were not given a party cue, are (statistically significantly) more supportive of the coalition's proposal than the opposition's proposal to introduce parallel voting.

### 3.4 Politicizing Reforms: Voting Age

Going one step further, we can also use the survey to assess whether the deterrence of voters by politicizing institutional reforms with the party cue travels to issues that the actual election law reform proposal itself does not cover. To do so, we informed respondents about a proposal to lower the voting age to 16 in federal elections (the voting age is currently 18).

## Voting age.

"In addition to reforming the allocation of seats, there is also discussion of lowering the voting age in federal elections. If politicians lowered the voting age, do you think such a reform would help ensure that all citizens have a fair chance to have their concerns taken into account politically?" [7-point scale, ranging from 'not at all' to 'very much']

We then investigate whether respondents who were informed about either the CDU/CSU party or the coalition proposal also have a less or more favorable view of reforms to lower the voting age to 16 , when they received the party cue. Importantly, the proposal to introduce parallel voting and to cut overhang seats did not include any such provisions. Figure 6 shows that respondents become less supportive for lowering the voting age to 16 when they were previously primed by the CDU/CSU party cue. The coalition cue however does not seem to travel to support for voting age reforms. In sum, once voters start to think about the bias of parties, they may be more reluctant to support any reform proposals.

Figure 6 Effect of Party Cue on Support for Lowering the Voting Age


Note: Average support including $95 \%$ confidence interval for two experimental groups.

### 3.5 Electoral Reforms and Party Support

The experimental evidence obtained through the public opinion survey helps corroborate our argument in a specific context. In this section, we assess the generalizeability of these results to other countries. If the theory is applicable to a wider set of countries, we should observe that voters punish incumbent parties when they alter political institutions. Following the discussion above, we also expect the results to be less pronounced when the incumbent is a coalition of parties, as their reforms should be perceived as less biased.

To assess these claims, we draw on data from European Electoral Reforms (Patkós and Stump, 2023) and the Database of Political Institutions (DPI, Cruz, Keefer, and Scartascini, 2021). Following Patkós and Stump (2023), we code a dummy variable that equals one in years with a new electoral reform. ${ }^{17}$ From DPI, we code a variable, governing coalition, when there are two or more parties in the governing coalition. We also collect information on the vote-share of the governing parties. ${ }^{18}$ To assess our theoretical expectations, we first regress the government vote-share on the electoral reform dummy. We expect a negative correlation, as government parties are punished for electoral reforms. We also interact the electoral reform dummy with a dummy indicating coalition governments, as we expect the results to be attenuated for coalitions (who should be perceived as less biased).

There are many potential confounders here, but we attempt to control for what we perceive to be the largest challenges. At the same time, we acknowledge that the results are merely suggestive, as it is almost certainly the case that governments reform constitutions during times of upheaval, which may themselves trigger political costs. We first include a set of economic controls, GDP per capita and GDP growth, which are related to both voting turnout and economic voting (World Bank, as reported by the Quality of Government Indicators, QOG, Teorell et al.,

[^14]2022). We then add controls for governance (from the International Country Risk Guide as reported by QOG) and the Polity score (QOG), as domestic institutions may affect both voting behavior and the propensity to reform constitutions. ${ }^{19}$ To ensure that within country variation in reforms are driving our results, we add country fixed effects. To account for time trends and shared shocks across countries, all models include year dummies. Standard errors are clustered at the country level to account for interdependence across observations from the same countries.

Once merged, the dataset includes up to 27 countries from 1975 to 2011. ${ }^{20}$ Table 2 reports the results of OLS regression models. Columns (1-3) report the association between an electoral reform and the government vote-share. Columns (4-6) introduce the interaction between the reform with the governing coalition. Columns (1) and (4) report baseline estimates with only economic controls. Columns (2) and (5) add political controls. Columns (3) and (6) add country fixed effects. Figure 7 displays the marginal effect of a new constitution on the vote-share of the government parties as a function of coalition government (estimates from Column(6) of Table 2).

Across all models, introducing new electoral reforms is consistently negatively associated with the vote-share of the incumbent government. Importantly, the negative association becomes smaller in magnitude and loses statistical significance when the country is governed by a coalition of two or more political parties. This finding is consistent with the survey evidence that voters are less likely to punish politicians for electoral reforms that are introduced by a coalition of different parties.

Robustness. In the appendix, we report results from a series of robustness checks.
First, reverse causality could explain the results if politicians implement important reforms

[^15]Figure 7 Effect of an electoral reform on government vote-share


Table 2 Electoral Reforms and Voteshare for the Government

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Electoral reform | $-7.68^{* *}$ | $-7.17^{* *}$ | $-6.18^{* *}$ | $-12.5^{* *}$ | $-15.4^{* *}$ | $-14.1^{* *}$ |
|  | $(3.15)$ | $(2.96)$ | $(2.82)$ | $(2.56)$ | $(1.82)$ | $(1.68)$ |
| Electoral reform $\times$ |  |  |  | $9.65^{*}$ | $13.2^{* *}$ | $12.9^{* *}$ |
| governing coalition |  |  |  | $(5.44)$ | $(5.74)$ | $(6.20)$ |
| Governing coalition |  |  |  | 3.84 | $4.13^{* *}$ | 2.09 |
|  |  |  |  | $(2.56)$ | $(1.82)$ | $(1.68)$ |
| GDP per capita, log | 3.10 | $5.17^{*}$ | $25.0^{*}$ | .65 | $6.02^{* *}$ | 14.8 |
|  | $(3.39)$ | $(2.71)$ | $(12.4)$ | $(2.93)$ | $(2.18)$ | $(9.29)$ |
| GDP growth | -.15 | .27 | .20 | -.20 | -.044 | -.11 |
|  | $(.17)$ | $(.32)$ | $(.31)$ | $(.15)$ | $(.26)$ | $(.20)$ |
| Polity |  | $-3.00^{* * *}$ | $-2.09^{* * * *}$ |  | $-3.18^{* * *}$ | $-2.55^{* * *}$ |
|  |  | $(.36)$ | $(.45)$ |  | $(.33)$ | $(.31)$ |
| ICRG governance |  | 5.23 | -13.4 |  | -9.03 | -21.9 |
|  |  | $(14.3)$ | $(18.6)$ |  | $(11.5)$ | $(14.7)$ |
| Constant | -4.51 | 24.6 | -157.8 | 24.8 | 27.4 | -43.4 |
|  | $(34.2)$ | $(21.7)$ | $(126.9)$ | $(30.6)$ | $(19.8)$ | $(91.3)$ |
| Number Obs. | 781 | 583 | 583 | 757 | 570 | 570 |
| Number Countries | 27 | 25 | 25 | 27 | 25 | 25 |
| Year fixed effects | yes | yes | yes | yes | yes | yes |
| Country fixed effects | no | no | yes | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$
when they are already unpopular. In the Appendix, we show that our results are robust to controlling for the popularity of the government in the previous year (data from Carlin et al., 2023). We also report the effect of reforms in the previous year and in the future (we lag and lead the reform variable by one period). The negative association seems largely confined to the period in which the electoral reform takes place.

Second, we distinguish between major and minor electoral reforms and show that the results are similar in magnitude but sometimes lose significance when including only major reforms in the regression. This is plausibly because major reforms are much less common in our sample: while about $7.5 \%$ of the sample have at least minor reforms, only $2.9 \%$ experience major reforms.

Third, our theory should only apply in countries where citizens share democratic norms and punish politicians for violations of these norms. We thus evaluate whether our argument applies in new or in more consolidated democracies. We code countries as democratic when they reach a Polity2 score of seven or higher. We code a dummy variable for whether each country transitioned to democracy in the prior three, five, or ten years (there were no democratic reversals). We then interact the variables capturing new democracies with the electoral reform variable. ${ }^{21}$ We find that electoral reforms only consistently lead to loss of votes in more consolidated democracies. In those countries that experienced a democratic transition in the recent past, electoral reforms do not produce vote losses. ${ }^{22}$

Fourth, to assess the plausibility of our results in a broader sample, we draw on data from the Comparative Constitutions Project (CCP, Elkins and Ginsburg, 2022). We report that constitutional reforms are also negatively associated with vote share in a sample of 168 countries

[^16]from 1975 to 2020. The negative effect again becomes less pronounced when considering governments with governing coalitions - although the interaction term is not statistically significant.

## 4 Conclusion

In this article, we argued that parties who attempt to reform political institutions face a significant likelihood of being punished at the ballot box. This is because voters assume any reform to be biased, even and especially in situations where they cannot gather enough information about the contents of a reform. We find evidence using a real-world example of the ongoing electoral reform attempt in Germany, which we embed in a survey experiment. If respondents learn that a specific political party is responsible for a reform - as is the case for the CDU/CSU's proposal to introduce parallel voting - they become more skeptical towards both the reform and the associated party. If, on the other hand, respondents learn that a coalition is responsible for a reform, then they perceive that the reform and coalition are less biased. Because the reform is jointly proposed by multiple parties, voters actually become more supportive of institutional reforms.

Our argument and findings have implications for reform activities in democracies on a more general level. The expectation of future electoral punishment prevents both biased and unbiased politicians from reforming agencies or altering political institutions, when they cannot credibly signal unbiasedness. This explains why institutions are sticky, even though they can be altered rather easily. The informational cost of reform also provides a rationale for the continued existence of biased institutions, beyond veto players (Bodea and Hicks, 2015; Henisz, 2000; Keefer and Stasavage, 2003; Tsebelis, 1995) and beyond interest groups who benefit from the institution (Greif and Kingston, 2011; Shepsle, 2008; Weingast, Shepsle, and Johnsen, 1981). Lastly, our findings also point to the need to integrate work in behavioral and
institutional political science. It is only by understanding political behavior that we can explain when institutions endure.

## References

Aldrich, John, Jason Reifler, and Michael C. Munger. 2014. "Sophisticated and myopic? Citizen preferences for Electoral College reform." Public Choice 158 (3/4): 541-558.

Behnke, Joachim. 2022. "Wahlrechtsreform: Ist der gordische Knoten endlich geplatzt?" Zeitschrift für Politikwissenschaft OnlineFirst.

Bermeo, Nancy. 2016. "On Democratic Backsliding." Journal of Democracy 27 (1): 5-19.
Blais, André, Jean-François Laslier, François Poinas, and Karine Van Der Straeten. 2015. "Citizens' preferences about voting rules: self-interest, ideology, and sincerity." Public Choice 164 (3): 423-442.

Bodea, Christina, and Raymond Hicks. 2015. "Price Stability and Central Bank Independence: Discipline, Credibility, and Democratic Institutions." International Organization 69 (1): 3561.

Boix, Carles. 1999. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." American Political Science Review 93 (3): 609-624.

Bol, Damien. 2016. "Electoral reform, values and party self-interest." Party Politics 22 (1): 93-104.

Bol, Damien, André Blais, Maxime Coulombe, Jean-François Laslier, and Jean-Benoit Pilet. 2023. "Choosing an electoral rule: Values and self-interest in the lab." Journal of Economic Psychology 95: 102602.

Canes-Wrone, Brandice, Michael C. Herron, and Kenneth W. Shotts. 2001. "Leadership and Pandering: A Theory of Executive Policymaking." American Journal of Political Science 45 (3): 532-550.

Carlin, Ryan E., Jonathan Hartlyn, Timothy Hellwig, Gregory J. Love, Cecilia MartinezGallardo, and Matthew M. Singer. 2023. "Executive Approval Database 3.0." Dataset .

Cho, In-Koo, and David M. Kreps. 1987. "Signaling Games and Stable Equilibria." The Quarterly Journal of Economics 102 (2): 179-222.

Cruz, Cesi, Philip Keefer, and Carlos Scartascini. 2021. Database of Political Institutions 2020. Washington, D.C.: Inter-American Development Bank Research Department.

Deutscher Bundestag. 2022. "Unterrichtung durch die Kommission zur Reform des Wahlrechts und zur Modernisierung der Parlamentsarbeit." Drucksache 20 (3250).

Eatwell, Roger. 1986. "The French General Election of March 1986." Political Quarterly 57 (3): 315-321.

Elkins, Zachary, and Tom Ginsburg. 2022. "Characteristics of National Constitutions, Version 4.0." Comparative Constitutions Project Available at comparativeconstitutionsproject.org.

Faas, Thorsten, and Sigrid Roßteutscher. 2022. "Alive and Kicking: Electoral Reform in Germany Introduction to the Special Issue." German Politics OnlineFirst.

Fudenberg, Drew, and Jean Tirole. 1991. Game Theory. Boston, M.A.: MIT Press.
Goldey, David. 1993. "The French General Election of 21-28 March 1993." Electoral Studies 12 (4): 291-314.

Graham, Matthew H., and Milan W. Svolik. 2020. "Democracy in America? Partisanship, Polarization, and the Robustness of Support for Democracy in the United States." American Political Science Review 114 (2): 392-409.

Greif, Avner, and Christopher Kingston. 2011. "Institutions: Rules or Equilibria?" In Political Economy of Institutions, Democracy and Voting, ed. Norman Schofield, and Gonzalo Caballero. Berlin: Springer pp. 13-43.

Henisz, Witold. 2000. "The Institutional Environment for Economic Growth." Economics \& Politics 12 (1): 1-31.

Invernizzi, Giovanna M., and Michael M. Ting. 2024. "Institutions and Political Restraint." American Journal of Political Science Forthcoming.

Katz, Richard. 2005. "Why Are There So Man (or So Few) Electoral Reforms?" In The Politics of Electoral Systems, ed. Michael Gallagher, and Paul Mitchell. Oxford: Oxford University Press pp. 57-76.

Keefer, Philip, and David Stasavage. 2003. "The Limits of Delegation: Veto Players, Central Bank Independence, and the Credibility of Monetary Policy." American Political Science Review 97 (3): 407-423.

Klüver, Heike, Jan Stuckatz, Felix Hartmann, and Kai Uwe Schnapp. 2023. "Can interest groups shape public opinion? Experimental evidence from Germany and the UK." Working Paper .

Knapp, Andrew. 1987. "Proportional but Bipolar: France's Electoral System in 1986." West European Politics 10 (1): 89-114.

Levitsky, Steven, and Daniel Ziblatt. 2018. How Democracies Die. New York, N.Y.: Broadway Books.

Lupia, Arthur, and Mathew D. McCubbins. 1998. The democratic dilemma: Can citizens learn what they need to know? New York, N.Y.: Cambridge University Press.

Patkós, Veronica, and Árpád Stump. 2023. "Do electoral reforms tend to favour the incumbents? A quantitative analysis." Acta Politica 58: 118-140.

Pierskalla, Jan Henryk. 2010. "Protest, Deterrence, and Escalation: The Strategic Calculus of Government Repression." Journal of Conflict Resolution 54 (1): 117-145.

Pond, Amy. 2021. "Biased politicians and independent agencies." Journal of Theoretical Politics 33 (3): 279-299.

Renwick, Alan. 2010. The Politics of Electoral Reform. Changing the Rules of Democracy. Cambridge: Cambridge University Press.

Riambau, Guillem, Steven Stillman, and Geua Boe-Gibson. 2021. "What determines preferences for an electoral system? Evidence from a binding referendum." Public Choice 186 (1): 179-208.

Shepsle, Kenneth. 2008. "Rational Choice Institutionalism." In The Oxford Handbook of Political Institutions, ed. R.A.W. Rhodes, Sarah Binder, and Bert Rockman. Oxford: Oxford University Press.

Shugart, Matthew S. 2001. "Extreme Electoral Systems and the Appeal of the Mixed-Member Alternative." In Mixed-Member Electoral Systems: The Best of Both Worlds, ed. Mattew S. Shugart, and Martin P. Wattenberg. Oxford, Oxford University Press pp. 25-51.

Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Natalia Alvarado Pachon, and Richard Svensson. 2022. The QOG Standard Dataset 2022. Gothenburg, Sweden: The Quality of Government Institute.

Tsebelis, George. 1995. "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartyism." British Journal of Political Science 25 (3): 289-325.

Virgin, Sheahan G. 2023. "The Effect of Core Values on Support for Electoral Reform: Evidence from Two Survey Experiments." American Journal of Political Science 67 (1): 239-256.

Weber, Matthias. 2020. "Choosing the rules: Preferences over voting systems for assemblies of representatives." Journal of Economic Behavior \& Organization 174: 420-434.

Weingast, Barry, Kenneth Shepsle, and Christopher Johnsen. 1981. "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics." Journal of Political Economy 89 (4): 642-664.

## A Appendix

## A. 1 Model Appendix

## A.1.1 Equilibrium

The solution concept is Perfect Bayesian Nash Equilibrium, which requires that equilibrium strategies are best responses in every sub-game and that Bayesian updating is used when possible. We assume that when indifferent the voter retains the incumbent.

There are three possible equilibria to the model.

1. Separating - the biased type reforms and the unbiased type does not
2. Stable electoral rule - both types pool on no reform
3. Both reform - the types pool on reform - this equilibrium exists with removal and no removal following no reform (the voter's strategy following no reform is off the equilibrium path, so beliefs are set to make the strategy individually rational)

As is common in these two-stage models, parties of both types select their ideal points in the second stage, as there is no longer an electoral threat. We thus characterize the first stage for each equilibrium here.

## Separating

There is one fully separating equilibrium where the biased type reforms and the unbiased type does not. The voter believes the party is biased following reform and removes the party. Following no reform, the voter believes the party is unbiased and retains the party. This equilibrium holds when bias is very large: $\beta \geq \frac{b(1-\delta p)-\delta r}{\delta p}$ and $\beta \geq \frac{\delta r}{1-\delta+\delta p}$. To verify that this is a Perfect Bayesian Nash Equilibrium, we check for profitable deviations.

Incentive compatibility constraints for the voter. The voter following reform must remove the biased party: $(1+p \delta)(\alpha-\beta)+\delta(1-p) b \geq(1+\delta)(\alpha-\beta) \Longrightarrow \alpha \leq \beta+b$. This is Assumption 1.

The voter following no reform must retain the unbiased party: $\delta b \geq-\delta p \beta+\delta(1-p) b$, which always holds.

Incentive compatibility constraints for the party. The biased type must be willing to reform despite facing removal: $\beta(1+\delta p) \geq \delta(\beta+r) \Rightarrow \beta \geq \frac{\delta r}{1-\delta+\delta p}$.

The unbiased type must be willing to abstain from reforms: $\delta(b+r) \geq b+\delta[(1-p) b-$ $p \beta] \Longrightarrow \beta \geq \frac{b(1-\delta p)-\delta r}{\delta p}$.

## Stable electoral rule - pooling on no reform

There is one pooling equilibrium where the biased and unbiased types do not reform. The voter believes the party is more likely to be biased following reform and removes the party (off the equilibrium path, any beliefs are supportable). Following no reform, the voter believes the party is unbiased with probability $1-p$ and retains the party. This equilibrium holds for intermediate levels of bias: $\beta \in\left[\frac{b(1-\delta p)-\delta r}{\delta p}, \frac{\delta r}{1-\delta+\delta p}\right]$. To verify that this is a Perfect Bayesian Nash Equilibrium, we check for profitable deviations.

Incentive compatibility constraints for the voter. The voter's beliefs must be updated using Bayes' rule on the equilibrium path. Following no reform, the voter believes the party is biased with probability $p$ and unbiased with probability $1-p$. Off the equilibrium path, any beliefs may be sustained. We define $\mu$ here to be the probability that the party is biased following reform.

The voter following reform must remove the biased party: $\mu(\alpha-\beta)+(1-\mu) b+\delta p(\alpha-$ $\beta)+\delta(1-p) b \geq(1+\delta) \mu(\alpha-\beta)+(1+\delta)(1-\mu) b \Longrightarrow p \leq \mu$.

The voter following no reform must retain the party: $p[(1+\delta) \alpha-\delta \beta]+(1-p) \delta b \geq$ $p[(1+\delta) \alpha-\delta \beta]+(1-p) \delta b$. The voter's payoffs to retain or remove are the same, as they learned no new information. This condition is thus met with equality.

Incentive compatibility constraints for the party. The biased type must be willing to abstain from reforms: $\delta(\beta+r) \geq \beta(1+\delta p) \Rightarrow \beta \leq \frac{\delta r}{1-\delta+\delta p}$.

The unbiased type must be willing to abstain from reforms: $\delta(b+r) \geq b+\delta[(1-p) b-$ $p \beta] \Longrightarrow \beta \geq \frac{b(1-\delta p)-\delta r}{\delta p}$.

## Both reform - retain following no reform

In this equilibrium, both party types reform. The voter retains the party following reform and retains the party following no reform. ${ }^{23}$

Incentive compatibility constraints for the voter. Following reform, the voter is indifferent, because he garnered no information from the reform, so his expected utility following removal is equal to his expected utility following retain.

If the voter believes the party is biased following no reform, he removes the party. If the voter believes the party is unbiased following no reform, he retains the party. This is off the equilibrium path, so either set of beliefs can be sustained. We will assume here that the voter retains the party following no reform and that he believes the party is more likely to be unbiased following no reform.

Incentive compatibility constraints for the party. The biased type must be willing to reform: $\beta+\delta(\beta+r) \geq \delta(\beta+r)$.

The unbiased type must be willing to reform: $b+\delta(b+r) \geq \delta(b+r)$.

## Both reform - remove following no reform

In this equilibrium, both party types reform. The voter retains the party following reform and removes the party following no reform. ${ }^{24}$

[^17]Incentive compatibility constraints for the voter. Following reform, the voter is indifferent, because he garnered no information from the reform, so his expected utility following removal is equal to his expected utility following retain.

If the voter believes the party is biased following no reform, he removes the party. If the voter believes the party is unbiased following no reform, he retains the party. This is off the equilibrium path, so either set of beliefs can be sustained. We will assume here that the voter removes the party following no reform and that he believes the party is more likely to be biased following no reform.

Incentive compatibility constraints for the party. The biased type must be willing to reform: $\beta+\delta(\beta+r) \geq p \delta(\beta+r)$.

The unbiased type must be willing to reform: $(1+\delta)(b+r) \geq \delta[(1-p) b-p \beta]$.
Both conditions always hold.

## A.1.2 Insights in text

Proposition 1. Stable electoral rules, where both types of party refrain from reform, are only possible when reform is punished by the voter.

Proof. If they are not punished, parties can profitably deviate to implementing their preferred policies, and abstaining from reform cannot be part of the equilibrium.

Proposition 2. In the equilibrium with stable electoral rules, voters believe that the party and the associated electoral reform are biased when they observe an electoral reform.

Proof. Voters must punish parties for reforms to sustain the equilibrium (see above). In order to sustain this punishment strategy, voters must believe that parties and their reforms are biased. Reforms are off the equilibrium path, so beliefs are generated that support the voters' equilibrium decision.

Proposition 3. The magnitude of the coalition bias decreases (and converges to zero) as the number of parties in the coalition increases.

Proof. This is simply the Law of Large Numbers. The average of several independent, random draws from a distribution approach the mean of the distribution as the number of draws increases. The mean of the distribution from which the party bias is drawn is zero. $\lim _{n \rightarrow \infty} \beta=$ $\lim _{n \rightarrow \infty} \frac{\rho_{1}+\rho_{2}+\ldots+\rho_{n}}{n} \Longrightarrow 0$.

Proposition 4. The both reform equilibrium becomes more likely as the number of parties in the coalition increases.

Proof. As $\beta$ approaches zero, the both reform equilibrium becomes more likely. Recall the biased type will always reform when the unbiased type reforms. As $\beta$ approaches zero, the unbiased type becomes more willing to reform (abstaining from reforms is only incentive compatible for the unbiased type when $\beta \geq \frac{b(1-\delta p)-\delta r}{\delta p}$ ), which means the both reform equilibrium is more likely.

## A. 2 Survey Appendix

## A.2.1 Experimental Design

Respondents first answered a standard set of questions on demographics, political interest, voting behavior in the 2021 federal election in Germany, and questions regarding basic knowledge about German election law. Next, we presented all respondents with information and follow-up questions regarding the current Bundestag election law.

1. Description of the status quo election law (1693 respondents in total):

The law for electing the Bundestag is as follows: The share of second votes a party wins determines how many seats that party receives in the Bundestag. A party that wins $20 \%$ of the second votes should therefore also receive about $20 \%$ of the seats in the Bundestag. The federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. Every person who wins one of the constituencies is guaranteed to enter the Bundestag. Sometimes, a party wins more constituency seats than it is entitled to according to the proportion of second votes. These additional seats are called overhang seats. To ensure that this party's share of seats corresponds to its share of second votes, all other parties receive additional seats in this case, so-called compensation seats. As a consequence of the overhang and compensation seats, the Bundestag regularly exceeds the size of 598 MPs. This is why the Bundestag has grown significantly in recent years to its current 736 members.
2. Survey question about comprehension of how the election law works:

Now assume that a party receives $20 \%$ of the second votes, which corresponds to about 120 (out of a total of 598) representatives in the Bundestag. With the first vote, this party wins 140 of 299 constituencies. How many seats will this party probably have in the Bundestag? [single choice with the following options: 100 seats, 120 seats, 140 seats, 160 seats, 180 seats, 200 seats]
3. Information about the correct answer:

For your information: In the previous example, the party receives approximately 140 seats. According to the number of second votes received, the party would only get about 120 seats. However, because the party won 140 constituencies, it gets 20 overhang seats. These overhang seats are compensated by compensation seats for the other parties. In this example, 80 compensation seats would be necessary.
4. Evaluation of the status quo:

How do you evaluate the current Bundestag election law? [7-point scale, ranging from 'very bad' to 'very good'].
5. Evaluation of reform pressure:

There are currently discussions about changing the current Bundestag electoral law to bring it back in line with the target number of 598 members. How necessary do you think such a reform would be? [7-point scale, ranging from 'not necessary' to 'urgently needed']

We then randomly assigned respondents to one of four experimental groups based on whether respondents received information about a specific real reform proposal (opposition vs. coalition) and which political parties support one of the two possible electoral reforms:

- Group 1 (415 respondents): Information about the opposition's electoral reform proposal.

At the moment, there are discussions to change the current Bundestag election law. One proposal is as follows: Only half of the seats in the Bundestag (299 out of 598) will be divided among the parties according to the proportion of second votes. The other 299 will be determined exclusively by districts. A party that wins $20 \%$ of the second votes thus does not have to receive $20 \%$ of the seats in the Bundestag. As before, the federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. Every person who wins one of the districts is guaranteed to enter the Bundestag. Since the second
votes now only determine the other half of the seats, a party always receives one seat for each constituency it wins. There will no longer be any overhang or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, the share of seats that the party receives in the Bundestag will no longer correspond to its share of the second votes if it wins very many or very few districts.

- Group 2 (426 respondents): Information about the opposition's electoral reform proposal and the parties proposing this reform ('The proposal of the CDU/CSU [...]' instead of 'One proposal [...]').
- Group 3 (424 respondents): Information about the coalition's electoral reform proposal. At the moment, there are discussions to change the current Bundestag election law. One proposal is as follows: As before, the share of second votes that a party wins determines how many seats that party receives in the Bundestag. A party that wins $20 \%$ of the second votes should therefore also receive about 20\% of the seats in the Bundestag. As before, the federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. However, not every person who wins one of the districts is guaranteed to enter the Bundestag. If a party wins more districts than it is entitled to according to the proportion of second votes, it may not fill these overhang seats. There will no longer be any overhang or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, not all candidates who win a district will receive a seat in the Bundestag if their party wins more constituencies than it is entitled to according to second votes.
- Group 4 (428 respondents): Information about the coalition's electoral reform proposal and the parties proposing this reform ('The proposal of the SPD, Bündnis 90/Die Grünen, and FDP [...]' instead of 'One proposal [...]').

After treatment assignment respondents were again confronted with a question whether they understand how the proposal works, with information about the correct answer including
an explanation, and were then asked to evaluate the election law proposal (see bullet points 2-4 above). Additionally, we also asked another set of outcome variables:

- There are a number of political parties in Germany, each of which would like to get your vote. For each of the following parties, please indicate how likely it is that you will ever vote for them. [10-point scale for each of the following parties: SPD, CDU/CSU, Bündnis 90/Die Grünen, FDP, AfD, Die Linke].
- In addition to reforming the allocation of seats, there is also discussion of lowering the voting age in federal elections. If politicians lowered the voting age, do you think such a reform would help ensure that all citizens have a fair chance to have their concerns taken into account politically? [7-point scale, ranging from 'not at all' to 'very much']

We concluded the entire survey with questions on income, the economic situation of the household, place of residence, as well as a question about the last time respondents preoccupied themselves with details regarding German election law.

## A.2.2 Regression Results

Table A. 1 Covariate Balance for Parallel Voting Proposal

|  | (1) <br> Without party cue <br> Mean/(SD) | (2) <br> With party cue <br> Mean/(SD) | (2) <br> Pairwise t-test <br> Mean diff |
| :--- | :---: | :---: | :---: |
| Variable | 1.514 | 1.491 | -0.023 |
| Female | $(0.505)$ | $(0.510)$ |  |
| Age in years | 47.722 | 47.764 | 0.042 |
|  | $(15.260)$ | $(14.905)$ |  |
| Education level in groups | 2.113 | 2.131 | 0.018 |
|  | $(0.678)$ | $(0.650)$ |  |
| Turnout, 2021 federal election | 0.849 | 0.855 | 0.006 |
|  | $(0.358)$ | $(0.352)$ |  |
| Left-right self-placement | 5.120 | 4.797 | $-0.324 *$ |
|  | $(2.071)$ | $(1.861)$ |  |
| Political interest | 2.863 | 2.829 | -0.034 |
| Trust in government | $(0.940)$ | $(0.864)$ |  |
|  | 3.507 | 3.437 | -0.070 |
| Correct knowledge questions | $(1.811)$ | $(1.797)$ |  |
|  | 0.576 | 0.568 | -0.008 |
| Household income | $(0.325)$ | $(0.325)$ |  |
|  | 4.764 | 4.967 | 0.203 |
| Number of children | $(2.856)$ | $(2.760)$ |  |
| Urban resident | 1.238 | 1.110 | -0.128 |
| \# of observations | $(1.263)$ | $(1.135)$ |  |

Statistical significance levels: * $p<0.05,{ }^{* *} p<0.01$

Table A. 2 Full Results for Parallel Voting Proposal

|  | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
| $\overline{\text { CDU/CSU party cue }}$ | $\begin{gathered} \hline-0.205^{* *} \\ (0.10) \end{gathered}$ | $\begin{gathered} -0.203 * * \\ (0.10) \end{gathered}$ | $\begin{gathered} \hline-0.155^{*} \\ (0.09) \end{gathered}$ |
| Female |  | $\begin{aligned} & 0.150 \\ & (0.10) \end{aligned}$ | $\begin{aligned} & 0.012 \\ & (0.10) \end{aligned}$ |
| Age in years |  | $\begin{aligned} & -0.005 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & -0.003 \\ & (0.00) \end{aligned}$ |
| Education level in groups |  | $\begin{aligned} & 0.095 \\ & (0.08) \end{aligned}$ | $\begin{aligned} & -0.123 \\ & (0.09) \end{aligned}$ |
| Turnout, 2021 federal election |  |  | $\begin{aligned} & 0.094 \\ & (0.13) \end{aligned}$ |
| Left-right self-placement |  |  | $\begin{gathered} 0.070 * * * \\ (0.03) \end{gathered}$ |
| Political interest |  |  | $\begin{gathered} 0.210 * * * \\ (0.06) \end{gathered}$ |
| Trust in government |  |  | $\begin{gathered} 0.256 * * * \\ (0.03) \end{gathered}$ |
| Correct knowledge questions |  |  | $\begin{aligned} & -0.256 \\ & (0.16) \end{aligned}$ |
| Household income |  |  | $\begin{aligned} & 0.019 \\ & (0.02) \end{aligned}$ |
| Number of children |  |  | $\begin{aligned} & 0.039 \\ & (0.04) \end{aligned}$ |
| Urban resident |  |  | $\begin{aligned} & 0.013 \\ & (0.04) \end{aligned}$ |
| Constant | $\begin{gathered} 4.193 * * * \\ (0.07) \end{gathered}$ | $\begin{gathered} 4.005 * * * \\ (0.25) \end{gathered}$ | $\begin{gathered} 2.642 * * * \\ (0.29) \end{gathered}$ |
| \# of respondents | 852 | 852 | 852 |
| Prob $>$ F | 0.043 | 0.032 | 0.000 |

Statistical significance levels: * $p<0.1,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table A. 3 Covariate Balance for Cut Overhang Seats Proposal

|  | (1) <br> Without party cue <br> Mean/(SD) | (2) <br> With party cue <br> Mean/(SD) | (2) <br> Pairwise t-test <br> Mean diff |
| :--- | :---: | :---: | :---: |
| Variable | 1.523 | 1.488 | -0.035 |
| Female | $(0.505)$ | $(0.505)$ |  |
| Age in years | 47.096 | 47.810 | 0.713 |
|  | $(15.315)$ | $(15.141)$ |  |
| Education level in groups | 2.133 | 2.138 | 0.006 |
|  | $(0.629)$ | $(0.681)$ |  |
| Turnout, 2021 federal election | 0.819 | 0.873 | $0.054^{*}$ |
| Left-right self-placement | $(0.385)$ | $(0.333)$ |  |
|  | 4.887 | 4.869 | -0.018 |
| Political interest | $(1.967)$ | $(1.986)$ |  |
| Trust in government | 2.831 | 2.859 | 0.028 |
|  | $(0.928)$ | $(0.817)$ |  |
| Correct knowledge questions | 3.410 | 3.653 | 0.243 |
|  | $(1.837)$ | $(1.777)$ |  |
| Household income | 0.564 | 0.586 | 0.022 |
|  | $(0.344)$ | $(0.329)$ |  |
| Number of children | 4.971 | 4.763 | -0.208 |
| Urban resident | $(2.853)$ | $(2.699)$ |  |
| \# of observations | 1.116 | 1.138 | 0.023 |

Statistical significance levels: ${ }^{*} p<0.05,{ }^{* *} p<0.01$

Table A. 4 Full Results for Cut Overhang Seat Proposal

|  | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
| Coalition party cue | $\begin{aligned} & \hline 0.182^{*} \\ & (0.10) \end{aligned}$ | $\begin{aligned} & \hline 0.184^{*} \\ & (0.10) \end{aligned}$ | $\begin{aligned} & \hline 0.111 \\ & (0.10) \end{aligned}$ |
| Female |  | $\begin{gathered} 0.186 * \\ (0.10) \end{gathered}$ | $\begin{gathered} 0.084 \\ (0.10) \end{gathered}$ |
| Age in years |  | $\begin{aligned} & 0.004 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & 0.002 \\ & (0.00) \end{aligned}$ |
| Education level in groups |  | $\begin{gathered} 0.227 * * * \\ (0.08) \end{gathered}$ | $\begin{aligned} & 0.000 \\ & (0.08) \end{aligned}$ |
| Turnout, 2021 federal election |  |  | $\begin{aligned} & 0.023 \\ & (0.13) \end{aligned}$ |
| Left-right self-placement |  |  | $\begin{aligned} & 0.029 \\ & (0.03) \end{aligned}$ |
| Political interest |  |  | $\begin{aligned} & 0.032 \\ & (0.06) \end{aligned}$ |
| Trust in government |  |  | $\begin{gathered} 0.251 * * * \\ (0.03) \end{gathered}$ |
| Correct knowledge questions |  |  | $\begin{gathered} 0.468 * * * \\ (0.16) \end{gathered}$ |
| Household income |  |  | $\begin{aligned} & 0.003 \\ & (0.02) \end{aligned}$ |
| Number of children |  |  | $\begin{aligned} & 0.014 \\ & (0.04) \end{aligned}$ |
| Urban resident |  |  | $\begin{aligned} & 0.028 \\ & (0.05) \end{aligned}$ |
| Constant | $\begin{gathered} 4.400 * * * \\ (0.08) \end{gathered}$ | $\begin{gathered} 3.425 * * * \\ (0.28) \end{gathered}$ | $\begin{gathered} 2.683 * * * \\ (0.31) \end{gathered}$ |
| \# rof respondents | 841 | 841 | 841 |
| Prob $>$ F | 0.080 | 0.003 | 0.000 |

Statistical significance levels: * $p<0.1,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

## A. 3 Pre-Analysis Plan — Party Support and Politicized Electoral Reforms

Registered with OSF.

## A.3.1 Version: October 19, 2022

## A.3.2 Description

The German mixed-member electoral system has for a long time been considered as successfully combining the goals of general proportionality and district representation. In recent years, however, the need to compensate surplus seats in order to preserve proportionality has led to a massive increase in the size of the Bundestag. The current Bundestag is more than $20 \%$ bigger than its legal size. Against this background, German parties have engaged in several reform attempts over the last decades. However, they have so far not been able to find a compromise that was palatable to all democratic parties (Behnke, 2022; Faas and Roßteutscher, 2022).

SPD, Bündnis 90/Die Grünen, and the FDP - the parties that form the incumbent coalition government - have now come forward with a reform proposal that they want to implement in late 2022 (Deutscher Bundestag, 2022, 14-18). As before, the share of second votes that a party wins determines how many seats that party receives in the Bundestag. Yet, if a party wins more constituencies than it is entitled to according to the proportion of second votes, it must not fill these surplus seats. The Bundestag will therefore no longer exceed 598 seats.

As a reaction, CDU/CSU - the biggest opposition parties - have presented a counter-reform (Deutscher Bundestag, 2022, 19-21). According to their proposal, only half of the seats in the Bundestag (299 out of 598) will be divided among the parties according to the proportion of second votes. The other 299 will be determined exclusively by constituencies on a FPTP basis. Since the second votes now only determine one half of the seats, a party always receives one seat for each constituency it wins. The Bundestag will also no longer exceed 598 seats.

The current electoral law and the two reform proposals therefore present us with a trilemma
situation. Each one stresses two out of three goals - (a) the guaranteed representation of district winners, (b) proportionality in the translation of party votes into seats, and (c) a fixed size of the Bundestag - yet sacrifices the respective third goal. The status quo in principal tolerates that the Bundestag grows bigger and bigger. The coalition proposal allows that some candidates that receive the most votes in their constituency cannot enter the Bundestag. The opposition proposal very likely leads to disproportional representation.

In this paper, we investigate whether the politicization of procedural rules that are at the center of democratic governance helps or hurts political parties electorally. In line with Pond (2021), we argue that voters do not necessarily understand institutional reforms in full, but they know that politicians likely benefit from instituting a biased reform. As long as the existing institutions are not too bad, a biased politician thus has more to gain from instituting a reform than an unbiased politician. For this reason, voters tend to assume that a politician and the reform are biased, when they observe a reform and they punish the politician by not supporting them electorally. Taken together, we thus investigate how information about a political party's support for a proposed electoral reform affects citizen perceptions of and support for the party.

## A.3.3 Hypotheses

We expect that citizens are:

- Less supportive of a reform proposal when they are informed that a specific political party proposed the reform, relative to when they only read about the content of the reform (with no party attachment)
- Less supportive of and less likely to vote for the specific political party that proposed the reform in future elections when they are informed that the party proposed the reform, relative to when they only read about the content of the reform (with no party attachment)

We also expect heterogeneous treatment effects depending on whether respondents supported the party that proposed one of two real reforms in the previous election.

## A.3.4 Design Plan

Study type This is an online survey experiment in Germany. We randomly assign whether respondents receive information about a specific real reform proposal and which political parties support one of the two possible electoral reforms.

Blinding Respondents will not know the treatment group to which they have been assigned.

Study design Respondents will first answer a question about their voting in the 2021 Bundestag election and will evaluate the current electoral law in Germany. Respondents are then assigned to one of four possible treatments. There are two electoral reforms, which were proposed by two different groups of political parties:

- Treatment 1: Just information about Reform 1
- Treatment 2: Information about Reform 1 and the parties proposing Reform 1
- Treatment 3: Just information about Reform 2
- Treatment 4: Information about Reform 2 and the parties proposing Reform 2

Respondents will then answer questions about their political support for the parties and the reforms

Randomization We will use block randomization, where each participant will be randomly assigned to one of the four (roughly) equally sized treatment arms.

## A.3.5 Sampling Plan

Existing data No previously existing data will be analyzed.

Data collection procedures Participants will be recruited online through the Bilendi company. We program the survey using the Qualtrics platform. No incentives other than the participation incentives provided by Bilendi will be given.

Sample size Our target sample size is 1750 participants in Germany. Participants must be at least 18 years old, reside in the country of interest, and eligible to vote in German federal elections. Respondents will be sampled according to quotas of gender, age, and education.

## A.3.6 Variables

Manipulated variables Respondents will read a description of one of two real electoral reform proposals. They will either be informed about the party proposing the reform or not.

- Reform 1, proposed by the coalition parties:

At the moment, there are discussions to change the current Bundestag election law. [One proposal / The proposal of the SPD, Bündnis 90/Die Grünen, and FDP] is as follows: As before, the share of second votes that a party wins determines how many seats that party receives in the Bundestag. A party that wins $20 \%$ of the second votes should therefore also receive about $20 \%$ of the seats in the Bundestag. As before, the federal territory is divided into 299 electoral districts, in which a candidate is elected with the first vote. However, not every person who wins one of the constituencies is guaranteed to enter the Bundestag. If a party wins more constituencies than it is entitled to according to the proportion of second votes, it may not fill these surplus seats. There will no longer be any surplus or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, not all candidates who
win a constituency will receive a seat in the Bundestag if their party wins more constituencies than it is entitled to according to second votes.

- Reform 2, proposed by the major opposition parties: At the moment, there are discussions to change the current Bundestag election law. [One proposal / The proposal of the CDU/CSU] is as follows: Only half of the seats in the Bundestag (299 out of 598) will be divided among the parties according to the proportion of second votes. The other 299 will be determined exclusively by constituencies. A party that receives $20 \%$ of the second votes thus does not have to receive $20 \%$ of the seats in the Bundestag. As before, the federal territory is divided into 299 constituencies, in which a candidate is elected with the first vote. Every person who wins one of the constituencies is guaranteed to enter the Bundestag. Since the second votes now only determine the other half of the seats, a party always receives one seat for each constituency it wins. There will no longer be any surplus or compensation seats. The Bundestag will therefore no longer exceed 598 seats. However, the share of seats that the party receives in the Bundestag will no longer correspond to its share of the second votes if it wins very many or very few constituencies.

Measured variables We will measure the following variables before treatment assignment:

- Standard demographics: age; gender; education
- Political variables: party choice in the 2021 Bundestag election; left-right self-placement; interest in politics; trust in government, parliament, representative, and the constitutional court.
- Knowledge questions about German election law; name and party of representative We will measure the following variables after treatment assignment:
- Looking at the proposed Bundestag election law, how do you evaluate this proposal? [7-point scale, ranging from 'very bad' to 'very good'].
- If you had to choose between the current federal election law and the election law proposal just described, which would you prefer? [binary choice, with a 'don't know' option].
- There are a number of political parties in Germany, each of which would like to get your vote. For each of the following parties, please indicate how likely it is that you will ever vote for them. [10-point scale for each of the following parties: SPD, CDU/CSU, Bündnis 90/Die Grünen, FDP, AfD, Die Linke].
- How well would you say does the political system in Germany ensure that all parties have a fair chance to represent their constituents in the Bundestag? [7-point scale, ranging from 'not at all' to 'very well'].
- How satisfied are you - all things considered - with the way democracy works in Germany? [7-point scale, ranging from 'extremely dissatisfied' to 'extremely satisfied'].
- Today we asked you some questions about voting rights in Germany. When did you last deal with this topic? [Single choice from the following list: Never; In school; Before my first federal election; Before the last federal election; After the coalition presented its reform proposal; Last month]


## A.3.7 Analysis Plan

We will estimate average treatment effects (ATT) by comparing different treatment conditions using standard OLS/probit/logit regression techniques and $10 \%, 5 \%$, and $1 \%$ confidence thresholds. The dependent variables will be the evaluation of a reform proposal and the support for each political party. The independent variable is either treatment (with party proposer) or control (without proposer party). We will also use multiplicative interaction terms to capture heterogeneous effects depending on party vote in the previous election (previous party vote X treatment). We plan to use the full sample. We might compare our results across sam-
ples with and without the respondents who have encompassing previous knowledge about the German electoral law and condition on when respondents last dealt with the topic of electoral reforms.

## A. 4 Appendix: Cross-national, time-series results

## A.4.1 Robustness

Table A. 5 Electoral Reforms and Voteshare for the Government, controlling for executive approval

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Electoral reform | $-4.91^{* *}$ | $-5.19^{*}$ | $-5.23^{*}$ | $-9.43^{*}$ | $-11.6^{* *}$ | $-11.6^{* *}$ |
|  | $(2.33)$ | $(2.58)$ | $(2.66)$ | $(4.91)$ | $(5.14)$ | $(5.11)$ |
| Electoral reform $\times$ governing coalition |  |  |  | 8.94 | $10.7^{*}$ | $10.9^{*}$ |
|  |  |  |  | $(5.46)$ | $(5.57)$ | $(5.42)$ |
| Governing coalition |  |  |  | $3.37^{*}$ | 2.93 | 1.01 |
|  |  |  |  | $(1.77)$ | $(2.16)$ | $(2.26)$ |
| Executive approval, lag | .097 | .036 | -.081 | .084 | .048 | -.041 |
| (past approval) | $(.066)$ | $(.068)$ | $(.076)$ | $(.062)$ | $(.062)$ | $(.040)$ |
| GDP per capita, log | 3.55 | 1.43 | 18.3 | 2.39 | 3.60 | 10.7 |
|  | $(2.32)$ | $(3.39)$ | $(14.7)$ | $(2.34)$ | $(2.66)$ | $(10.0)$ |
| GDP growth | .14 | .15 | .14 | -.12 | -.13 | .018 |
|  | $(.24)$ | $(.24)$ | $(.26)$ | $(.14)$ | $(.15)$ | $(.13)$ |
| Polity |  | -.11 | $5.53^{*}$ |  | -.17 | $3.61^{*}$ |
|  |  | $(1.89)$ | $(2.99)$ |  | $(1.36)$ | $(1.89)$ |
| ICRG governance |  | 12.2 | 5.50 |  | -6.82 | -11.5 |
|  |  | $(13.6)$ | $(20.6)$ |  | $(9.72)$ | $(17.8)$ |
| Constant | -17.0 | 24.3 | -175.0 | 7.77 | 17.3 | -64.6 |
|  | $(27.7)$ | $(24.7)$ | $(139.2)$ | $(22.4)$ | $(23.1)$ | $(89.0)$ |
| Number Obs. | 427 | 380 | 380 | 418 | 372 | 372 |
| Number Countries | 27 | 25 | 25 | 27 | 25 | 25 |
| Year fixed effects | yes | yes | yes | yes | yes | yes |
| Country fixed effects | no | no | yes | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table A. 6 Electoral Reforms and Voteshare for the Government, effects before or after the reform

|  | $(1)$ | $(2)$ | $(3)$ |
| :--- | :---: | :---: | :---: |
| Electoral reform, lag (past reform) | -3.24 | -2.17 | -.41 |
|  | $(2.27)$ | $(1.79)$ | $(1.48)$ |
| Electoral reform | $-7.58^{*}$ | $-6.90^{*}$ | -5.36 |
|  | $(3.79)$ | $(3.46)$ | $(3.22)$ |
| Electoral reform, led (future reform) | -1.74 | -1.28 | .34 |
|  | $(1.45)$ | $(1.85)$ | $(1.71)$ |
| GDP per capita, log | 2.66 | $5.50^{* *}$ | $24.9 * *$ |
|  | $(3.44)$ | $(2.58)$ | $(11.8)$ |
| GDP growth | -.13 | .33 | .30 |
|  | $(.17)$ | $(.34)$ | $(.33)$ |
| Polity |  | $-2.99^{* * *}$ | $-2.20^{* * *}$ |
|  |  | $(.34)$ | $(.42)$ |
| ICRG governance |  | 2.15 | -17.2 |
|  |  | $(14.1)$ | $(17.2)$ |
| Constant | 26.1 | 23.9 | -153.2 |
|  | $(35.7)$ | $(20.4)$ | $(120.4)$ |
| Number Obs. | 742 | 558 | 558 |
| Number Countries | 27 | 25 | 25 |
| Year fixed effects | yes | yes | yes |
| Country fixed effects | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table A. 7 Electoral reforms in new democracies

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electoral reform | $\begin{gathered} -9.23 * * \\ (3.71) \end{gathered}$ | $\begin{gathered} -7.66 * * \\ (3.00) \end{gathered}$ | $\begin{gathered} \hline-6.87 * * \\ (2.86) \end{gathered}$ | $\begin{gathered} -8.62 * * \\ (3.60) \end{gathered}$ | $\begin{gathered} \hline-7.96 * * \\ (3.15) \end{gathered}$ | $\begin{gathered} \hline-7.14 * * \\ (3.01) \end{gathered}$ | $\begin{gathered} \hline-9.37 * * \\ (4.16) \end{gathered}$ | $\begin{gathered} \hline-8.14 * * \\ (3.39) \end{gathered}$ | $\begin{gathered} -7.93 * * \\ (3.34) \end{gathered}$ |
| Electoral reform $\times$ new democracy, three years | $\begin{aligned} & 17.2^{* *} \\ & (6.43) \end{aligned}$ | $\begin{gathered} 12.6 \\ (7.47) \end{gathered}$ | $\begin{aligned} & 13.8^{* *} \\ & (6.62) \end{aligned}$ |  |  |  |  |  |  |
| New democracy, three years | $\begin{gathered} -12.9 * * \\ (5.29) \end{gathered}$ | $\begin{aligned} & -13.3^{*} \\ & \text { (6.59) } \end{aligned}$ | $\begin{aligned} & -10.8 * \\ & (5.89) \end{aligned}$ |  |  |  |  |  |  |
| Electoral reform $\times$ new democracy, five years |  |  |  | $\begin{gathered} 4.56 \\ (5.74) \end{gathered}$ | $\begin{aligned} & 9.59 * \\ & \text { (5.04) } \end{aligned}$ | $\begin{aligned} & 10.3 * * \\ & (4.76) \end{aligned}$ |  |  |  |
| New democracy, five years |  |  |  | $\begin{aligned} & -7.30 \\ & (4.88) \end{aligned}$ | $\begin{gathered} -10.2 * * \\ (4.18) \end{gathered}$ | $\begin{gathered} -8.41 * * \\ (3.65) \end{gathered}$ |  |  |  |
| Electoral reform $\times$ new democracy, ten years |  |  |  |  |  |  | $\begin{gathered} 4.24 \\ (4.60) \end{gathered}$ | $\begin{gathered} 4.77 \\ (4.79) \end{gathered}$ | $\begin{gathered} 7.53 \\ (4.43) \end{gathered}$ |
| New democracy, ten years |  |  |  |  |  |  | $\begin{gathered} -8.30 \\ (5.27) \end{gathered}$ | $\begin{gathered} -7.04 * * \\ (3.05) \end{gathered}$ | $\begin{aligned} & -5.84^{*} \\ & (2.83) \end{aligned}$ |
| GDP per capita, log | $\begin{gathered} 2.30 \\ (3.81) \end{gathered}$ | $\begin{gathered} 4.12 \\ (2.82) \end{gathered}$ | $\begin{aligned} & 22.8^{*} \\ & \text { (11.9) } \end{aligned}$ | $\begin{gathered} 2.18 \\ (4.01) \end{gathered}$ | $\begin{gathered} 3.67 \\ (2.87) \end{gathered}$ | $\begin{aligned} & 22.3^{*} \\ & \text { (11.6) } \end{aligned}$ | $\begin{gathered} .92 \\ (4.59) \end{gathered}$ | $\begin{gathered} 2.72 \\ (3.25) \end{gathered}$ | $\begin{aligned} & 20.9^{*} \\ & \text { (11.8) } \end{aligned}$ |
| GDP growth | $\begin{aligned} & -.15 \\ & (.20) \end{aligned}$ | $\begin{gathered} .25 \\ (.33) \end{gathered}$ | $\begin{aligned} & .17 \\ & (.32) \end{aligned}$ | $\begin{aligned} & -.11 \\ & (.20) \end{aligned}$ | $\begin{gathered} .29 \\ (.32) \end{gathered}$ | $\begin{gathered} .20 \\ (.31) \end{gathered}$ | $\begin{gathered} -.15 \\ (.21) \end{gathered}$ | $\begin{gathered} .24 \\ (.32) \end{gathered}$ | $\begin{aligned} & .16 \\ & (.31) \end{aligned}$ |
| Polity |  | $\begin{gathered} -2.97 * * * \\ (.34) \end{gathered}$ | $\begin{gathered} -2.05 * * * \\ (.42) \end{gathered}$ |  | $\begin{gathered} -2.95 * * * \\ (.33) \end{gathered}$ | $\begin{gathered} -2.02 * * * \\ (.40) \end{gathered}$ |  | $\begin{gathered} -2.89 * * * \\ (.31) \end{gathered}$ | $\begin{gathered} -1.96 * * * \\ (.42) \end{gathered}$ |
| ICRG governance |  | $\begin{gathered} 7.41 \\ (14.1) \end{gathered}$ | $\begin{gathered} -10.5 \\ (18.2) \end{gathered}$ |  | $\begin{gathered} 8.24 \\ (13.8) \end{gathered}$ | $\begin{gathered} -9.23 \\ (18.1) \end{gathered}$ |  | $\begin{gathered} 9.26 \\ (14.1) \end{gathered}$ | $\begin{gathered} -8.74 \\ (18.9) \end{gathered}$ |
| Constant | $\begin{gathered} 17.8 \\ (42.1) \end{gathered}$ | $\begin{gathered} 33.0 \\ (22.5) \end{gathered}$ | $\begin{gathered} -138.2 \\ (122.4) \end{gathered}$ | $\begin{gathered} 13.4 \\ (44.7) \end{gathered}$ | $\begin{gathered} 36.6 \\ (23.2) \end{gathered}$ | $\begin{gathered} -135.2 \\ (119.8) \end{gathered}$ | $\begin{gathered} 27.0 \\ (51.0) \end{gathered}$ | $\begin{aligned} & 50.7^{*} \\ & (28.6) \end{aligned}$ | $\begin{gathered} -116.7 \\ (121.5) \end{gathered}$ |
| Number Obs. | 728 | 583 | 583 | 728 | 583 | 583 | 728 | 583 | 583 |
| Number Countries | 168 | 128 | 128 | 168 | 128 | 128 | 168 | 128 | 128 |
| Year fixed effects | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| Country fixed effects | no | no | yes | no | no | yes | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table A. 8 Major electoral Reforms and Voteshare for the Government

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Major reform | $-8.64^{*}$ | -6.72 | $-6.86^{*}$ | $-18.3^{* *}$ | $-14.4^{* *}$ | -11.5 |
|  | $(4.41)$ | $(4.02)$ | $(3.80)$ | $(8.27)$ | $(6.89)$ | $(6.96)$ |
| Major reform $\times$ governing coalition |  |  |  | $14.9^{*}$ | 11.5 | 9.08 |
|  |  |  |  | $(8.61)$ | $(7.31)$ | $(7.45)$ |
| Governing coalition |  |  |  | $4.46^{*}$ | $5.52^{* *}$ | $3.66^{*}$ |
|  |  |  |  | $(2.47)$ | $(2.16)$ | $(1.95)$ |
| GDP per capita, log | 3.35 | $5.38^{*}$ | $24.8^{*}$ | .72 | $6.21^{* * *}$ | 15.1 |
|  | $(3.41)$ | $(2.73)$ | $(12.5)$ | $(2.91)$ | $(2.17)$ | $(9.50)$ |
| GDP growth | -.16 | .25 | .18 | -.23 | -.10 | -.16 |
|  | $(.17)$ | $(.33)$ | $(.33)$ | $(.15)$ | $(.27)$ | $(.21)$ |
| Polity |  | $-3.06^{* * *}$ | $-2.19^{* * *}$ |  | $-3.29^{* * *}$ | $-2.69^{* * *}$ |
|  |  | $(.39)$ | $(.46)$ |  | $(.35)$ | $(.31)$ |
| ICRG governance |  | 5.92 | -13.9 |  | -9.16 | -21.9 |
|  |  | $(14.6)$ | $(18.8)$ |  | $(11.8)$ | $(14.9)$ |
| Constant | -7.07 | 22.4 | -154.1 | 23.8 | 25.6 | -45.9 |
|  | $(34.4)$ | $(21.9)$ | $(128.6)$ | $(30.4)$ | $(19.6)$ | $(93.7)$ |
| Number Obs. | 781 | 583 | 583 | 757 | 570 | 570 |
| Number Countries | 27 | 25 | 25 | 27 | 25 | 25 |
| Year fixed effects | yes | yes | yes | yes | yes | yes |
| Country fixed effects | no | no | yes | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table A. 9 New Constitutions and Voteshare for the Government

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| New constitution | $-14.7^{* * *}$ | $-10.5^{* * *}$ | $-7.26^{* *}$ | $-15.8^{* * *}$ | $-12.1^{* * *}$ | $-9.72^{* *}$ |
|  | $(2.38)$ | $(3.15)$ | $(2.84)$ | $(2.76)$ | $(4.11)$ | $(3.77)$ |
| New constitution $\times$ |  |  |  | 4.70 | 4.84 | 7.88 |
| governing coalition |  |  |  | $(4.59)$ | $(7.24)$ | $(6.11)$ |
| Governing coalition |  |  |  | -.87 | -1.98 | .47 |
|  |  |  |  | $(2.70)$ | $(2.72)$ | $(2.60)$ |
| GDP per capita, log | $1.83^{*}$ | -1.90 | $17.2^{* * *}$ | $1.87^{*}$ | -1.86 | $17.3^{* * *}$ |
|  | $(1.04)$ | $(2.02)$ | $(6.07)$ | $(1.07)$ | $(2.01)$ | $(6.08)$ |
| GDP growth | -.17 | $-.35^{*}$ | -.14 | -.17 | $-.35^{*}$ | -.14 |
|  | $(.10)$ | $(.19)$ | $(.100)$ | $(.10)$ | $(.19)$ | $(.10)$ |
| Polity |  | .25 | $-1.31^{* * *}$ |  | .29 | $-1.33^{* * *}$ |
|  |  | $(.39)$ | $(.39)$ |  | $(.37)$ | $(.39)$ |
| ICRG governance |  | $34.4^{* * *}$ | 16.8 |  | $34.7^{* * *}$ | 16.7 |
|  |  | $(12.1)$ | $(12.4)$ |  | $(12.2)$ | $(12.3)$ |
| Constant | $16.4^{*}$ | $43.5^{* * *}$ | $-144.2^{* *}$ | $16.2^{*}$ | $43.5^{* * *}$ | $-145.1^{* *}$ |
|  | $(9.44)$ | $(12.5)$ | $(64.2)$ | $(9.44)$ | $(12.4)$ | $(64.3)$ |
| Number Obs. | 6,696 | 4,082 | 4,082 | 6,696 | 4,082 | 4,082 |
| Number Countries | 168 | 128 | 128 | 168 | 128 | 128 |
| Year fixed effects | yes | yes | yes | yes | yes | yes |
| Country fixed effects | no | no | yes | no | no | yes |

The dependent variable is the vote-share of the parties in government.
Standard errors in parentheses, clustered at the country level.
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$


[^0]:    ${ }^{\dagger}$ Department of Political Science, University of Geneva. Email: lukas.haffert@unige.ch
    ${ }^{*}$ Department of Political Science, Washington University in St. Louis. Email: pamy@wustl.edu.
    ${ }^{\S}$ Hochschule für Politik München at the Technical University of Munich. Email: tobias.rommel@tum.de.

[^1]:    ${ }^{1}$ Whether the reform worked for the Socialists as intended is hard to assess in terms of the actual election outcome, since the change of the electoral rules also completely changed the tactical considerations of voters.

[^2]:    ${ }^{2}$ For some reforms in some countries, a supermajority is required or another more onerous process must be followed. But parties can also be creative, opting to change electoral rules that do not require constitutional reforms for example.

[^3]:    ${ }^{3}$ Parties that are concentrated in specific electoral districts for example may win several districts but win a relatively small share of party votes overall.
    ${ }^{4}$ Although the opposition includes two formal political parties (CDU and CSU), these parties behave as one actor in practice. They have agreed not to compete, with the CSU operating only in Bavaria, while the CDU operates in the remaining 15 German states.

[^4]:    ${ }^{5}$ For a look at the political costs of more gradual reforms, see Pond (2021).

[^5]:    ${ }^{6}$ They could receive rents in the first period as well, but they would get those no matter what, so it would have no effect on equilibrium play. For efficiency of notation, we leave these out.

[^6]:    ${ }^{7}$ The 'voter's' payoffs in the figure reflect the pivotal voter's payoff if no reforms or unbiased reforms are made in the first period, and they reflect the potential pivotal voter's payoffs, who has the affinity $\alpha$ toward the biased politician, if biased reforms are made in the first period.
    ${ }^{8}$ Incorporating a direct cost would raise the threshold for reforms but would not change the substantive insights from the model.

[^7]:    ${ }^{9}$ There are alternative assumptions that would lead to similar outcomes: The existing pivotal voter could

[^8]:    ${ }^{10}$ They are indifferent between retain and remove.

[^9]:    ${ }^{11}$ Here the model predicts that both biased and unbiased parties abstain from reforms and that, if reforms are introduced, the reforms will be perceived as biased and the reforming party will be punished electorally.

[^10]:    ${ }^{12}$ Consistent with the ethical treatment of research subjects, respondents were informed that they were part of a research study and that they could leave the study at any time, they voluntarily agreed to participate, and there was no deception. A potential cost of completing the survey is 15 minutes of the respondent's time, while potential benefits include gaining an understanding of German electoral law and helping researchers understand voter behavior in stable democracies. The only identifying information collected by Qualtrics is the respondents' IP addresses. Survey data will be fully anonymized before sharing for replication. Respondents received a small payment for completing the survey. The survey itself cost $€ 2.50$ per respondent. The study was exempted by an institutional review board.

[^11]:    ${ }^{13}$ The CSU has historically received a disproportionate number of direct seats from Bavaria, resulting in overhang seats in the Bundestag, which in the past were offset by compensation seats to maintain proportionality. The CDU/CSU proposal would eliminate the practice of granting compensation seats.
    ${ }^{14}$ https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/fast-80-prozent-der-menschen-fuer-verkleinerung-des-bundestages-auf-die-regelgroesse-598

[^12]:    ${ }^{15}$ Propensity to vote for the CDU/CSU takes on the value 1 when respondents indicate a higher than average propensity to vote for the CDU/CSU in the future (at least 6 on the $0-10$ scale).

[^13]:    ${ }^{16}$ Propensity to vote for the coalition takes on the value 1 when respondents indicate a higher than average propensity to vote for either the SPD, or Bündnis 90 /Die Grünen, or the FDP in the future (at least 6 on the $0-10$ scale).

[^14]:    ${ }^{17}$ We include both major and minor reforms, as few citizens have the time or expertise to easily distinguish major from minor reforms, and we expect them to be skeptical of any reform offered by a political party.
    ${ }^{18}$ The results look substantively similar when using the vote-share of the largest party in government.

[^15]:    ${ }^{19}$ We cannot control for proportional representation, as it is co-linear with the variable capturing coalition governments.
    ${ }^{20}$ DPI begins in 1975; the reform data end in 2011.

[^16]:    ${ }^{21}$ During our sample period, several countries became democratic: Bulgaria in 1990, Croatia in 2000, Estonia in 1999, Hungary in 1990, Poland in 1991, Portugal in 1976, and Romania in 1996.
    ${ }^{22}$ We urge caution in interpreting these results, as democratic reforms are a subset of electoral reforms and democratic reforms might be popular.

[^17]:    ${ }^{23}$ The voter's strategy here doesn't matter, as both party types want to reform if they will also be retained following reform. This is better than their payoff following no reform, whatever the voter does.
    ${ }^{24}$ The voter's strategy here doesn't matter, as both party types want to reform if they will also be retained following reform. This is better than their payoff following no reform, whatever the voter does.

