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Partisan districting and the adoption of proportional representation: gerrymandering and its discontents

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Abstract
Electoral engineering strategies in majoritarian electoral systems, in particular the possibility to contain insurgent parties by manipulating electoral districts for partisan gain, are key determinants of parties' positions on the adoption of proportional representation (PR). Providing both qualitative and quantitative evidence, this paper demonstrates that partisan districting can be an effective strategy to protect incumbent parties' dominant political positions. In addition, it shows how insurgent parties push for the adoption of PR to end the practice of partisan districting. Finally, it demonstrates that incumbents – in the face of increasing electoral threats – cling to the existing majoritarian system if partisan districting allows them to influence vote-seat distortions in their favor. Together, these findings suggest that the possibility to contain insurgent parties by means of partisan districting is an important but overlooked alternative to the adoption of PR. Moreover, by demonstrating that vote-seat distortions moderate the relationship between district-level electoral threats and legislators' support for PR adoption, this paper offers an important corrective to Stein Rokkan's influential electoral threat thesis.

Keywords: proportional representation; gerrymandering; electoral reform; partisan districting; Switzerland

Introduction

On June 6, 1884, three Swiss Conservatives submitted a parliamentary motion, demanding changes to the electoral district map or, alternatively, the adoption of proportional representation (PR) (Kölz, 2004: 639–640). The motion featured, at first sight, a surprising connection of reforms. For a long time already, the Conservatives had been accusing the politically dominant Liberals of resorting to partisan districting to obtain advantages in parliamentary representation at their expense. The demand to change the district map reflected this criticism. Should the Liberals refuse this demand, the Conservatives requested the adoption of an electoral system they believed to be less prone to manipulation, PR. Hence, for these Conservatives, there was a direct link between partisan districting and electoral system choice.

Existing research has overlooked this link. The literature on electoral system choice does not consider how districts in the old majoritarian representation (MR) systems are set and changed. Instead, the district map is treated as exogenous to parties' preferences for electoral system choice. In these accounts, incumbent parties opt for the adoption of PR because insurgent parties endanger their future electoral viability (Boix, 1999; Leemann and Mares, 2014) or because they are negatively affected by vote-seat distortions and uncertainty about election outcomes (Colomer, 2005; Calvo, 2009).

Similarly, for a long time, the literature on partisan districting ignored the link between district design and electoral system choice. Based on the USA case, this literature long questioned the effectiveness of partisan districting due to legal constraints or because effects cancel each other out at the aggregate level (Gelman and King, 1994; Engstrom, 2013). The outcome of the 2010 redistricting cycle made scholars reconsider this conclusion, which has also triggered debates about PR adoption (McGhee, 2020; Keena *et al.*, 2021). Yet, before these recent developments, few scholars had explored the relationship between gerrymandering and electoral system choice.

In contrast, we argue that possibilities for partisan districting are key determinants of parties' positions on PR. Partisan districting can be an effective containment strategy that allows incumbent parties to keep insurgent parties at bay. As we show, factors historically limiting the effectiveness of gerrymandering in the USA case do not necessarily apply to other cases. Accordingly, partisan districting was more widespread in first-wave democracies than is generally acknowledged (Handley, 2018). This has important implications for parties' positions on electoral system choice because partisan districting as a containment strategy is primarily effective in MR systems due to small district magnitude and the constant need to adapt district boundaries to accommodate population growth (Grofman, 2016). Consequently, if incumbent parties can resort to partisan districting to engineer parliamentary majorities, they have an alternative to PR when facing electorally strong insurgent parties.

This paper adds to the literature on electoral system choice. This literature has been dominated by Rokkan's (1970) electoral threat thesis, according to which established parties facing an electorally strong insurgent party adopt PR to minimize seat losses. Taking partisan districting into account can turn this logic upside down. In the empirical analysis, we demonstrate that electoral disproportionalities resulting from partisan districting influence legislators' voting behavior on the adoption of PR. In contrast to the traditional electoral threat thesis, we show that legislators of incumbent parties facing a district-level electoral threat favor MR *if* they have benefitted from partisan districting in the past. In addition, we add to the USA-centric literature on partisan districting. In line with more recent contributions on gerrymandering in the USA, we offer qualitative and quantitative evidence to demonstrate that partisan districting under MR can be an effective instrument to protect incumbent parties' strong political positions. Finally, by showing that insurgent parties often suffered from partisan districting under MR, we can explain why insurgent parties often favor PR adoption – rather than oppose it, as the electoral threat thesis predicts.

Empirically, we explore gerrymandering and electoral reform in Switzerland, which relied on an MR system before it adopted – in line with other first-wave democracies – PR in 1918. The Swiss case allows us to take advantage of unique datasets based on parliamentary debates and several roll-call votes to demonstrate that partisan seat-maximization interests were decisive in district design and that gerrymandering influenced party positions on PR. At the same time, there is little reason to believe that this direct link between biases resulting from partisan districting and electoral system choice is specific to Switzerland. There is plenty of research highlighting the role of partisan districting in other first-wave democracies and beyond (Handley, 2018). Similarly, the literature on electoral system choice has emphasized that vote-seat distortions are key determinants of preferences for electoral reform (Calvo, 2009). We simply add that gerrymandering can be *deliberately* used to contain insurgent parties, and that gerrymandering is thus intimately linked to questions of electoral system choice because it is primarily effective under MR.

This paper proceeds as follows. The next section develops our theoretical argument on the relationship between district design and electoral system choice. Subsequently, we provide empirical evidence on this relationship in chronological order. First, we show how partisan districting was used to contain insurgent parties. Second, we document how the resulting disproportionalities gave rise to demands for PR. Finally, we demonstrate that legislators

benefiting from partisan districting opposed PR. The conclusion discusses the implications for research on partisan districting and electoral system choice.

Partisan districting and electoral system choice

Over the last decades, two sophisticated but surprisingly disconnected literatures have emerged. The literature on partisan districting mainly focuses on the USA case (Gelman and King, 1994; Cox and Katz, 2002; Engstrom, 2013; McGhee, 2020), where the term gerrymandering was coined to describe the manipulation of electoral districts for partisan goals (exceptions include Brady and Mo, 1992; Pilet, 2007; Handley and Grofman, 2008; Wong, 2017). In contrast, the literature on electoral system choice primarily focuses on Europe where during the early 20th century, several countries adopted PR (Boix, 1999; Blais *et al.*, 2005; Colomer, 2005; Calvo, 2009). This literature rarely explores the US case (exceptions include Ahmed, 2013; Santucci, 2017; Rodden, 2019).

This disconnection is unfortunate because there are important points of contact. Consider the literature on electoral system choice, which has been dominated by Rokkan's 'two roads to electoral reform' (Calvo, 2009: 267). According to one road, the electoral threat thesis, parties support PR adoption if insurgent parties endanger their future electoral viability. If insurgent parties gather enough support or have concentrated voter bases, the other parties might be better off under PR (Lijphart, 1992; Boix, 1999; Leemann and Mares, 2014). According to the other road, parties support PR if they are adversely affected by vote-seat distortions, i.e., they win a substantially lower percentage of seats than votes (Andrews and Jackman, 2005; Calvo, 2009; Rodden, 2009).[1]

There is great merit in both arguments. However, they both treat the district map as exogenous to parties' preferences for electoral system choice. In these accounts, there is little incumbent parties can do to improve their situation. If they face an electorally strong insurgent party, if they do not benefit from the mechanical and psychological effects of MR, or if they are uncertain about electoral outcomes, their only response is to adopt PR. But why should incumbent parties not try to create favorable vote-seat distortions and thus contain insurgent parties?

Indeed, Ahmed (2013) points to the possibility of containment as an alternative to PR. However, she does not offer a systematic analysis of containment strategies. Leemann and Mares (2014) show that both district-level electoral threats and vote-seat distortions influence legislators' support for PR, but they do not consider the possibility of parties trying to influence electoral disproportionalities to contain insurgent parties. Finally, Emmenegger and Walter (2021) find that vote-seat distortions affect the relationship between district-level electoral threats and legislators' support for PR. However, they do not offer evidence on the strategic manipulation of electoral districts to create these vote-seat distortions, and they do not show that PR adoption was a strategic response to these manipulations.

This paper argues that incumbent parties may have means at their disposal to engineer more beneficial vote-seat distortions and lower levels of uncertainty about election outcomes. Incumbent parties, if in control of the relevant decision-making body and conditional on their electoral geography, can manipulate electoral districts to protect their parliamentary majority. In this process, incumbent parties may try to maximize the number of insurgent parties' votes that do not contribute to the election of these parties' candidates. For instance, minorities of insurgent parties' voters can be moved into districts dominated by incumbent parties, thus wasting all the insurgent parties' votes for the losing candidates. Alternatively, geographical boundaries can be adapted to create safe but inefficient districts, where the insurgent parties' candidates win with overwhelming majorities, thus wasting a lot of votes on few seats.

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[1]New contributions also highlight within-party dynamics (Cox *et al.*, 2019; Schröder and Manow, 2020), issues of legitimacy (Blais *et al.*, 2005; Bol *et al.*, 2015), and systemic threats (Ahmed, 2013; Gjerløw and Rasmussen, 2022).

Hence, under MR, incumbent parties may be able to use district design to contain insurgent parties. The observable implications are that incumbent parties engage in partisan districting and insurgent parties suffer from electoral disproportionalities. Moreover, having the means to keep insurgent parties at bay, incumbent parties have little incentive to adopt PR, which would not only put an end to their parliamentary majority but also remove their most powerful containment instrument, which is more effective under MR (Birch, 2011; Grofman, 2016; Martinez i Coma and Lago, 2018). In fact, as the insurgent parties' electoral strength increases, containment by means of partisan districting (and by implication the MR system) becomes more important. Thus, only if districting as a containment strategy is *not* available, should we expect incumbent parties facing strong insurgent parties to pin their hopes on PR (i.e., Rokkan's electoral threat thesis).

Of course, there is an important caveat. This containment strategy is dependent on the *effectiveness* of partisan districting. Yet, the primarily US-based literature on gerrymandering has long suggested the opposite. Summarizing this literature, McGhee (2020: 173) notes that 'the conclusion was quite consistent: Partisan gerrymandering either was a minor factor in American elections or actually had the opposite of its intended result.' Only the outcome of the 2010 redistricting cycle in the USA has made scholars reconsider this conclusion (Stephanopoulos and Warshaw, 2020; Keena *et al.*, 2021), which, tellingly, also triggered debates about the adoption of PR (Donovan, 2018).

The literature on the US case has discussed several limitations to effective gerrymandering (Cox and Katz, 2002; Engstrom, 2013; McGhee, 2020). First, gerrymandering requires control over the districting process and sufficient information on voters' distribution. Second, disadvantages in one state might be compensated by advantages in another one, canceling each other out at aggregate level. Third, legal constraints and judicial review might limit possibilities for gerrymandering. Finally, gerrymandering might also be used to protect incumbent legislators rather than to maximize seat shares.[2]

Research on gerrymandering has focused almost exclusively on the USA, making it 'the most neglected topic in electoral and institutional design in terms of comparative research' (Handley and Grofman, 2008: v). However, insights from the US case might not travel easily to other cases. Consider the Swiss case, where electoral districts were designed by the federal parliament, giving the politically dominant Liberals full control over the districting process, whereas minority parties had no possibility to compensate for these disadvantages. Regular subnational elections offered detailed and fine-grained data on voters' distribution. Moreover, there was no possibility to challenge electoral districts in court. Still today, Swiss courts have limited jurisdiction in case of federal parliamentary acts. Finally, the protection of specific incumbent legislators was no concern because candidates could run in several districts simultaneously. This is not to say that partisan districting was effective, which is an empirical question, but the standard reasons given for its ineffectiveness do not apply to Switzerland.

Switzerland is no exception. There is considerable historical research pointing to partisan districting in a variety of first-wave democracies, often with the legislature in charge of district design (Handley and Grofman, 2008). In other countries, incumbent parties benefited from malapportionment due to the *nonadaption* of electoral districts (Elklit, 2002; Reibel, 2007). In fact, 'during the nineteenth century, in Europe and in self-governing European colonies around the world, redistricting was carried out by the legislature. Gerrymandering [. . .] and other electoral abuses were not uncommon' (Handley, 2018: 516). Over time, these abuses led some countries to adopt reforms depoliticizing the redistricting process, thereby often explicitly excluding representatives of political parties from serving on such boundary commissions – the USA being a notable exception (Handley, 2018: 517).

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[2]Although scholars increasingly emphasize the effectiveness of gerrymandering, there is still evidence showing that the widespread gerrymandering mostly cancels nationally (Kenny *et al.*, 2023).
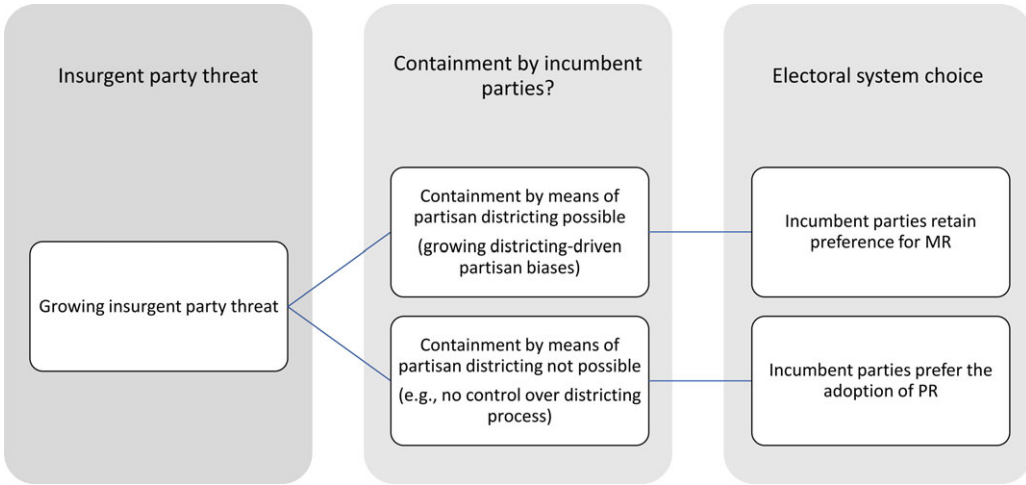
Figure 1. Partisan districting and electoral system choice.

Other countries adopted PR systems whose large multimember districts are rarely redrawn. Rather, shifts in population are accommodated by adjusting the number of seats allocated to each of the multimember districts, whereas the boundaries can stay the same. Hence, under PR, the potential for partisan districting is limited (Grofman, 2016). With most European countries adopting PR in the early 20th century, partisan districting under the previous MR systems became an afterthought. Moreover, with the US-based literature traditionally (but no longer) emphasizing the *ineffectiveness* of partisan districting, electoral system choice scholars had little reason to reconsider this position.

Importantly, this unequal role of partisan districting in MR and PR systems is in line with the well-known argument in the electoral system choice literature that vote-seat distortions under MR are an important driver of support for PR (Calvo, 2009). However, this literature has not systematically linked the *politics* of partisan districting to questions of electoral system choice. Consequently, it has failed to see what partisan districting might truly be: a strategy parties deliberately use to contain insurgent parties. In contrast, we suggest that the widespread practice of partisan districting (leading to vote-seat distortions) and the regular occurrence of vote-seat distortions (widely considered a predictor of support for PR) are causally connected.

Figure 1 summarizes our argument. If partisan districting under MR is effective, parties can use it to contain insurgent parties, reduce uncertainty, and create advantageous vote-seat distortions. In this case, incumbent parties have little reason to push for PR, whereas insurgent parties, suffering from the resulting disproportionalities, push for PR to neutralize the incumbent parties' containment strategy. In contrast, if partisan districting under MR is not effective, we expect incumbent parties facing strong insurgent parties to support PR adoption to minimize seat losses.

What makes partisan districting – rather than PR adoption – more likely in the face of an electoral threat, and what specific form does partisan districting take? The choice of containment strategy is a function of several variables, most notably electoral geography, the rules shaping the (non)adaptation of districts, and data availability. For starters, to rely on districting as a containment strategy, parties must be in control of the relevant decision-making body. In this period, this was typically the legislature, with limited involvement by the courts (Handley, 2018). In addition, the incumbent parties' parliamentary representation must be such that insurgent parties – with the help of districting – can be relegated to a minority status for longer periods.

Second, parties' electoral geography might favor different forms of districting. For instance, parties with electoral strongholds in rural areas might oppose reapportionment despite rural

depopulation. The Danish Liberals and the German Conservatives relied on such malapportionment as a containment strategy (Elklit, 2002; Reibel, 2007). In contrast, parties with electoral strongholds in urban areas, such as the Swiss Liberals, favor reapportionment. Yet, each redistricting cycle provides such parties with opportunities for gerrymandering, as district boundaries are adapted to accommodate differences in population growth. The Swiss Liberals thus relied on gerrymandering, rather than malapportionment, to contain insurgent parties (see below).

Third, partisan districting requires fine-grained data on electoral geography. Thanks to regular subnational elections, such data exist in most cases. In Switzerland, election results at municipality level were available since the mid-19th century, although in comparative perspective, the documentation of electoral results was rather underdeveloped (Caramani, 2000). Today, more information is typically available (Wong, 2017).

Fourth, constitutional provisions might limit the potential for districting. For instance, the Belgian constitution requires regular reapportionment, which made it impossible for the Catholic Party to rely on malapportionment before the adoption of PR in 1899 (Emmenegger and Walter, 2019). In contrast, the Swiss Liberals benefited from regular reapportionment. However, the Swiss constitution did not allow electoral districts to cut across cantonal borders, which circumscribed gerrymandering's potential for containment.

In sum, partisan districting as a containment strategy is influenced by several factors and can take different forms. In some cases, it might not even be available. If incumbent parties cannot manipulate district boundaries for partisan gain, or if its potential for containment is exhausted, we expect these parties, in line with Rokkan's (1970) electoral threat thesis, to adopt PR when facing strong insurgent parties. In contrast, where partisan districting as a containment strategy is available, incumbent parties prefer to maintain MR because of the possibilities MR offers for partisan districting.

In the remainder of this paper, we provide, using the Swiss case, empirical evidence to support our argument. The next two sections offer qualitative and quantitative evidence on the importance of gerrymandering as a containment strategy. Subsequently, we demonstrate how vote-seat distortions moderated the effect of district-level electoral threats on legislators' support for PR adoption.

Qualitative evidence of partisan districting

In the Swiss civil war of 1847, the Liberal proponents of a federal state and modern democracy faced the Conservative defenders of cantonal sovereignty and traditional authorities. After their decisive victory, the Liberals created a reform commission tasked with the drafting of the new constitution. Each of the 25 cantons had one representative in the commission. However, given that the Liberals had installed 'puppet regimes' (Altermatt, 2020: 37) in the Conservative cantons, Liberals also represented the latter. Next to introducing direct voting and male universal suffrage, the reform commission defined the constitutional rules for district design. While the commission quickly settled on the principle of one member of parliament (MP) per 20,000 residents, district design proved to be controversial. Ultimately, the commission decided that districts were not allowed to cut across cantonal borders because representatives of non-German-speaking minorities and small cantons worried that their candidates would not find sufficient support in a nationwide district (Natsch, 1967: 538; Kölz, 1992: 567–568; Holenstein, 2018: 302–303).[3] The task to specify further details was left to parliament. For the first election under the new constitution, in 1848, the cantons – all led by Liberal governments – were to set the rules. They

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[3]According to the 1850 census, the four largest cantons had 46.3% of the population. Roughly 70% of the population were German speaking.

were simply informed about their number of representatives and asked to respect democratic procedures (Natsch, 1967: 539).

But Switzerland was a country emerging from a civil war. In several cantons, the Liberal occupation regimes did not have broad popular support. Allowing the Conservatives to win the election might have jeopardized the Liberals' democratization and modernization project. Drastic measures were therefore necessary to neutralize the 'die-hard enemies of our reborn fatherland' and 'unpatriotic accomplices of the reactionaries' (Jorio, 1998: 89–98). The Liberals thus faced a dilemma. If they upheld democracy, they would risk losing power to the 'forces of darkness' (Gruner, 1978a: 315) whom they accused of trying to undermine the democracy from within. In contrast, if they wanted to secure political power, they were forced to resort to illicit means that risked undermining democracy.

Complaints about partisan districting accompanied federal elections from the beginning. Historical research suggests that these complaints were warranted. For instance, in the reform commission, the Liberals openly discussed the implications of district magnitude on election outcomes. If there was a Liberal majority, a single canton-wide district was preferable because it would allow the Liberals to win all seats. In contrast, if the Conservative opposition was strong, single-member districts were preferable to prevent a Conservative landslide win (Gruner, 1978a: 322–323). Accordingly, Aargau opted for a single multimember district with nine seats, ultimately preventing the regionally concentrated Conservative vote from winning a single seat. In contrast, the predominantly Conservative cantons Fribourg and Luzern were divided into single-member districts.

Moreover, next to partisan districting, the Liberals relied on other forms of manipulation. For instance, in Fribourg, voters were required to swear an oath on the new constitution to prevent Conservatives from voting (Greyerz, 1977: 1022). Consequently, voter turnout in Fribourg was a paltry 21% (Gruner, 1978b: 345). Ultimately, in 1848, not a single Conservative was elected in Fribourg, whereas in Luzern, the Conservatives managed to win one district. Liberal newspapers publicly applauded this political exclusion (*Neue Zürcher Zeitung*, November 18, 1848, Nr. 323).

For the first election, the revision commission had left electoral district design to cantonal authorities. For subsequent elections, the federal parliament was to specify further rules. In 1850, the Federal Government suggested that multimember districts of three to four seats should be the rule but wanted to leave district design to cantonal authorities. The lower chamber, dominated by Liberals, agreed on district magnitude but insisted on having final authority over district design (Natsch, 1967: 539–540). The cantons' role was limited to making suggestions. Alfred Escher, president of the lower chamber and later the chair of the parliamentary commission designing the districts, understood that district design had the potential to prevent a Conservative victory in the 1851 election (Gruner, 1978a: 101). Referring to the possibility of a Conservative return to power in some cantons, he argued that it would be 'naïve' to leave district design to cantonal authorities (personal letter, cited in Gagliardi, 1919: 168).

In 1850, Escher, supported by an all-Liberal commission, embarked on district design. Detailed calculations made by the commission for all districts, preserved in Escher's literary remains, document the commission's gerrymandering (Gruner, 1978a: 333–334). After the federal parliament had supported the commission's district map, Escher was satisfied, arguing that 'all liberal cantons are content, except Luzern. But the latter is hard to help if you do not want to leave the principled ground' (personal letter, cited in Gagliardi, 1919: 168). To be clear, despite these inadequacies of Luzern's district map, the Liberals still won five out of seven seats in this historically Conservative stronghold in the 1851 election. The Liberals were thus confident about the upcoming elections. The Liberal commission member Jakob Dubs, who would later join the Federal Government, argued that 'districts are such that according to the worst scenario 40 [. . .] Conservatives will be elected to the [120 seats strong] lower chamber' (personal letter, cited in Gagliardi, 1919: 168).

In these years, partisan districting is hard to deny. The Liberals spoke openly about it. Referring to Aargau, the Liberal MP Keller argued that 'even if they must make crooked strokes, . . . where there is not enough, a few Liberal municipalities will be added, so it cannot go wrong. Where there are too many black or red voters, the council will say: let us move them where they do not trouble us' (cited in Gruner, 1978a: 323). Similarly, referring to St. Gallen, the Liberal MP Gmür argued that the very purpose of district design was to increase the likelihood that no Conservative candidate would be elected (*Der Wahrheitsfreund*, 1848: 40–41, cited in Gruner, 1978a: 328). In fact, the Liberals did not hesitate to resort to more open manipulation strategies in this early period of the federal state. For instance, after the Liberals had lost all six seats in the 1854 election in Ticino, the Liberal majority in the federal parliament simply declared the election illegal – 'an obvious partisan decision' (Tanner, 1998: 69). After the opposition leaders' incarceration, the repeated election brought six Liberals back to power. However, for the Liberals, such blunt interventions were dangerous, as they undermined the Liberals' claim to be the true defenders of democratization. Hence, over time, the Liberals preferred to rely on forms of electoral manipulation that are less visible and harder to prove, most notably gerrymandering. In the online Appendix B, we discuss three concrete instances of gerrymandering to show how the Liberals took advantage of partisan districting to protect their parliamentary majority.

Against this background, it is not surprising that Conservative complaints about partisan districting did not abate over the following decades (Natsch, 1967; Tanner, 1998). In the late 19th century, the emerging Socialists joined these allegations (Degen, 1998). Gruner (1978a: 352) argues that 'the federal authorities were positively bombarded with petitions' for more adequate districts. Yet, with an absolute majority in the lower chamber from 1848 to 1918, the Liberal groups were in control of district design for national elections from 1848 until the adoption of PR in 1918. Admittedly, these Liberal groups had grown increasingly heterogeneous: A 'Radical left' faced a 'Liberal center'. Later, a democratic 'extreme left' would further fragment the Liberal camp (with the Socialists' emergence, the use of 'left' for Radicals and 'extreme left' for Democrats was discontinued). However, all these groups were united in the opposition to the 'Conservative right' (Altermatt, 2020: 81) and later also the Socialists (Degen, 1998).[4]

Consequently, the Liberals rejected most petitions for more adequate districts (Gruner, 1978a: 352–361). Moreover, they rejected accusations of partisan districting. For instance, in an 1883 report commissioned by the Federal Government, Carl Hilty, a professor of public law and later Liberal MP (1890–1909), could not detect any biases in district design (Kölz, 2004: 693). Over time, Conservatives and Socialists increasingly relied on statistical means to demonstrate the role of gerrymandering (Gruner, 1978a: 58–64), but the Liberals would have none of it. As late as 1914, the Federal Government, controlled by Liberals, rejected accusations of partisan districting. Based on their own calculations, the government argued, there is no 'serious imbalance' between votes and seats (Bundesrat, 1914: 146).

Quantitative evidence of partisan districting

There is a sophisticated literature examining partisan districting in the USA. Yet, it is difficult to identify clear instances of gerrymandering because the process of redistricting is largely hidden from the public. Moreover, the system of single-member districts can generate natural biases if voters of a party are concentrated in few populous municipalities, thereby giving even impartial bureaucrats only limited options to design maps without partisan biases (Chen and Rodden, 2013). Consequently, researchers often draw on computational methods to generate a large set of possible district maps to investigate whether the implemented district plan displays an unusually high level of partisan bias.

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[4]The Democrats, Liberals, and Radicals relied on district-level electoral alliances to solve coordination problems. For instance, in the 1917 election, the three groups won 67 of their 122 seats based on such alliances (Gruner, 1978b: 325–340).

The Swiss case does not suffer from such problems. The process of redistricting was openly discussed in parliament with proponents and opponents of the various plans clearly identifiable. Based on suggestions by cantonal governments but also other interest groups, and relying on detailed results from regular subnational elections, a parliamentary commission prepared a proposal, in which it also reviewed the different suggestions. The commission's proposal was subsequently discussed in parliament, with votes on specific districting decisions and a final vote on the overall district plan. The publicly documented process of redistricting allows us to draw on comprehensive evidence to study gerrymandering. Moreover, in Switzerland, elections were held in multimember districts. Hence, the geographical scope of a district could be expanded by adding more seats, making electoral geography endogenous to party strategies. Although multimember districts of three or four seats were defined as the rule, there were plenty of exceptions.

As mentioned, there is a constitutional limit to partisan districting in Switzerland. Electoral districts were not allowed to cut across cantonal borders, which was an important limitation given the small size of many of the 25 cantons. Due to this restriction, only about ten cantons offered serious potential for partisan districting (Zürich, Bern, Luzern, Fribourg, St. Gallen, Graubünden, Aargau, Ticino, Vaud, and Valais). The other 15 cantons were either too small throughout the entire period or had enough seats only after population growth started to pick up in the late 19th century. However, the ten largest cantons had the most seats in parliament (74.8% in 1848 and 71.4% in 1917).[5]

In the following, our quantitative analysis covers four different aspects of the redistricting process to provide evidence for gerrymandering. First, we employ roll-call vote data from Bolliger and Zürcher (2004), who have retrieved over 100 roll-call votes for the period 1874–1914, including two final votes on the districting plans in 1881 and 1890, respectively. We use these votes as descriptive evidence to demonstrate that the districting process was politicized along party lines.

Second, we have collected data from the parliamentary debates on redistricting in 1902 and 1911.[6] In particular, we focus on how legislators positioned themselves vis-à-vis specific district proposals in the debate. Our binary-dependent variable captures whether the proposal of a given MP was adopted or if in the parliamentary debate, the MP opposed a proposal that was not adopted eventually. In both cases, we assign the score of 1 to our dependent variable because the legislator's preferences for district reform prevailed. In contrast, we assign the score of 0 if a MP proposed a district plan that was rejected or if he opposed a proposal that was adopted. As predictors, we include the legislator's party affiliation and whether the proposal was originally made by a legislator or another political actor (cantonal governments or other nonparliamentary actors such as local party chapters).

Third, we draw on electoral data and all district reforms under MR. Our binary-dependent variable captures whether a district was merged with or split from another district or whether its borders were adjusted after a national census. In these cases, we assign the value of 1. In contrast, we assign the value of 0 if districts were not changed. For the estimation, we use changes in electoral strength of the main minority parties (Conservatives and Socialists) in a district to account for partisan biases in the redistricting process. Gruner (1978b) provides estimates of the true but unobserved vote share of parties from 1848 to 1917 by accounting for strategic candidate entry and electoral alliances between parties (we provide a detailed explanation of Gruner's approach in the online appendix C). In addition, we compute whether a canton received additional seats due to population growth ('seat adjustment'), which could trigger redistricting by

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[5]Changing this constitutional rule would have required a popular vote with majorities required among both voters *and* cantons. Hence, the prospects of removing this restriction were slim. For the same reason, the popular initiative right was, once introduced, difficult to remove again.

[6]The parliamentary debates are officially recorded only since 1891.

design. Lastly, we control for district magnitude because redistricting was more difficult in small cantons since districts were not allowed to cut across cantonal borders.

Fourth, we capture whether redistricting increasingly distorted the translation from votes to seats by using Gruner's (1978b) electoral strength data at cantonal level.[7] We use data on electoral strength along with information about the number of seats to compute the disproportionalities from which minority parties suffered. More specifically, we use the difference between electoral strength and the seat share of Conservatives and Socialists by canton.

Given that our analysis builds on different data sets with less than 500 observations, we employ a penalized Logit estimator for small samples with binary dependent variables (Firth, 1993; Rainey and McCaskey, 2021) and outlier-robust linear regression for continuous dependent variables.[8] In addition, our observations are nested within cantons, which are constitutional barriers to partisan redistricting. Therefore, we assume that our observations within cantons are not independent and thus employ cluster-robust standard errors at cantonal level for all estimations. Summary statistics are provided in the online appendix A.

How did party competition in Switzerland evolve from 1848 to 1917? The upper panel in Fig. 2 shows that the Liberal camp, consisting of Liberals, Radicals, and Democrats (in the following called 'Liberals' for the sake of simplicity) enjoyed a comfortable majority in parliament throughout the period. While the Conservatives gained considerably in the first three decades, their seat share stagnated subsequently. The Socialists' entry at the turn to the 20th century did not alter the relationship fundamentally even though they were able to snatch some seats from the Liberals.

The lower panel in Fig. 2 shows that the Liberals' dominance was, in part, built on vote-seat distortions.[9] Their seat bonus declined in the first decades from over 10% to 5%. This decline can be attributed to the Conservatives' increasing electoral strength in small rural cantons, which limited the Liberals' ability to influence the electoral outcome via redistricting. For instance, the electoral strength of the Conservatives in strongholds such as Luzern, Fribourg, and Valais grew between 1848 and 1875 from 24% to 68%, 8% to 80%, and 38% to 70%, respectively (Gruner, 1978b: 373–382). Despite various attempts to secure a strong Liberal representation in these cantons by adjusting district boundaries, the Conservatives' overwhelming support made it increasingly difficult for the Liberals to introduce distortions to change the outcome in their favor. Still, thanks to careful district design, the Liberals won four seats in these overwhelmingly Conservative cantons in the 1875 election.

In contrast, the Socialists were unable to gain similar levels of electoral support to neutralize the adverse effects of partisan redistricting. By entering the electoral arena in the more urban and industrialized cantons, the Socialists challenged the Liberals in their heartlands. The Liberals resorted to redistricting, which resulted in considerable disproportionalities. For instance, in the last election under MR in 1917, the Socialists gained 44% and 39% of the vote in Zürich and Bern but only 28% and 24% of the seats (Gruner, 1978b: 396).

Given that redistricting was one of the most contentious issues, how did the process look like from a quantitative perspective? Between 1848 and 1917, the district design was adjusted seven times, each time following the national census. Table 1 provides an overview. The columns show

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[7]In case of redistricting, the old districts often cease to exist, which makes an analysis at district-level impossible. All districts are nested in cantons. We therefore capture disproportionalities at cantonal level.

[8]We provide linear probability models and logit models for all estimations with binary dependent variables.

[9]The electoral disproportionality shown in Figure 2 need not imply bias. Figure A1 therefore shows the levels of partisan bias favoring the Liberals using the procedure suggested by Keena *et al.* (2021). The patterns are very similar, although the bias indicator does not fully capture the electoral manipulation in the first two elections. In general, the calculation of partisan bias scores is difficult for elections in multimember districts and in multiparty systems. Because there are only a few districts within cantons, partisan bias cannot be calculated due to lack of observations. However, in this paper, we only explore levels and changes of disproportionality within the same MR system. We are thus confident that disproportionalities approximate partisan biases.
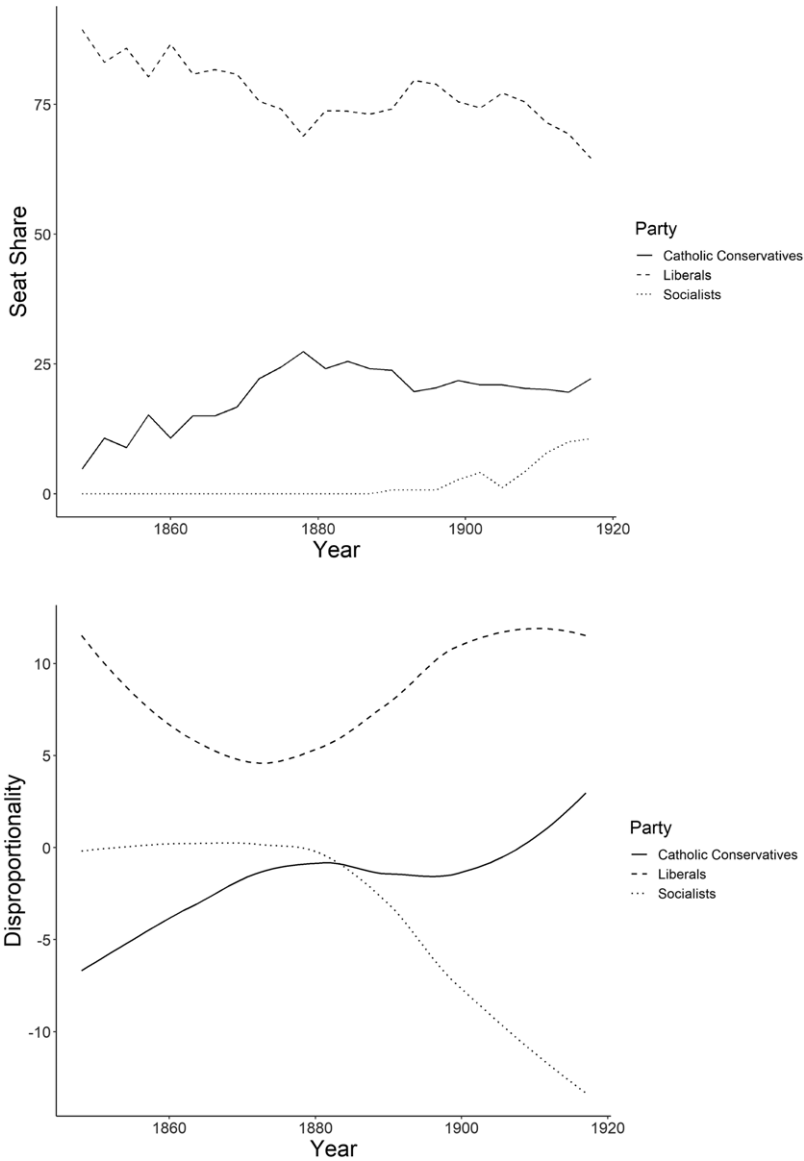
Figure 2. Seat shares and electoral disproportionality, 1848-1917.

the distribution of cantons along two dimensions: whether cantons' number of seats changed and whether redistricting took place. Table 1 demonstrates that in a substantial number of cases, districts within cantons were adjusted without any change in the number of seats, especially in 1851, after the 1848 election had provided rich data on electoral geography. Such cases of 'unprompted' redistricting are clear signs that changes in district design follow partisan rather than just demographic considerations (Engstrom, 2013).

Redistricting was highly contentious. Table 2 offers an overview of legislators' voting behavior along party lines for the final district bills in 1881 and 1890 – the only two years for which roll-call data is available. In both cases, the Conservatives unanimously rejected the laws, while a large majority of Liberal MPs supported them. Note that some Liberal MPs opposed the new district

Table 1 Redistricting in Switzerland, 1848–1917

Year	No redistricting, no seat change	No redistricting, seat change	Redistricting, no seat change	Redistricting seat change	Total
1851	11	2	7	5	25
1863	17	4	0	4	25
1872	17	3	2	3	25
1881	15	5	2	3	25
1890	18	3	3	1	25
1902	12	7	2	4	25
1911	10	8	0	7	25
Total	57.1%	18.3%	9.1%	15.4%	100%

Table 2 Parliamentary votes on redistricting, 1881 and 1890

	Law 1881		Law 1890	
	Nay	Yay	Nay	Yay
Conservatives	35	0	28	0
Liberals	20	61	20	65
Total	55	61	48	65

maps because in some cantons, factions within the Liberal camp ran against each other (e.g., Neuchâtel, Vaud, and Bern). Nevertheless, the Liberals had enough supporters to overcome Conservative resistance against the new district maps.

Next, we turn to our multivariate analysis. As outlined above, we focus on parliamentary debates and the factors triggering redistricting. Models 1 and 2 in Table 3 present our results on the question of which proposals debated in parliament were ultimately incorporated into the final law. Despite controlling whether the proposal came from a cantonal government or an MP, the dummy variable for the Liberals is significant and positive. More specifically, the point estimate suggests that Liberal proposals were twice as likely to be adopted.

Models 3 to 6 of Table 3 contribute to this picture. They show that the probability of redistricting is higher when the minority parties' electoral strength is growing before the design of the new district map. Importantly, the result holds despite accounting for whether a canton received (or lost) seats due to reapportionment as well as the log-transformed number of seats.

Finally, we turn to the question whether redistricting increased partisan biases. In Table 4, we estimate whether changes in district boundaries within cantons increased disproportionalities for minority parties (Conservatives and Socialists). We use a binary measure that captures whether districts have been adjusted prior to an election. In addition, we employ disproportionality at cantonal level (the difference between a party's seat share and electoral strength at cantonal level) as a dependent variable. Negative values indicate a bias against the minority party. Using a range of specifications with lagged dependent and control variables, canton fixed effects, and nonlinear time trends, we find that redistricting *increased* disproportionalities by about 2.6 to 3.6 percentage points. Put differently, following the adjustment of electoral districts, minority parties lost between three to four percentage points of seat shares for the same vote share.[10]

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[10]Table A2 in the online appendix A replicates this analysis but excludes cantons with only one seat. The results are not affected by this change.

Table 3 Determinants of redistricting, 1848–1917

	Parliamentary debates		Redistricting			
	OLS	Firth Logit	Linear	Linear	Firth Logit	Firth Logit
Liberals	0.44**	1.83*				
	(0.16)	(0.76)				
Cantonal Government	0.04	0.18				
	(0.21)	(0.92)				
MP	−0.03	−0.15				
	(0.15)	(0.70)				
Growth Minority Party Electoral Strength			0.22*	0.21*	1.09**	1.05**
			(0.09)	(0.09)	(0.40)	(0.40)
Lag Minority Party Electoral Strength			0.22	0.21	1.12	1.08
			(0.13)	(0.13)	(0.58)	(0.61)
Seat Adjustment			0.23*	0.24*	1.18*	1.18*
			(0.10)	(0.10)	(0.54)	(0.52)
ln District Magnitude				−0.02		−0.07
				(0.05)		(0.24)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.17		0.05	0.04		
N	110	110	210	210	210	210
AIC		139.75			251.73	253.74
BIC		153.26			278.51	283.86
Log Likelihood		−64.88			−117.87	−117.87
Deviance		129.75			235.73	235.74

Notes: ***$P < 0.001$;
**$P < 0.01$;
*$P < 0.05$.

In sum, the quantitative evidence points to a considerable amount of partisan districting. Against the background of Liberal MPs openly admitting political manipulation, the use of partisan districting in Switzerland is hard to deny. However, did partisan districting matter for political majorities? There are good reasons to believe that it did.

As mentioned, factors limiting the effectiveness of gerrymandering did not apply to Switzerland. Minority parties had no possibilities to offset disadvantages or challenge districts in court. Throughout the entire period, the Liberals defined the district map against their opposition. Little surprise that the Liberals benefited from electoral disproportionalities throughout the entire period. Admittedly, the Conservatives' disadvantages decreased over time, but this happened *despite* partisan districting. As the Conservatives reclaimed their traditional strongholds, removing the Liberal 'puppet regimes' (Altermatt, 2020: 37), they benefited from these cantons' small size. Moreover, over time, Liberal attention increasingly turned to the Socialists, which challenged the Liberals in their strongholds, whereas the Conservatives' rural strongholds were plagued by depopulation (in 1848, the eight cantons losing the 1847 civil war had 19% of the seats in the federal parliament; in 1917, they had 15%). As Fig. 2 shows, the Socialists suffered from electoral disproportionalities that eclipsed even the ones from which Conservatives had suffered after 1848. Hence, while the Liberals had at first targeted the Conservatives, at the turn to the 20th century, their advantage came at the Socialists' expense. This situation would only change with the adoption of PR in 1918, which allowed the Socialists to double their number of seats (from 22 in 1917 to 41 seats in 1919) *despite* a reduction in their electoral strength (from 30.8% to 23.5%). The next section examines the empirical relationship between partisan districting and PR adoption.

Table 4 Effectiveness of redistricting, 1848–1917

	Disproportionality			
Redistricting	−2.66[*]	−2.84[*]	−2.67[*]	−3.60[*]
	(1.17)	(1.19)	(1.17)	(1.56)
ln District Magnitude			−2.75	−2.54
			(2.91)	(2.11)
Lagged Dependent Variable				0.24[***]
				(0.06)
Canton FE	Yes	Yes	Yes	Yes
Quadratic Time Trends	No	Yes	Yes	Yes
N	552	552	552	527

Notes: ***$P < 0.001$;
**$P < 0.01$;
*$P < 0.05$.

Partisan districting and the adoption of PR

Conservatives and Socialists regularly complained about partisan districting. The previous section has shown that the Conservatives unanimously rejected the district maps in 1881 and 1890 and that Conservative and Socialist suggestions for district reforms were significantly less likely to be accepted in 1902 and 1911. Seeing their requests for changes in electoral districts repeatedly ignored, the minority parties turned to electoral system reform. Already in 1872, the Conservative MP Herzog-Weber demanded the introduction of PR with cantons as electoral districts. However, there was considerable uncertainty about the specifics. Moreover, alternative reform proposals suggested the introduction of single-member districts or the adoption of limited voting (Natsch, 1967: 543). Yet, the Liberals remained steadfast in their opposition to electoral system reform. They rejected any accusations of partisan districting and praised the virtues of MR in multimember districts (Kölz, 2004: 693).

In the 1880s, the Conservatives increasingly pinned their hopes on PR. In an 1884 parliamentary motion, three leading Conservative MPs demanded a new district map or the adoption of PR – a clear sign that the Conservatives were converging on PR. Only three years later, the Conservative leader Zemp declared that fairer districts would not be sufficient because only the adoption of PR would satisfy the minority parties (Natsch, 1967: 551). In their efforts, the Conservatives were now joined by the Socialists. In the late 1880s, the two parties organized numerous joint rallies, yet the Liberals remained unimpressed (Natsch, 1967: 551). In the discussion of the districts for the 1890 election, Conservative and Socialist requests were mostly ignored. Summarizing the discussion, a Conservative MP argued that 'instead of being a work of peace, the new district map will be the source of disunity and struggle' (*Der Bund*, November 30, 1889, Nr. 330). Even the influential Liberal-leaning *Neue Zürcher Zeitung* acknowledged the use of gerrymandering: 'It should be said openly: We have the majority, and we want to make sure that we do not lose it' (November 28, 1889, Nr. 332).

While the Conservatives and the Socialists did not stop submitting parliamentary motions demanding electoral reform, they increasingly turned their attention to extra-parliamentary means. In 1891, Switzerland had introduced the instrument of popular initiatives, which required the support of at least 50,000 citizens and allowed suggesting constitutional articles that needed to be implemented by law if approved in a popular vote (parliament could not change the proposals). Conservatives and Socialists launched their first joint popular initiative in the late 1890s,

demanding the adoption of PR with cantons as electoral districts. Relying on cantons as districts was an important Socialist concession because the Conservatives would benefit from the small size of most of their cantonal strongholds. In public discussions, the Liberals tried to take advantage of this concession to drive a wedge into the Conservative-Socialist coalition, but the Socialists did not take the bait (Natsch, 1967). Nevertheless, the first initiative was rejected in a popular vote in 1900 with a yes share of 40.9%. The second initiative was rejected more narrowly in 1910 (yes share of 47.5%). The third initiative was ultimately accepted in 1918, with a yes share of 66.8% (Linder *et al.* 2010). In each case, the proposals simply stated that elections to the lower chamber are direct, based on the principle of proportionality, and that cantons are the electoral districts.

In the following, we examine the relationship between partisan districting and support for the adoption of PR empirically. We follow the approach of Leemann and Mares (2014) and analyze the voting behavior of MPs to explore the relationship between electoral threats, seat-vote distortions, and support for the adoption of PR. More concretely, we take advantage of the fact that popular initiatives are also voted upon in parliament.[11] Our dependent variable is the support for the adoption of PR by an MP in the lower chamber in 1900, 1910, 1914, and 1918 (the parliament voted twice on the third popular initiative). In all four votes, parliamentary majorities rejected the proposal, with yes/no ratios of 33/79 in 1900, 45/100 in 1910, 62/105 in 1914, and 71/78 in 1918 (Bulletin, 1900, 1910, 1914, 1918). The analysis is based on Emmenegger and Walter (2021) who offer a more detailed discussion of the dataset.

As discussed, we expect that as the insurgent party's electoral strength increases, containment by means of gerrymandering and by implication, the MR system, becomes more important. MPs benefiting from disproportionalities are particularly opposed to the adoption of PR because in the absence of MR and the potential it offers for containment, these MPs have little chance to beat strong insurgent candidates. Empirically, we are thus particularly interested in the interaction between an insurgent party's electoral strength and the degree to which MPs are advantaged by partisan districting. Hence, if facing a strong electoral challenge, support for PR should be low if the MP benefits from electoral disproportionalities because this MP's electoral success depends on the continued reliance on gerrymandering under MR.

By the time of the first popular initiative on the adoption of PR, Liberal gerrymandering was mainly focusing on the Socialists, whereas Conservatives were comparatively 'safe' in their rural strongholds (see Fig. 2). In the analysis below, we therefore focus on the Socialists' electoral strength. We expect parties to evaluate the status quo against their vote-to-seat relation under PR. Given that cantonal borders constituted legal barriers to redistricting under MR and were the demanded districts under PR, we focus on the Socialists' electoral strength at cantonal level. The electoral strength data are from Gruner (1978b: 373–397). Based on this data, we also calculate the degree of disproportionality at cantonal level by party (seat share minus electoral strength). A substantial part of this disproportionality is likely to be the result of partisan districting.

Table 5 provides evidence for our argument using MP voting behavior on the four proposals.[12] Both estimators show that the interaction term of disproportionality and Socialist electoral strength is highly significant when added to models 2 and 5. The result remains unaffected in models 3 and 6 with the most restrictive specification, additionally controlling for the most important competing approaches. More precisely, we control for the presence of co-specific assets and trade exposure (Rogowski, 1987; Cusack *et al.*, 2007), run-off elections, and the vote margin of the two strongest non-Socialist parties (Boix, 1999; Leemann and Mares, 2014), whether the MP is a member of the party elite (Cox *et al.*, 2019; Schröder and Manow, 2020), and Socialist radicalization (Ahmed, 2013; Gjerløw and Rasmussen, 2022). Table A3 in the online appendix A provides detailed information on the operationalization of all variables.

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[11]If supported by parliament, the proposal is typically implemented by law without a popular vote.

[12]Table A5 in the online appendix A shows that the interaction term of disproportionality and Socialist electoral strength remains significant when excluding Socialist MPs.

Table 5 Disproportionality, socialist electoral threat, and support for PR, 1900–1918

	Linear (Outlier-Robust)			Firth Logit		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Disproportionality	−1.48[***]	−0.64	−0.67	−7.78[***]	−2.08	−2.32
	(0.42)	(0.41)	(0.39)	(0.91)	(1.74)	(1.52)
Socialist Electoral Strength	−0.01	−0.00	−0.00	−0.03	−0.00	−0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Disproportionality × Socialist Electoral Strength		−0.04[***]	−0.04[***]		−0.46[***]	−0.43[**]
		(0.01)	(0.01)		(0.12)	(0.11)
Co-Specific Assets			−0.91			−7.76
			(2.84)			(13.04)
Trade			0.22			0.79
			(0.29)			(1.10)
Right Margin			0.01			−0.02
			(0.03)			(0.29)
Party Elite			0.14			0.48
			(0.08)			(0.42)
Number of Strikes			−0.00			−0.00
			(0.00)			(0.00)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	547	547	547	547	547	547
AIC				601.69	553.71	560.68
BIC				627.52	583.84	616.64
Log Likelihood				−294.85	−269.85	−267.34
Deviance				589.69	539.71	534.68

Notes: Cluster robust standard errors in parentheses.
[***]$P < 0.001$;
[**]$P < 0.01$;
[*]$P < 0.05$.

What does the interaction term tell us about how incumbents respond to an increasing electoral threat? In Fig. 3, we plot the predicted probabilities for different levels of Socialist electoral strength on support for PR, depending on whether MPs benefit from the existing electoral system. In addition, we include a histogram of Socialist electoral strength at the bottom of Fig. 3 (see Figure A2 in the online appendix A for a histogram of disproportionalities). We differentiate two scenarios. A disproportionality score of 0.2 indicates that the legislator's party received 20% more seats than votes in a canton. As Figure A2 shows, this value is rather common among MPs, especially Liberal ones, which were the primary beneficiaries of gerrymandering. In contrast, a disproportionality score of −0.2 indicates that the legislator's party received 20% more votes than seats in a canton. As Figure A2 shows, this is a realistic value, especially for non-Liberal MPs, although there are fewer cases. This should not come as a surprise though, as parties are likely to struggle to get their candidates elected in such circumstances.[13]

The dotted line in Fig. 3 shows that if MPs benefit from electoral disproportionalities, higher Socialist electoral strength is associated with stronger *opposition* to PR. This result supports our argument that if incumbents can influence vote-seat distortions in their favor, they cling to the existing MR system despite increasing electoral challenges because the MR system offers incumbents a powerful containment strategy. In the Swiss case, the use of gerrymandering under MR allowed the Liberals to contain the Socialist electoral threat and defend their absolute majority in parliament. A different picture emerges if MPs do not benefit from electoral disproportion-alities. For this case, the solid line in Fig. 3 shows that Socialist electoral strength has a positive impact on MPs' support of PR. This is the familiar electoral threat argument (Rokkan, 1970;

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[13]Figure A3 in the in online appendix A shows that the same pattern can be observed with a disproportionality score of −0.1.
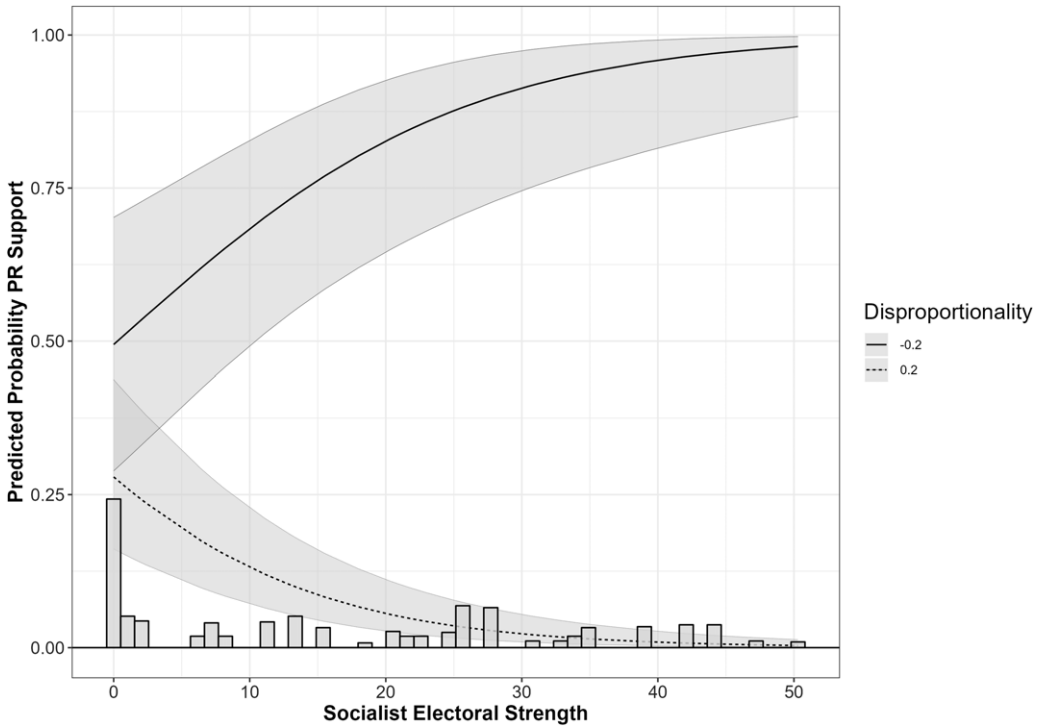
Figure 3. Effect of socialist electoral strength on support for PR conditional on disproportionality.

Leemann and Mares, 2014), according to which threatened MPs support the adoption of PR to increase their reelection chances. In the Swiss case, this scenario describes the situation of many Conservative and some Liberal MPs that, for whatever reasons, could not benefit from vote-seat distortions. Overall, Fig. 3 demonstrates that partisan districting and the resulting disproportionalities decisively moderate whether electoral threats increase or decrease support for PR among incumbent MPs.

Conclusion

Electoral threats are not set in stone. Depending on the processes shaping the (non-)adaption of electoral districts, incumbent parties can contain insurgent parties by means of partisan districting. However, this containment strategy is primarily effective under MR, which is why incumbent parties benefiting from partisan districting have little incentive to adopt PR in response to electoral threats. By adopting PR, powerful incumbents would put an end to their parliamentary majority *and* neutralize their most powerful containment instrument.

Using the Swiss case, this paper has demonstrated that the Liberals relied on partisan districting to contain insurgent parties. We have discussed how the districting rules were created in the period from 1847 to 1850. In addition, we have demonstrated that minority party suggestions for changes to the district map were significantly less likely to be accepted by parliament, that minority parties unanimously rejected the final electoral laws containing the district maps, that the probability of redistricting increased with the electoral strength of minority parties (even when the number of seats remained unchanged), and that redistricting increased electoral disproportionalities for minority parties.

For minority parties, the Conservatives and the Socialists, there was little chance to get a more adequate district map under MR. Consequently, from the 1870s onward, they began to cooperate and demand electoral system reform. From the late 1890s onward, they pursued electoral reform by means of direct democracy. Using four roll-call votes in parliament, this paper has shown that incumbent MPs benefiting from electoral disproportionalities opposed the adoption of PR in the face of an insurgent party electoral threat. Put differently, if incumbents can influence vote-seat distortions in their favor by means of districting, they cling to the existing MR system despite increasing electoral threats.

Together, these findings suggest that electoral engineering strategies under MR, and in particular the process of adapting electoral districts, are key determinants of parties' positions on the desirability of PR. Clearly, Rokkan's 'two roads to electoral reform' (Calvo, 2009) are not independent of each other. Whether electoral threats make incumbent parties support or oppose PR is decisively moderated by partisan districting. If partisan districting under MR is effective, incumbent parties can use it to contain insurgent parties. In contrast, if partisan districting under MR is not effective, incumbent parties facing strong insurgent parties adopt PR to minimize seat losses.

The literature on electoral system choice has repeatedly emphasized that vote-seat distortions are a key determinant of preferences for electoral reform. From this point of view, the adoption of PR could be a remedy against malapportionment and gerrymandering, as both are strongly tied to MR systems and low district magnitude. In this paper, our aim has simply been to demonstrate that the widespread practice of partisan districting and the regular occurrence of vote-seat distortions may be causally connected, and that contemporaries were aware of this link. In short, the discontents of partisan districting had good reasons to push for PR.

Clearly, partisan districting is not the only electoral manipulation strategy available to incumbents (Norris, 2004; Birch, 2011; Ahmed, 2013). However, for two reasons, we believe partisan districting to be particularly important. First, as demonstrated above, partisan districting under MR could be highly effective. Moreover, its ineffectiveness as a containment strategy under PR creates a direct link to questions of electoral system choice. If partisan districting is an effective containment strategy under MR, there is little reason to adopt PR and thereby give up on partisan districting.

Second, partisan districting is also an option for parties that are openly supportive of democracy. Whereas some containment strategies are highly visible (e.g., plural voting) or risky (e.g., electoral fraud), partisan districting has the advantage that it is hard to prove (Wong, 2017). In MR systems, districts must be regularly adapted to accommodate population shifts. Lacking objective benchmarks, deliberately created partisan biases are difficult to prove, as the USA debate demonstrates (Chen and Rodden, 2013). As late as 1914, the Swiss Government, dominated by Liberals, claimed to be unable to detect any 'serious imbalance' between seats and votes (Bundesrat, 1914: 146). Five years later, after the adoption of PR, the Socialists almost doubled their seat share despite losing 7.3 percentage points in their vote share. This credible deniability makes partisan districting less costly in terms of voters' affect (Quintal, 1970).

Of course, partisan districting and other forms of electoral manipulation can be used simultaneously. However, in the other cases, credible denials of electoral manipulation are often more difficult. As a containment strategy, partisan districting thus offers significant advantages.

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