# Is there a Prime Ministerial Party Advantage in Portfolio Allocation? How the Cases You Choose Affect the Answers You Get*

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## ABSTRACT

Is there a prime ministerial (PM) party advantage in ministerial portfolio allocation within coalition governments? Early models of government formation suggested that PM parties are advantaged when portfolios are allocated. Empirical studies based on postwar Western Europe, though, show that portfolios are allocated fairly proportionally with a slight PM party disadvantage. In recent years, scholars have sought to resolve this troubling disconnect between theory and empirics by developing new theoretical models that better match 'empirical reality.' In this letter, we question the purported empirical reality. Using original data on (i) a global sample of postwar non-presidential democracies, (ii) interwar European democracies, and (iii) subnational Indian governments, we find that PM parties are rarely disadvantaged across different regions, time periods, or institutional settings. Indeed, we generally find a significant PM party advantage. Our findings highlight a potential danger of repeatedly testing and revising theories based largely on the same empirical cases.

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# 1 Introduction

Is there a 'prime ministerial party advantage' when it comes to allocating cabinet positions in coalition governments? Cabinet portfolio allocation matters because policy in most democracies is driven by governments. Ministerial portfolios provide cabinet parties with agenda-setting and gate-keeping powers that shape government policy (Laver and Shepsle, 1996; Bäck et al., 2022). This is especially true for the party controlling the prime ministership. How cabinet posts are allocated influences important outcomes like political representation and government accountability (Ferland and Golder, 2021). Despite its relevance, important gaps between theoretical and empirical accounts of portfolio allocation remain.

In non-presidential democracies, voters don't elect the prime minister or cabinet members. Instead, legislative parties bargain with each other to determine who will make it into government. Each party brings certain resources, such as their legislative size and pivotality, to the table in these negotiations. Early formal models of government formation, based around an alternating offers bargaining framework, predicted that the proposer, or formateur party, would be advantaged when it came to the allocation of ministerial portfolios (Austen-Smith and Banks, 1988; Baron and Ferejohn, 1989). In effect, the formateur party, which would become the PM party if successful, was expected to receive a greater share of portfolios than was warranted based on the share of resources it provided to the government. This theoretical prediction ran counter to a much earlier claim made by Gamson (1961) that cabinet parties would receive ministerial portfolios in proportion to the resources each contributes to the government. More importantly, the prediction failed to receive empirical support. Empirical studies of portfolio allocation in postwar Western Europe repeatedly found that ministerial portfolios were allocated in a fairly proportional way and that large parties, such as PM parties, were, if anything, at a slight disadvantage. Contrary to expectations, PM parties received less than their fair share (Browne and Franklin, 1973; Warwick and Druckman, 2001, 2006; Bäck, Meier and Persson, 2009; Falcó-Gimeno and Indriðason, 2013). In recent years, government formation scholars have attempted to resolve this troubling and long-standing disconnect between theory and empirics by developing new theoretical models that better match 'empirical reality' (Bassi, 2013; Martin and Vanberg, 2020; Cox, 2021). These models, which have been successful at achieving this goal, are quite general and do not define their empirical domain narrowly.

In this letter, we question how general the 'empirical reality' really is that has motivated these newer

theoretical models of government formation. As we demonstrate, the empirical patterns of portfolio allocation observed in postwar Western Europe are not representative of how ministerial portfolios are allocated in non-presidential democracies more broadly. Using original data on (i) a global sample of postwar non-presidential democracies, (ii) interwar European democracies, and (iii) subnational Indian governments, we find that PM parties are rarely disadvantaged across different regions, time periods, or institutional settings. Indeed, we generally find a significant PM party advantage. Our findings highlight a potential danger of repeatedly testing and revising theories based largely on the same set of empirical cases. They also leave us with a puzzle as to why portfolio allocation is so different in postwar Western Europe.

## 2 Power-sharing within Cabinets: Theory and Empirics

In most non-presidential democracies, it is rare for a single party to control a legislative majority. However, the existence of the vote of no confidence in these democracies requires that governments obtain the implicit support of a legislative majority to enter and stay office. Typically, legislative parties bargain with each other to form some kind of coalition government. When two or more parties enter government together, they must agree, among other things, on how to allocate ministerial positions among themselves. A crucial part of these negotiations includes which party receives the prime ministership, the most important cabinet post (Laver and Schofield, 1998; Glasgow, Golder and Golder, 2011). Parties care about ministerial positions both because of the office benefits they generate and the opportunity they provide to shape government policy (Müller and Strøm, 2000). But how are ministerial posts allocated across the various members of a coalition government?

In an early discussion of portfolio allocation patterns, Gamson (1961: 376) claims that ministerial portfolios will be allocated proportionally to the resources that coalition parties contribute to any potential government. The resources that a party brings to the bargaining table can be thought of in terms of their legislative seats (Browne and Franklin, 1973; Schofield and Laver, 1985) or in terms of their bargaining power or 'pivotality' in the government formation process (Ansolabehere et al., 2005). Many scholars found Gamson's claim dissatisfying because it lacked "deep theoretical underpinnings" (Cutler et al., 2016: 34). The earliest formal models of coalition bargaining in a government formation context adopted an alternating offers framework (Baron and Ferejohn, 1989: 1193-5). In these bargaining models, the actor who makes

proposals regarding the division of portfolios ends up with a larger share of the pie than expected given the resources they bring to the table. The proposer, or formateur, is typically a large party and, if successful, is expected to become the prime ministerial party (Warwick and Druckman, 2006; Akirav and Cox, 2018). These early theoretical models, thus, predict that the prime ministerial party (and large parties in general) will be advantaged in the portfolio allocation process. Portfolios may be allocated in a roughly proportional way but there should be a prime ministerial party bonus.

But what did the data say? The first empirical assessments of portfolio allocation found that government parties in postwar Western European non-presidential democracies receive a portfolio share roughly proportional to their share of the government's legislative seats (Browne and Franklin, 1973; Schofield and Laver, 1985). However, closer inspection revealed a consistent deviation from perfect 'Gamsonian' proportionality, in which larger parties, including prime ministerial parties, are penalized (Warwick and Druckman, 2001: 628-630) and smaller, non-PM parties are favored (Browne and Franklin, 1973; Bäck, Meier and Persson, 2009). In effect, it appeared that the real-world government formation process was characterized by a PM party *disadvantage*. This empirical pattern was at odds with the theoretical predictions made by Baron-Ferejohn type bargaining models.

This theoretical-empirical disconnect was troubling. As Warwick and Druckman (2001: 628) noted, "We thus have a major disjuncture between the dominant theoretical direction on the issue of coalition payoffs and the available evidence." Other scholars spoke of "a notorious contradiction" (Cutler et al., 2016: 31), a "stark contrast" (Falcó-Gimeno and Indriðason, 2013: 223), and a "fundamental tension" (Warwick and Druckman, 2006: 660) between theory and empirics.

In recent years, scholars have sought to resolve this apparent disconnect between theory and empirics in one of two ways. One strategy has been to use alternative measurement and estimation strategies to ascertain whether the empirical evidence of a PM party disadvantage in the data is 'real'. Early analyses of portfolio allocation operationalized the resources coalition parties brought to the table in terms of their share of the cabinet's legislative seats (Browne and Franklin, 1973). Other studies have operationalized a party's resources in terms of various 'bargaining weights' that take account of, for example, a party's pivotality to the creation of minimal winning coalitions (Ansolabehere et al., 2005). Scholars have investigated the extent to which the proportionality of portfolio allocation varies with the presence of pre-electoral coalitions

(Carroll and Cox, 2007), the uncertainty and complexity in the bargaining environment (Falcó-Gimeno and Indriðason, 2013), the role of monarchical heads of state (Akirav and Cox, 2018), and the perceived importance of ministerial positions (Warwick and Druckman, 2001, 2006). Cutler et al. (2016) propose a different estimation strategy to earlier studies, jointly estimating which parties enter government and how ministerial portfolios are allocated among them. To a large extent, these different measurement and estimation strategies were used to examine portfolio allocation in the same set of postwar Western European countries that had given rise to the theoretical-empirical disconnect. These analyses continued to produce empirical results that deviated from theoretical predictions. While ministerial portfolios were allocated fairly proportionally, PM and large parties generally received less than their fair share of cabinet posts.

The second response to the apparent theoretical-empirical disconnect has been to take the empirical evidence as given and develop new theoretical models whose predictions better match the empirical 'facts'. Scholars have, for example, developed bargaining models that predict proportional portfolio allocation by endogenizing the choice of the party making government proposals (Bassi, 2013). Others have models that predict proportional portfolio allocation using an alternating demands, rather than alternating offers, framework (Morrelli, 1999), incorporate the possibility of government dissolution (Indriðason, 2015), or account for the electoral constraints imposed by voters (Martin and Vanberg, 2020). Explicitly motivated by a desire to match the patterns of portfolio allocation found in the empirical data, Cox (2021) presents a model where the presence of intraparty factions leads to a fairly proportional allocation of ministerial portfolios but where small parties receive a bonus compared to PM or large parties. Other scholars have made more radical theoretical departures from the existing literature, arguing that the assumptions underlying most bargaining models are artificial and lacking in empirical support (Laver, de Marchi and Mutlu, 2011; De Marchi and Laver, 2023).

In what follows, we question how general the 'empirical reality' really is that has motivated these newer theoretical models. Most theoretical models are quite general in their approach and have predictions that apply to all non-presidential democracies.[1] Yet scholars have largely assessed them with empirical evidence drawn from postwar Western Europe, despite hints that portfolio allocation may be different in other world regions (Carroll and Cox, 2007; Ariotti and Golder, 2018; Jang, 2024) or in earlier time periods

[1]For example, Baron and Ferejohn (1989: 1193) address "multiparty parliamentary systems when no party has a majority of seats".

(Akirav and Cox, 2018). When scholars first examined empirical patterns of portfolio allocation, there were few non-presidential democracies outside of Western Europe (Browne and Franklin, 1973; Schofield and Laver, 1985). Data on portfolio allocation was also less readily available from other regions. Over time, questions of ministerial portfolio allocation became so tightly associated with postwar Western Europe that scholars rarely considered the fact that these theoretical arguments applied elsewhere.

That the vast majority of empirical and theoretical innovations with respect to ministerial portfolio allocation in non-presidential democracies have focused on the same small set of postwar West European countries comes at a potential cost. As Laver and Schofield (1998: 8) noted, coalition research in the European politics tradition has "been a rather incestuous process. There is, for example, really only one universe of data of European coalition governments – the set of governments that were actually formed. [...] The original data on coalition governments were collected to test early coalition theories. As a result of these tests [the data] were used to nurture new theories, theories which the same data were used in turn to test." The first empirical assessment of portfolio allocation focused on governments in twelve postwar Western European countries (plus Israel) (Browne and Franklin, 1973); subsequent analyses used the same twelve countries (Schofield and Laver, 1985; Warwick and Druckman, 2001). Warwick and Druckman (2006) later included two additional Western European countries. Since then, portfolio allocation studies have largely focused on postwar coalition governments in these same fourteen countries (Bäck, Meier and Persson, 2009; Falcó-Gimeno and Indriðason, 2013; Cox, 2021).[2]

To what extent do the patterns of portfolio allocation in postwar Western Europe, and in particular evidence of a PM party disadvantage, generalize to other time periods and regions of the world? Below, we provide the first examination of portfolio allocation from a global perspective. Our analyses compare patterns of portfolio allocation across geographic regions, time periods, and levels of government.

## 3 Portfolio Allocation Revisited

Our empirical analysis analyzes four samples of government formation opportunities in non-presidential democracies: (1) the "Core-14" sample of 14 Western European countries typically used in portfolio allo-

[2] Cutler et al. (2016) add one West European country and Australia.

cation studies;[3] (2) the "Postwar Global Sample" of 57 additional non-presidential democracies between 1946 and 2018; (3) the "Interwar Europe Sample" of 22 non-presidential European democracies between 1919 and 1939; and (4) the "India sample" of 26 Indian federal states.[4] Political scientists have not systematically studied the PM party advantage predicted by formal models in the last three of these samples even though none of the existing theoretical models limit their predictions to a particular set of Western European non-presidential democracies.

All our cases feature a vote of no confidence and thus fit the fundamental logic outlined by theoretical models of portfolio allocation. All our cases also feature coalition governments, i.e., cabinets with ministers from at least two legislative parties. The 476 coalition cabinets in postwar global democracies, 285 coalitions from interwar Europe, and 111 multiparty cabinets from Indian states increase the number of cases typically analyzed, the 344 cabinets in the Core-14 sample, by 350%. Comparing the Core-14 Sample with the others on six institutional measures reveals no consistent differences between them, assuaging concerns about the fundamental comparability of the newly introduced cases (see Online Appendix B).

Our unit of analysis is party $i$ nested in cabinet $c$. The dependent variable $\textit{Portfolioshare}_{ic}$ measures the share of ministerial portfolios in cabinet $c$ controlled by party $i$. To empirically examine whether PM parties are favored by the portfolio allocation process, we include two key independent variables. The first, $\textit{PM}_{ic}$, is a dichotomous variable that equals 1 if party $i$ in cabinet $c$ controls the prime ministerial position and 0 otherwise. The second, $\textit{Seatshare}_{ic}$, captures the share of legislative seats that party $i$ controls out of the total number of seats controlled by all of the parties in cabinet $c$. Building on existing practices in the literature, we start with a baseline model that employs ordinary least squares regression with robust standard errors to take account of any heteroskedasticity:[5]

$$\textit{Portfolioshare}_{ic} = \beta_0 + \beta_1 \textit{PM}_{ic} + \beta_2 \textit{Seatshare}_{ic} + \epsilon_{ic}.$$

The coefficient $\beta_1$ is our quantity of interest and indicates whether PM parties do better or worse than non-PM parties after controlling for the resources these parties bring to the table through $\textit{Seatshare}_{ic}$. This

[3] Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, and Sweden.

[4] Online Appendix A provides detailed information on the selection criteria and the specific cases included in each sample.

[5] Below we discuss why the baseline model may not be methodologically appropriate and suggest alternatives. We nevertheless retain it to compare our results to existing work.

coefficient has typically been found to be negative in postwar Western Europe, indicating a PM party disadvantage in the portfolio allocation process.

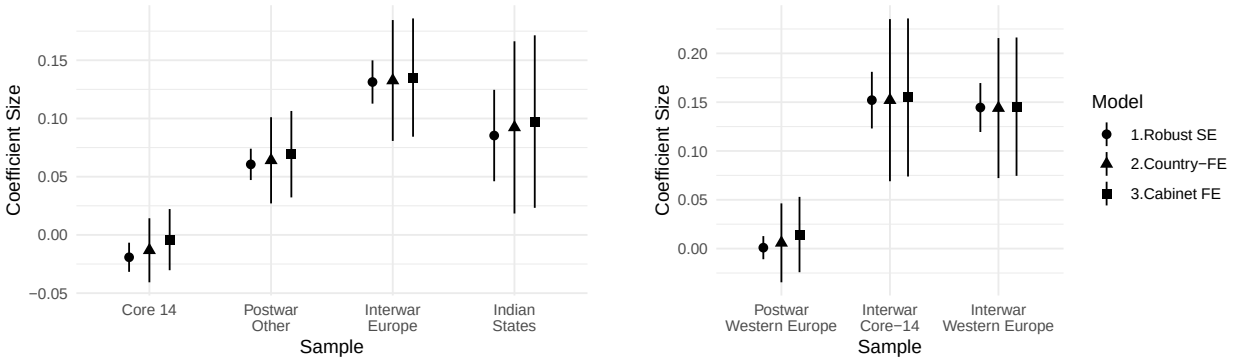
There are, however, reasons to think that our baseline model may not be entirely appropriate. It compares the average PM party to the average non-PM party across all cabinets in the sample. Conventions of portfolio allocation, though, may vary across countries. To address this issue and any other unobserved, time-invariant factors that differ between countries, we estimate a second model that includes country fixed effects. We also employ country-clustered standard errors to account for the lack of independence between observations in the same country. The inclusion of country fixed effects means that this second model compares the average PM party to the average non-PM party from the same country. Patterns of portfolio allocation may also vary across cabinets within the same country for unobserved reasons. Thus, we estimate a third model that includes cabinet fixed effects. In this model, we are comparing the PM party with all other parties in the same cabinet. As before, we cluster standard errors by country. We estimate each of these three models on our four different samples.

### 3.1 Results

The full results of our analysis can be found in Online Appendix C. In Figure 1, we display the estimated PM party effect ($\beta_1$) across each of our four samples and three model specifications (Figure 1a). We focus first on the replication of existing models and the estimated PM party bonus in the Core-14 sample in the absence of any fixed effects (circles). In line with existing studies, we find a statistically significant negative effect indicating that PM parties are disadvantaged in the portfolio allocation process. Once we introduce country (triangles) or cabinet fixed effects (squares), the PM party effect remains negative but becomes statistically insignificant. The results from the Core-14 sample indicate that PM parties are either disadvantaged or treated similarly to other parties. Does this pattern generalize?

In striking contrast to the Core-14 results, we find a positive PM party effect in every other sample and specification that we consider! The estimated effects do not only reject zero effects in all nine models, they are also significantly larger than the Core-14 PM party effect. While the differences between model specifications within samples are negligible, notable variation between our regional samples exists. We estimate the strongest PM party bonus in interwar European democracies, and smaller advantages in postwar

Figure 1: Estimated PM party bonus in four different samples (left) and varying spatial and temporal scope for Western European cases (right).




(a) All observations (Tables A7 and A8)

(b) Post/interwar Western Europe (Tables A9-A10)

democracies across the globe as well as in Indian states. In addition to offering very little support for the predictions of recent formal models of coalition bargaining, our results also open up new questions about existing differences in the strength of the PM party bonus across different regions and political cultures.[6]

Next, we explore the stability of the PM party disadvantage in Western Europe to alternative spatial and temporal scope conditions. In Figure 1b, we present PM party estimates for an extended postwar Western European sample, which adds coalition cabinets from the French 4th Republic, Greece, and the United Kingdom to the Core-14 countries. Moreover, we investigate the PM party effect in the interwar Core-14 and the extended interwar Western European samples. The negative PM party effect disappears in all of these models. The PM party effect in the postwar Western European sample is statistically insignificant and ceases to be negative across all model specifications. PM party effects in both interwar samples are consistently positive and statistically significant.

### 3.2 Robustness tests

Next, we subject our results to different robustness tests. First, portfolio share data is compositional data (Aitchison, 1986). Put differently, observations within one formation opportunity are not independent from one another (Fréchette, Kagel and Morelli, 2005), and $n$-1 observations within one formation opportunity convey the same information as $n$ observations, which yields standard errors that are too optimistic. We

[6]Hausmann tests across all eight fixed effects models reject the null hypothesis that random effects models are the appropriate modeling choice.

tackle these issues by re-estimating all models depicted in Figure 1a by dropping one observation from each formation opportunity (see Online Appendix (OA) C.3), by implementing the additive log-ratio transformation recommended by Aitchison (1986) (OA C.4), and by estimating beta regressions (OA C.5). The latter modeling approach additionally addresses the problem that our outcome variable is bounded between 0 and 1. We replicate our main results in all 36 (sample-specification) models estimated in these robustness tests, with the exception that the positive PM party coefficient just fails to reach statistical significance in three models associated with the India sample.

Second, we replicate existing models that explain the lack of a PM party bonus through theoretical or empirical adjustments. Cox (2021: 927) is able to resolve the "portfolio allocation paradox" by developing a new formal model that relaxes the assumption that parties are unitary actors. Ansolabehere et al. (2005) take a more empirical tack and argue that the logic of portfolio allocation revolves around parties' voting weights rather than seat shares. We replicate both Cox's finding of no PM party effect in the Core-14 sample (OA C.6) and Ansolabehere et al.'s positive PM party effect (OA C.7). In keeping with our original results, we uncover significantly larger PM party effects in all other samples.

Third, Cutler et al. (2016) raise two concerns regarding the empirical analysis of portfolio allocation. One is that the predictions from formal models of portfolio allocation generally only apply to majority governments (ibid., 39). The other is that portfolio allocation and the choice of PM party (and government) are jointly determined. To address the first concern, we re-estimate our models after dropping minority coalitions. Our results and inferences remain robust (OA C.8). To address the second concern, we follow Cutler et al.'s (2016) approach and jointly estimate the "ex-ante" likelihood of becoming the PM party and the "ex-post" probability of portfolio shares by implementing a probit-linear regression mixture model with a multivariate normal error distribution (Teixeira-Pinto and Normand, 2009). In line with their analysis, we add both seat shares and bargaining weights as predictors to both equations. We find a positive and statistically significant effect of PM party status on portfolio allocation in the Core-14 sample but larger effects in the Postwar Global Sample (OA C.9).

Finally, we estimate two sets of Bayesian regression models. After disaggregating the postwar global sample into five regions (Western Europe, Africa, the Americas, Asia & Oceania, and Eastern Europe), we estimate the PM party effect with a positive prior derived from the theoretical prediction made by Baron and

Ferejohn (1989). We find positive estimates of the PM party variable with credible intervals that exclude 0 for all world regions except Western Europe. The credible intervals of all world regions except for Eastern Europe exclude the average effect estimated for Western Europe (OA C.10). We then re-estimate our main models but this time impose a negative prior derived from previous empirical studies. Even this 'hard' test produces positive PM party effects for all specifications in the postwar global and interwar European samples (OA C.11).

# 4 Discussion

Overall, two key observations stand out from our empirical analysis. First, the empirical patterns of portfolio allocation observed in post-war Western Europe, which have motivated recent theoretical innovations, are not representative of how ministerial portfolios are allocated in non-presidential democracies more generally. Second, there is considerable variation in the size of the PM party bonus across different regions, time periods, and institutional settings.

Our findings generate new questions for comparative scholars interested in government formation. To the extent that the 'usual suspects' – the postwar Western European coalition governments that are most often studied – exhibit a fundamentally different pattern to governments elsewhere or in an earlier time period, what explains this difference? What contextual features are we omitting from our theoretical models and our analyses of portfolio allocation that would allow us to understand the conditions under which we should expect to see a PM party disadvantage? Finally, do these findings have implications for other results in the government formation literature that are based on postwar Western Europe cases but assumed to be broadly generalizable?

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Online Appendix to

*Investigating Portfolio Allocation in Coalition Governments: How the Cases You Choose Affect the Answers You Get*


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# A Data

## A.1 The Core-14 or Postwar Europe sample, 1946-2018

The standard studies of portfolio allocation in Western Europe analyze fourteen countries. Some studies have one or two fewer countries, some one or two more, and some cover longer time periods than others. But they largely cover the same core countries. We use data from these same fourteen countries, from the European part of our global sample (see below), to match the existing datasets.

Table A1: Cases included in the postwar Europe core 14 sample.

| Country | Cabinet parties | Coalition governments | First year | Last year |
|---|---|---|---|---|
| Austria | 47 | 23 | 1945 | 2017 |
| Belgium | 140 | 36 | 1946 | 2018 |
| Denmark | 63 | 24 | 1950 | 2016 |
| Finland | 167 | 43 | 1946 | 2017 |
| France | 60 | 24 | 1969 | 2017 |
| Germany | 57 | 26 | 1949 | 2018 |
| Iceland | 75 | 31 | 1944 | 2017 |
| Ireland | 40 | 17 | 1948 | 2017 |
| Italy | 142 | 37 | 1948 | 2016 |
| Luxembourg | 46 | 21 | 1945 | 2018 |
| Netherlands | 89 | 29 | 1946 | 2017 |
| Norway | 43 | 14 | 1963 | 2018 |
| Portugal | 22 | 9 | 1978 | 2011 |
| Sweden | 28 | 10 | 1951 | 2014 |
| Total | 1019 | 344 | | |

## A.2 The Postwar Global Sample: Africa (1994-2017), the Americas (1980-2009), Asia & Oceania (1945-2018), and Europe (1945-2018).

We begin by considering all democracies in the postwar period, including only country-years where a country scored at least a 6 on the -10 to +10 scale provided by Polity IV (Marshall, Gurr and Jaggers, 2019). In a few cases where the population size was below the minimum level of inclusion in the Polity dataset, we considered a country to be democratic if it was coded as "Free" by Freedom House (2022). We exclude democracies that don't have a vote of no confidence procedure, which means dropping presidential democracies and keeping the parliamentary and semi-presidential ones (Clark, Golder and Golder, 2024). For each

of our democracies we code a new government as forming when there has been an election, a change in the identity of the head of the government, a change in the cabinet's partisan composition, or the government resigns (Müller and Strøm, 2000). We keep the coalition governments and drop single-party ones. For each party in each coalition government, we record the number of ministerial portfolios received as well as the number of legislative seats they control. We use these numbers to calculate each party's share of the total number of partisan portfolios as well as their share of the total number of legislative seats controlled by the government. We drop any coalition governments for which we cannot determine the exact number of portfolios allocated to the parties that comprise the government. We include whether each party holds the portfolio of the prime minister (what would have been labeled the formateur party in prior studies). We drop governments with nonpartisan prime ministers.

We code the region of each country in this dataset based on the coding from the United Nations Statistics Division (Africa, Americas, Asia, Europe, Oceania), grouping Asia and Oceania together.[7]

*Africa*

We extended the 1990-2014 data on African coalition governments from Ariotti and Golder (2018) through 2018. To do so, we relied on a variety of media and government sources. We have complete information on partisan portfolio allocation in governments in 6 parliamentary or semi-presidential democracies from Africa in our global sample (see Table A2). For legislative seats totals held by nongovernmental parties, to calculate bargaining weights, we consulted sources such as IPU Parline and the African Elections Datadase.

*Americas*

We gathered original data on all coalition governments in parliamentary and semi-presidential democracies in North and South America from 1945-2018. This region is dominated by presidential regimes, and many of the parliamentary regimes experience only single-party governments. For Peru, a semi-presidential regime, we relied on data from the Dataverse file associated with Vera and Carreras (2018). For other non-presidential democracies with coalition governments, we used a variety of media and governmental sources

[7]Note that Taiwan is not a member state of the United Nations so we consider its geographic location and code it as belonging to the Asian-Pacific region.

as well as resources such as *The Europa World Year Book* and the IPU Parline website. There are 6 non-presidential democratic countries from the Americas in the global sample (see Table A2).

*Asia-Pacific*

We use the Asia-Pacific dataset constructed by Jang (2024) which includes all coalition governments under democratic regimes in the Asia-Pacific region from 1945 to 2018. This dataset was collected from a wide range of sources, including official government websites, news articles, *the Political Handbook of the World*, the *Inter-Parliamentary Union*, case studies, etc. We exclude all presidential democracies. Through this process, 27 democratic cases in the Asia-Pacific region were included in the sample (see Table A2).

*Europe*

We used data from the Comparative Parliamentary Democracy Archive (Strøm, Müller and Bergman, 2008) on governments in 17 non-presidential Western European democracies from 1945 to 1998. The countries with included in the CPDA were Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom (though neither Spain nor the UK had any coalition governments during that time period). We used data from Conrad and Golder (2010) on governments in eleven Eastern European democracies from 1990 to 2008. The countries included in their dataset were Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. We updated the information on governments in both sets of countries through 2018. We also gathered data on coalition governments for all other parliamentary or semi-presidential democracies in Western and Eastern Europe for any democratic years from 1946 through 2018. To do this, we examined media and government sources, along with case studies and volumes about national elections. A particularly useful resource was the annual country yearbooks published by the *European Journal of Political Research*. For the number of portfolios allocated to the government parties, we used the *Who Governs Europe* database (Casal Bértoa and Enyedi, 2022).

The countries in the Core-14 or Postwar Europe sample were removed from this dataset for separate empirical analyses. Without those countries, there are 57 democratic countries remaining in the global

sample (see Table A2). Note that the studies that use the Core-14 countries exclude all governments from the French Fourth Republic (1946-1957), so "France" in the Core-14 sample is the French Fifth Republic (beginning in 1958) only whereas "France" in the global sample is the French Fourth Republic.

Table A2: Cases included in the postwar global sample.

| Country | Cabinet parties | Coalition governments | First year | Last year |
|---|---|---|---|---|
| Albania | 38 | 10 | 2002 | 2013 |
| Armenia | 3 | 1 | 2018 | 2018 |
| Australia | 53 | 25 | 1949 | 2018 |
| Bangladesh | 5 | 2 | 1996 | 2001 |
| Bulgaria | 17 | 7 | 1995 | 2017 |
| Burkina Faso | 3 | 1 | 2016 | 2016 |
| Croatia | 27 | 8 | 2000 | 2017 |
| Czech Republic | 26 | 9 | 1993 | 2018 |
| Dominica | 4 | 2 | 2000 | 2000 |
| Estonia | 34 | 13 | 1992 | 2016 |
| Fiji | 7 | 2 | 1999 | 2001 |
| France | 97 | 21 | 1947 | 1957 |
| Georgia | 12 | 4 | 2012 | 2015 |
| Greece | 11 | 5 | 1989 | 2015 |
| Grenada | 2 | 1 | 1990 | 1990 |
| Guinea-Bissau | 3 | 1 | 2007 | 2007 |
| Guyana | 2 | 1 | 2015 | 2015 |
| Hungary | 21 | 9 | 1990 | 2014 |
| India | 65 | 11 | 1977 | 2014 |
| Iraq | 11 | 1 | 2014 | 2014 |
| Israel | 255 | 63 | 1949 | 2018 |
| Japan | 60 | 22 | 1983 | 2017 |
| Kyrgyzstan | 13 | 4 | 2010 | 2014 |
| Latvia | 71 | 21 | 1993 | 2016 |
| Lebanon | 21 | 5 | 2005 | 2018 |
| Lesotho | 14 | 3 | 2012 | 2017 |
| Liechtenstein | 4 | 2 | 1993 | 1993 |
| Lithuania | 32 | 11 | 1996 | 2016 |
| Macedonia | 28 | 12 | 1994 | 2017 |
| Malaysia | 28 | 6 | 1957 | 2018 |
| Mauritius | 22 | 6 | 1990 | 2014 |
| Moldova | 22 | 8 | 1999 | 2016 |
| Mongolia | 33 | 12 | 1996 | 2014 |
| Montenegro | 9 | 3 | 2009 | 2016 |

| | | | | |
|---|---|---|---|---|
| Myanmar | 7 | 2 | 1956 | 1957 |
| Nepal | 57 | 11 | 2006 | 2018 |
| New Zealand | 14 | 7 | 1996 | 2017 |
| Pakistan | 35 | 9 | 1990 | 2018 |
| Peru | 18 | 9 | 1980 | 2009 |
| Poland | 47 | 16 | 1991 | 2014 |
| Romania | 45 | 16 | 1996 | 2018 |
| San Marino | 17 | 5 | 2006 | 2016 |
| Sao Tome and Principe | 7 | 3 | 1996 | 2002 |
| Serbia | 9 | 3 | 2007 | 2012 |
| Slovakia | 30 | 10 | 1993 | 2018 |
| Slovenia | 52 | 15 | 1993 | 2018 |
| Solomon Islands | 44 | 10 | 1978 | 2017 |
| South Africa | 10 | 4 | 1994 | 2004 |
| Sri Lanka | 29 | 10 | 1952 | 2015 |
| St. Kitts and Nevis | 3 | 1 | 2015 | 2015 |
| Taiwan | 4 | 2 | 2000 | 2000 |
| Thailand | 28 | 6 | 1992 | 2011 |
| Timor-Leste | 14 | 5 | 2007 | 2018 |
| Trinidad and Tobago | 2 | 1 | 1995 | 1995 |
| Turkey | 35 | 14 | 1961 | 1999 |
| Ukraine | 11 | 4 | 2005 | 2010 |
| United Kingdom | 2 | 1 | 2010 | 2010 |
| Total | 1573 | 476 | | |

### A.3 The Interwar Europe Sample, 1919-1939

We collected cabinet data from Europe in the interwar period as part of a third-party funded research project on coalition governments in European democracies between January 1st, 1919 and August 31st, 1939. The sample includes all European parliamentary democracies according to the minimal definition provided by the Boix, Miller, and Rosato (BMR) political regimes dataset (Boix, Miller and Rosato, 2013). The BMR data classifies a state as democratic as of December 31st of given year if (1) its executive is directly or indirectly elected and responsible to either voters or a legislature, (2) free and fair elections determine the composition of the legislature, and (3) a majority of adult men has the right to vote (Boix, Miller and Rosato, 2013: 1530). Overall, the interwar Europe sample consists of 20 parliamentary and two semi-presidential

democracies.[8] Half of all democracies survived the entire period whereas 11 democracies exited the sample before September 1939, with Italy being the first case of breakdown in March 1922 and Spain the last in April 1939. Table A3 lists all countries and years during Europe's interwar period.

Table A3: Cases included in the interwar Europe sample.

| Country | Cabinet parties | Coalition governments | First year | Last year |
|---|---|---|---|---|
| Austria | 34 | 14 | 1921 | 1932 |
| Belgium | 41 | 17 | 1919 | 1939 |
| Czechoslovakia | 131 | 20 | 1920 | 1938 |
| Denmark | 8 | 4 | 1929 | 1939 |
| Estonia | 62 | 17 | 1921 | 1933 |
| Finland | 43 | 15 | 1919 | 1939 |
| France | 124 | 36 | 1919 | 1939 |
| Germany | 99 | 26 | 1919 | 1933 |
| Greece | 47 | 17 | 1926 | 1935 |
| Iceland | 7 | 3 | 1932 | 1939 |
| Italy | 37 | 10 | 1919 | 1922 |
| Latvia | 105 | 23 | 1923 | 1933 |
| Luxembourg | 19 | 9 | 1920 | 1938 |
| Netherlands | 28 | 8 | 1922 | 1939 |
| Norway | 10 | 5 | 1920 | 1927 |
| Poland | 19 | 5 | 1923 | 1926 |
| Portugal | 33 | 13 | 1919 | 1925 |
| San Marino | 6 | 3 | 1920 | 1922 |
| Spain | 69 | 17 | 1931 | 1936 |
| Sweden | 4 | 2 | 1926 | 1936 |
| United Kingdom | 22 | 8 | 1919 | 1937 |
| Yugoslavia | 36 | 13 | 1921 | 1928 |
| Total | 984 | 285 | | |

For each democracy in the interwar Europe sample, we drew on different sources to collect party seat shares, cabinet representation, and the identity of the PM party. The main source for 11 states is the widely-used *ParlGov* dataset (Döring and Manow, 2016), which provides election results and the composition of cabinets. For 11 predominantly Eastern and Southern European democracies, we collected election results and cabinet membership from a wide variety of sources. With respect to election data, we drew on a wealth

[8]Finland and Germany had semi-presidential constitutions. Ireland is not part of the sample, because there were only single party majority governments during the interwar period. We could not find portfolio information for Lithuania. Finally, in keeping with contemporary practise we consider Switzerland a presidential democracy because the executive Federal Council, a collective presidency of seven ministers, is not subject to a vote of no confidence, even if it is elected by parliament.

of non-digitized election almanacs (McHale and Skowronski, 1983; Caramani, 2000; Nohlen and Stöver, 2010), official records from election commissions or statistical offices, historical case studies (The Information Department of the Royal Institute of International Affairs, 1970 (1938), or period-specific edited volumes (Berg-Schlosser and Mitchell, 2000). We cross-referenced these sources and included those election results with the highest agreement across sources. When a majority of sources indicated that the electoral results were different from those reported in *ParlGov* we changed the reported results.

Regarding cabinet-level data, we derived information predominantly from the *Who Governs Europe* database (Casal Bértoa and Enyedi, 2022) for eight of the 11 cases not included in *ParlGov*. We again validated these classifications drawing on country-specific sources where possible. For the three countries missing from *Who Governs Europe*, Iceland, Italy, and Yugoslavia we relied exclusively on case-specific sources. For each country, a detailed list of references and coding notes is available on request.

### A.4 The Indian States sample, 1977-2019

We collected cabinet data for 26 of the 34 Indian states and union territories in the period 1977 to 2019.[9] Indian states are sub-national parliamentary democracies with a first-past-the-post electoral system. The executive is headed by a Chief Minister who heads a cabinet that is responsible to the lower house of parliament, the *Vidhan Sabha*. There is a long tradition of studying coalition behavior in Indian states (Brass, 1968; Bueno de Mesquita, 1975). In particular after 1989, Indian states featured a large number of coalition governments (Ziegfeld, 2012), and corresponding variation in portfolio shares. Unlike all other samples, the Indian state sample only includes cabinets formed after elections. We could not identify systematic information on cabinet reshuffles within electoral periods. Table A4 lists all states and years included in our data.

We computed party seat shares from data on candidate-district-level election results provided by the Trivedi Centre for Political Data's (TCPD) *Lok Dabha* database. We subset this sample to all candidates that won their respective districts and became members of parliament (MPs), i.e., their respective Vidhan Sabha. We then summed the number of seats won by each party and divided it by the total number of parliamentary seats. Data on cabinet appointments stem from two sources: First, Bhavnani (2018) provides

[9] These states include more than 97% of India's population (Bhavnani, 2018: 76).

Table A4: Cases included in the Indian federal states sample.

| State | Cabinet parties | Coalition governments | First year | Last year |
|---|---|---|---|---|
| Andhra Pradesh | 8 | 4 | 1978 | 2014 |
| Arunachal Pradesh | 2 | 1 | 1980 | 1980 |
| Assam | 9 | 4 | 1978 | 2016 |
| Bihar | 10 | 4 | 2000 | 2015 |
| Goa | 14 | 5 | 1999 | 2017 |
| Haryana | 8 | 4 | 1982 | 2019 |
| Himachal Pradesh | 4 | 2 | 1990 | 1998 |
| Jammu & Kashmir | 16 | 6 | 1977 | 2014 |
| Jharkhand | 15 | 4 | 2005 | 2019 |
| Karnataka | 11 | 4 | 1983 | 2018 |
| Kerala | 58 | 10 | 1977 | 2016 |
| Madhya Pradesh | 2 | 1 | 1998 | 1998 |
| Maharashtra | 18 | 6 | 1978 | 2019 |
| Manipur | 33 | 8 | 1972 | 2017 |
| Meghalaya | 26 | 7 | 1978 | 2018 |
| Mizoram | 6 | 3 | 1987 | 2003 |
| Nagaland | 11 | 3 | 2003 | 2018 |
| Odisha | 4 | 2 | 2000 | 2004 |
| Puducherry | 10 | 4 | 1974 | 2001 |
| Punjab | 8 | 4 | 1977 | 2012 |
| Rajasthan | 4 | 2 | 1990 | 2018 |
| Telangana | 5 | 2 | 2014 | 2018 |
| Tripura | 22 | 8 | 1977 | 2018 |
| Uttar Pradesh | 7 | 3 | 1993 | 2017 |
| Uttarakhand | 5 | 2 | 2007 | 2012 |
| West Bengal | 31 | 8 | 1977 | 2011 |
| Total | 347 | 111 | | |

data on cabinet positions that were in office one year after the election in 17 states in the period 1977 to 2007. We merged these information with the TCPD candidate-level data. Second, we collected original data from *The Journal of Parliamentary Information* (JPI), published quarterly by the Lok Sabha (Indian National Parliament) Secretariat. The JPI publishes the names of newly inaugurated cabinet ministers after state elections. We matched the names with the candidates in the TCPD election data. Where multiple candidates with the same name were elected to parliament, we drew on party affiliation or additional sources, such as Indian newspapers like the The Hindu or the Times of India, to determine which MP held the cabinet position.

Having merged MP data with cabinet appointments, we calculated party-level seat and portfolio shares

for each election by summing up the number of seats/cabinet positions by party and dividing by the total number of parliamentary seats/cabinet positions. Next, we dropped all single-party majority cabinets to arrive at the sample of 111 multi-party cabinets with 347 parties. Finally, we identified the PM party party, i.e., the party of the Chief Minister, through information from the JPI.

# B Descriptives

Table A5: Overview of data by regions/samples.

| Sample | Parties | Cabinets | States |
|---|---|---|---|
| Africa | 59 | 18 | 6 |
| Caribbean & Lat America | 31 | 15 | 6 |
| Asia | 833 | 234 | 23 |
| Eastern Europe | 519 | 175 | 17 |
| Western Europe | 1150 | 378 | 19 |
| Interwar Europe | 984 | 285 | 22 |
| Indian States | 347 | 111 | 26 |

Figure A1 plots the distributions of key institutional characteristics across the four regional samples using elections at the unit of analysis. Starting in the top-left, we find that the core-14 sample (red) has a larger number of semi-presidential *regimes* than other regions. At the other end of the distribution, the Indian states sample (light blue) consists entirely of parliamentary democracies. With respect to the *parliamentary size* (top right), the core-14 region does not differ much from interwar parliaments (purple) although the variation for the core-14 sample is smaller. Indian state legislatures are the smallest.

Next, we compare the distribution of *electoral rules* (middle row, left). The core-14 sample, features the fewest elections with majoritarian rules but does not differ much from from the interwar European parliaments in the number of elections with PR rules. On mixed electoral rules, a combination of majoritarian and PR rules at different electoral tiers or in different constituencies, the core-14 elections fall in-between the global postwar (green) and the interwar Europe sample. In India, all Members of the Legislative Assemblies (MLAs) are elected under majoritarian first-past-the-post rules. The *effective number of parliamentary parties* (ENPP) reflects the distribution of electoral rules (middle row, right). ENPP is smallest under exclusively majoritarian rules in India, and rises as the number of share of majoritarian elections decreases. The core-14 sample and the interwar Europe sample hardly differ, although the latter features a slightly larger number of majoritarian elections.

Next, we compare the *frequency of minority and majority coalitions* (bottom left). Minority coalitions are disproportionaly more common in interwar Europe than anywhere else, and least common in Indian states. Finally, we turn to *average district magnitude* (bottom right). Once again, the core-14 sample barely

Table A6: Summary statistics of key variables for each sample.

| Statistic | N | Mean | St. Dev. | Min | Max |
|---|---|---|---|---|---|
| **Core-14** | | | | | |
| Portfolio Share | 1,019 | 0.338 | 0.208 | 0.031 | 0.944 |
| Seat Share | 1,019 | 0.338 | 0.246 | 0.014 | 0.975 |
| Formateur Status | 1,019 | 0.338 | 0.473 | 0 | 1 |
| Equal Share | 1,019 | 0.338 | 0.118 | 0.143 | 0.500 |
| Voting Weight (Banzhaf) | 978 | 0.335 | 0.251 | 0.000 | 1.000 |
| **Postwar Other** | | | | | |
| Portfolio Share | 1,573 | 0.303 | 0.261 | 0.015 | 0.958 |
| Seat Share | 1,573 | 0.303 | 0.269 | 0.003 | 0.990 |
| Formateur Status | 1,573 | 0.303 | 0.460 | 0 | 1 |
| Equal Share | 1,573 | 0.303 | 0.125 | 0.091 | 0.500 |
| Voting Weight (Banzhaf) | 837 | 0.339 | 0.287 | 0.000 | 1.000 |
| **Interwar Europe** | | | | | |
| Portfolio Share | 984 | 0.290 | 0.205 | 0.053 | 0.947 |
| Seat Share | 984 | 0.290 | 0.231 | 0.000 | 1.000 |
| Formateur Status | 984 | 0.282 | 0.450 | 0 | 1 |
| Equal Share | 984 | 0.290 | 0.118 | 0.111 | 0.500 |
| Voting Weight (Banzhaf) | 984 | 0.284 | 0.249 | 0.000 | 1.000 |
| **Indian States** | | | | | |
| Portfolio Share | 347 | 0.320 | 0.290 | 0.022 | 0.971 |
| Seat Share | 347 | 0.320 | 0.295 | 0.006 | 0.994 |
| Formateur Status | 347 | 0.320 | 0.467 | 0 | 1 |
| Equal Share | 347 | 0.320 | 0.130 | 0.125 | 0.500 |
| Voting Weight (Banzhaf) | 347 | 0.325 | 0.350 | 0.000 | 1.000 |

differs from the interwar Europe sample on average. In the rest of the world and in Indian states, the size of the average district is significantly lower than in Europe. Across all comparisons, we find no clear pattern of exceptionalism for the core-14 sample.

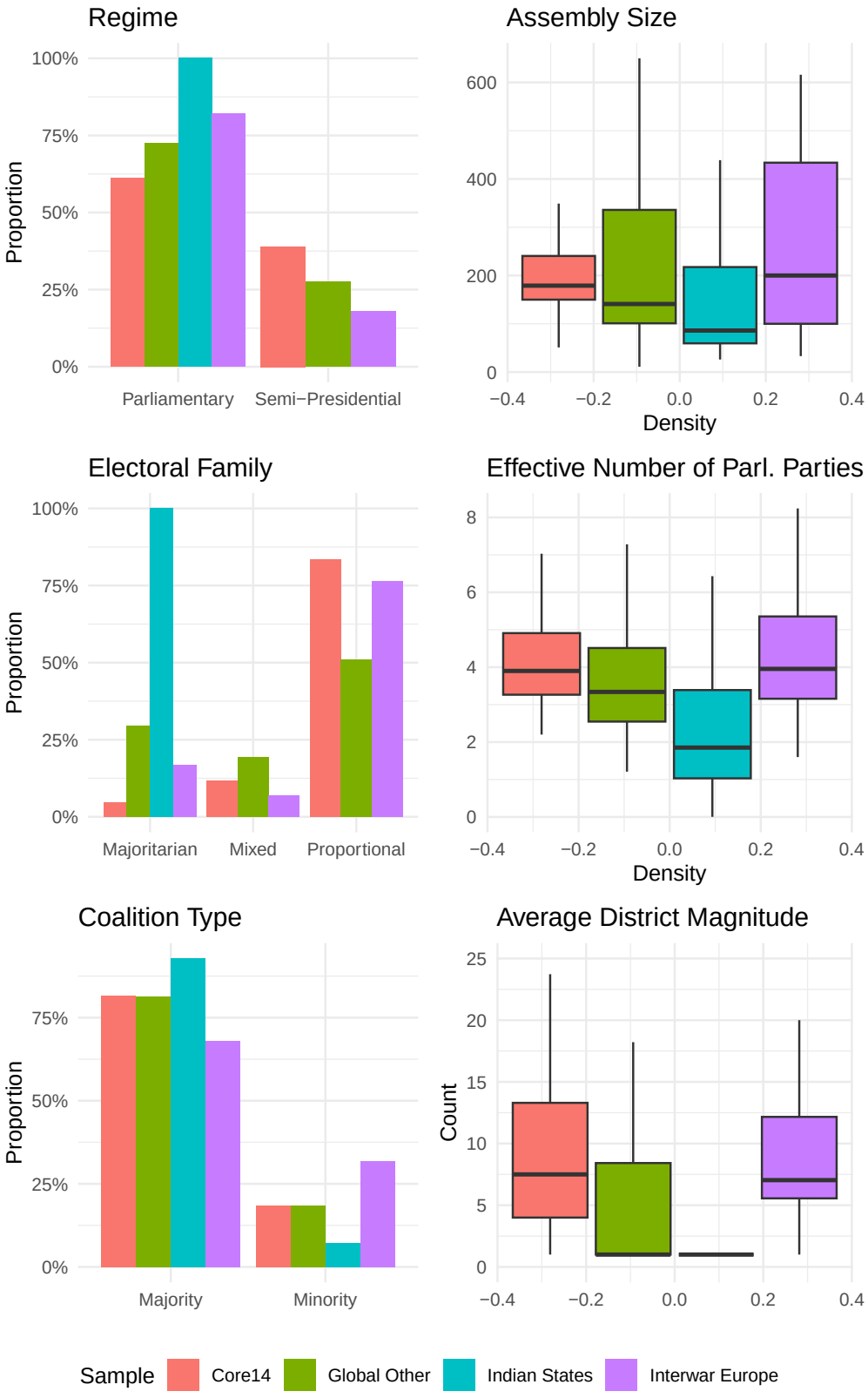



Figure A1: Comparison of four samples across different variables.

# C Analysis

## C.1 All observations

Table A7: Linear regressions on partisan portfolio share in core-14 European and global states, 1946-2020

| | **Postwar Core-14 Europe** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.83*** | 0.75*** | 0.80*** | 0.84*** | 0.80*** | 0.82*** |
| | (0.01) | (0.03) | (0.03) | (0.01) | (0.03) | (0.03) |
| PM Party | −0.02** | −0.004 | −0.01 | 0.06*** | 0.07*** | 0.06** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.02) |
| Constant | 0.06*** | | | 0.03*** | | |
| | (0.004) | | | (0.003) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1019 | 1019 | 1019 | 1573 | 1573 | 1573 |

***p $<$ .001; **p $<$ .01; *p $<$ .05

Table A8: Linear regressions on partisan portfolio share in Europe (1919-1939) and Indian states (1977-2018)

| | **Interwar Europe** | | | **Indian States** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.57*** | 0.46*** | 0.52*** | 0.81*** | 0.77*** | 0.79*** |
| | (0.02) | (0.07) | (0.06) | (0.03) | (0.05) | (0.05) |
| PM Party | 0.13*** | 0.14*** | 0.13*** | 0.09*** | 0.10* | 0.09* |
| | (0.01) | (0.03) | (0.03) | (0.02) | (0.04) | (0.04) |
| Constant | 0.09*** | | | 0.03*** | | |
| | (0.01) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 984 | 984 | 984 | 347 | 347 | 347 |

***p $<$ .001; **p $<$ .01; *p $<$ .05

## C.2 Core-14 vs Western Europe - Postwar & Interwar

Table A9: Linear regressions on partisan portfolio share in core-14 & postwar Western Europe, 1946-2020

| | **Postwar Core-14** | | | **Postwar Western Europe** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.83*** | 0.80*** | 0.75*** | 0.81*** | 0.78*** | 0.73*** |
| | (0.01) | (0.03) | (0.03) | (0.01) | (0.03) | (0.03) |
| PM Party | −0.02** | −0.01 | −0.004 | 0.001 | 0.01 | 0.01 |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.02) |
| Constant | 0.06*** | | | 0.06*** | | |
| | (0.004) | | | (0.003) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1019 | 1019 | 1019 | 1150 | 1150 | 1150 |

***p $<$ .001; **p $<$ .01; *p $<$ .05

Table A10: Linear regressions on partisan portfolio share in interwar core-14 & Western Europe, 1946-2020

| | **Interwar Core-14** | | | **Interwar Western Europe** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.47*** | 0.43*** | 0.35*** | 0.51*** | 0.47*** | 0.41*** |
| | (0.03) | (0.06) | (0.08) | (0.03) | (0.06) | (0.07) |
| PM Party | 0.15*** | 0.15** | 0.15** | 0.14*** | 0.14** | 0.15** |
| | (0.01) | (0.04) | (0.04) | (0.01) | (0.04) | (0.04) |
| Constant | 0.13*** | | | 0.11*** | | |
| | (0.01) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 487 | 487 | 487 | 584 | 584 | 584 |

***p $<$ .001; **p $<$ .01; *p $<$ .05

## C.3 N-1 random observations

Table A11: Linear regressions on partisan portfolio share in core-14 European and global states, 1946-2020. Drop one random party per cabinet.

| | **Postwar Core-14 Europe** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $0.83^{***}$ | $0.75^{***}$ | $0.80^{***}$ | $0.84^{***}$ | $0.79^{***}$ | $0.83^{***}$ |
| | (0.02) | (0.03) | (0.03) | (0.01) | (0.03) | (0.03) |
| PM Party | $-0.02^{*}$ | $-0.01$ | $-0.02$ | $0.06^{***}$ | $0.07^{**}$ | $0.06^{**}$ |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.02) |
| Constant | $0.06^{***}$ | | | $0.03^{***}$ | | |
| | (0.004) | | | (0.003) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 675 | 675 | 675 | 1097 | 1097 | 1097 |

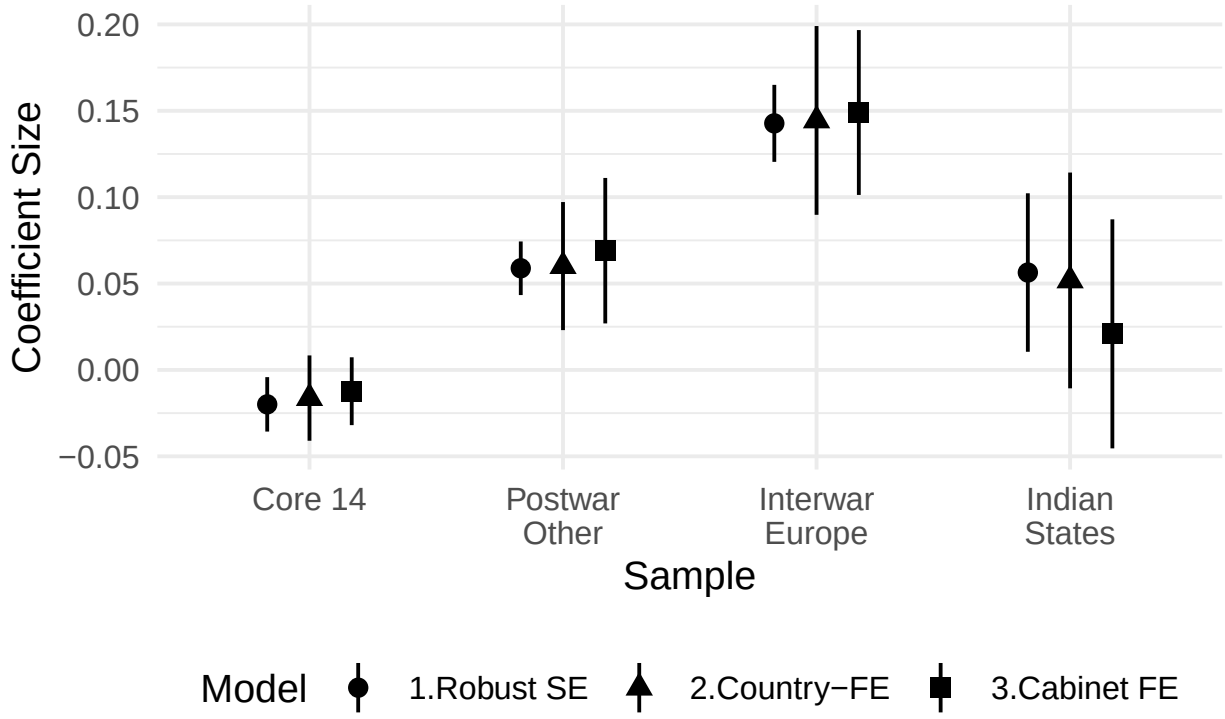
$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Table A12: Linear regressions on partisan portfolio share in Europe (1919-1939) and Indian states (1977-2018). Drop one random party per cabinet.

| | **Interwar Europe** | | | **Indian States** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $0.55^{***}$ | $0.38^{***}$ | $0.50^{***}$ | $0.84^{***}$ | $0.79^{***}$ | $0.82^{***}$ |
| | (0.02) | (0.07) | (0.06) | (0.04) | (0.06) | (0.05) |
| PM Party | $0.14^{***}$ | $0.15^{***}$ | $0.14^{***}$ | $0.06^{*}$ | 0.02 | 0.05 |
| | (0.01) | (0.02) | (0.03) | (0.02) | (0.03) | (0.03) |
| Constant | $0.08^{***}$ | | | $0.03^{***}$ | | |
| | (0.01) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 699 | 699 | 699 | 236 | 236 | 236 |

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Figure A2: Estimated PM party bonus in four different samples with randomly sampled n-1 parties at each formation opportunity. Underlying regression results reported in Tables A11 and A12.



## C.4 N-1 random log-ratio transformed observations

When working with compositional data, methodologists advise not only to drop one random observation from a formation opportunity but to re-base the remaining observations. The so-called *additive log-ratio transformation* divides the n-1 remaining observations by the dropped observation, and thus ensures that the choice of the excluded party does not influence the estimated results. Figure A3 displays the estimates across our four samples using log-ratio transformed portfolio shares. The results are similar to the findings reported above with two exceptions: For one, we no longer find any statistically significant negative PM party effect for the Core-14 countries. For another, all our estimates of the PM party status for the Indian sample are statistically significant and positive, indicating that the non-significant effect we found in the n-1 sample in Figure 1 results from misspecification rather than just the reduced sample size.

Table A13: Linear regressions on partisan portfolio share in core-14 European and global states, 1946-2020. Drop one random party per cabinet and log-ratio transformation.

| | **Postwar Core-14 Europe** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $0.71^{***}$ | $0.72^{***}$ | $0.72^{***}$ | $0.72^{***}$ | $0.56^{***}$ | $0.71^{***}$ |
| | (0.01) | (0.05) | (0.03) | (0.01) | (0.04) | (0.03) |
| PM Party | 0.01 | $-0.02$ | $-0.01$ | $0.22^{***}$ | $0.36^{**}$ | $0.23^{*}$ |
| | (0.03) | (0.05) | (0.03) | (0.06) | (0.11) | (0.10) |
| Constant | $-0.004$ | | | $-0.07^{***}$ | | |
| | (0.02) | | | (0.02) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 675 | 675 | 675 | 1097 | 1097 | 1097 |

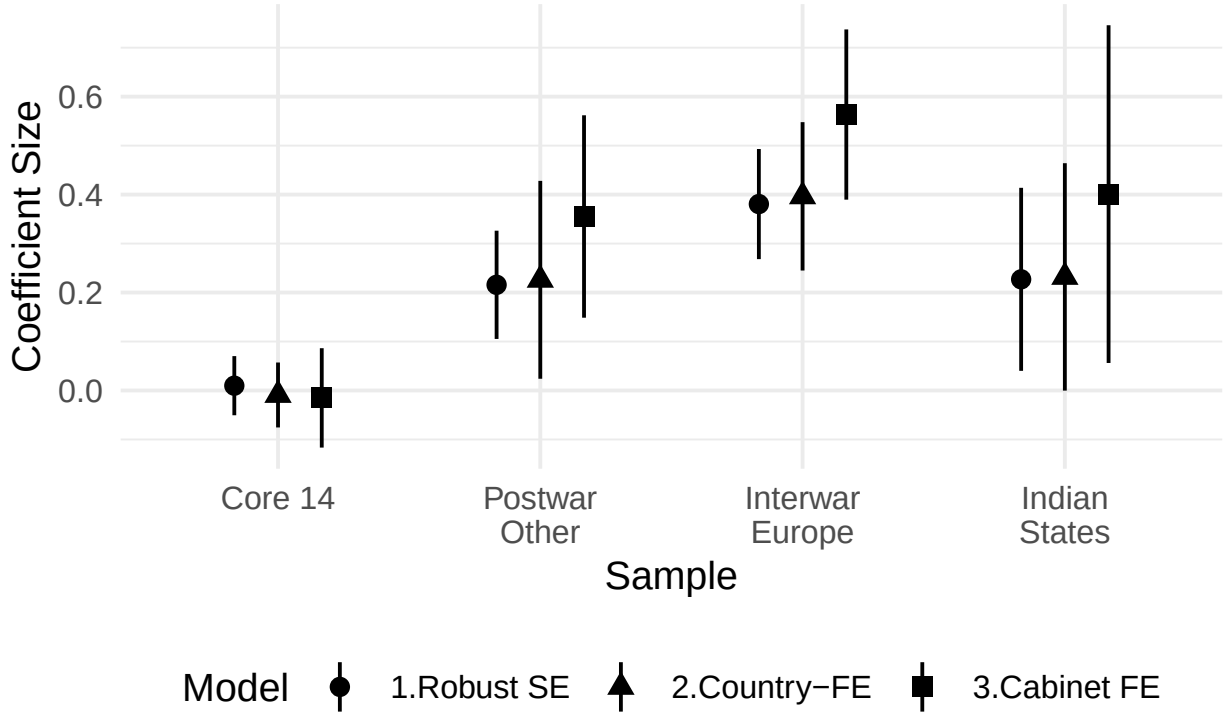
$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Table A14: Linear regressions on partisan portfolio share in Europe (1919-1939) and Indian states (1977-2018). Drop one random party per cabinet and log-ratio transformation.

| | Interwar Europe | | | Indian States | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.39*** | 0.20* | 0.38*** | 0.70*** | 0.59*** | 0.72*** |
| | (0.03) | (0.09) | (0.09) | (0.03) | (0.06) | (0.05) |
| PM Party | 0.38*** | 0.56*** | 0.40*** | 0.23* | 0.40* | 0.23 |
| | (0.06) | (0.09) | (0.08) | (0.10) | (0.18) | (0.12) |
| Constant | −0.17*** | | | −0.12* | | |
| | (0.03) | | | (0.05) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 698 | 698 | 698 | 236 | 236 | 236 |

***p < .001; **p < .01; *p < .05

Figure A3: Estimated PM party bonus in four different samples with randomly sampled n-1 parties at each formation opportunity and the log-ratio transformation. Underlying regression results reported in Tables A13 and A14.



## C.5 Beta regression

Table A15: Beta regressions on partisan portfolio share in core-14 European and global states, 1946-2020

| | **Postwar Core-14 Europe** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $4.05^{***}$ | $3.90^{***}$ | $3.69^{***}$ | $4.40^{***}$ | $4.34^{***}$ | $4.23^{***}$ |
| | (0.07) | (0.07) | (0.08) | (0.08) | (0.08) | (0.08) |
| PM Party | $-0.13^{***}$ | $-0.10^{**}$ | $-0.06$ | $0.21^{***}$ | $0.21^{***}$ | $0.24^{***}$ |
| | (0.03) | (0.03) | (0.03) | (0.04) | (0.04) | (0.04) |
| Constant | $-2.10^{***}$ | $-2.00^{***}$ | $-2.07^{***}$ | $-2.41^{***}$ | $-2.28^{***}$ | $-2.23^{***}$ |
| | (0.02) | (0.07) | (0.18) | (0.02) | (0.39) | (0.38) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1019 | 1019 | 1019 | 1573 | 1573 | 1573 |
| Log Likelihood | 1305.85 | 1340.19 | 1383.62 | 1946.09 | 1985.96 | 2019.88 |

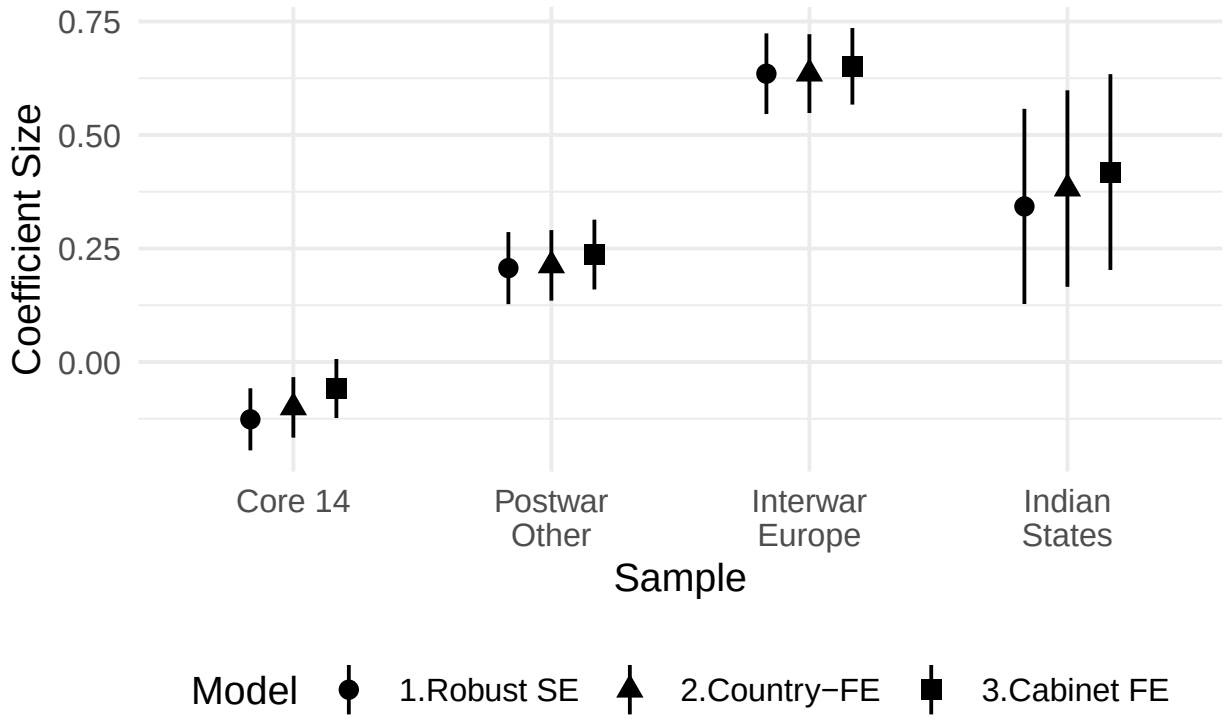
$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Table A16: Beta regressions on partisan portfolio share in Europe (1919-1939) and Indian states (1977-2018)

| | **Interwar Europe** | | | **Indian States** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $2.59^{***}$ | $2.39^{***}$ | $2.12^{***}$ | $4.23^{***}$ | $4.11^{***}$ | $4.00^{***}$ |
| | (0.09) | (0.09) | (0.10) | (0.19) | (0.20) | (0.21) |
| PM Party | $0.63^{***}$ | $0.64^{***}$ | $0.65^{***}$ | $0.34^{**}$ | $0.38^{***}$ | $0.42^{***}$ |
| | (0.05) | (0.04) | (0.04) | (0.11) | (0.11) | (0.11) |
| Constant | $-1.91^{***}$ | $-1.71^{***}$ | $-1.38^{***}$ | $-2.40^{***}$ | $-2.24^{***}$ | $-2.21^{***}$ |
| | (0.03) | (0.12) | (0.34) | (0.06) | (0.20) | (0.43) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 984 | 984 | 984 | 347 | 347 | 347 |
| Log Likelihood | 854.86 | 885.47 | 928.46 | 386.68 | 389.43 | 394.38 |

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Figure A4: Estimated PM party bonus in four different samples using beta regressions. Underlying regression results reported in Tables A15-A16)



## C.6 N-1 random observations: Cox (2021) model

Cox (2021) develops a new formal model that relaxes the unitary actor assumption of parties, which allows him to explain the "portfolio allocation paradox" (ibid., 927). The central insight of Cox' (2021) model is that the share of portfolios a party receives should be a weighted average of its seat share and the so-called `equal share`, or $\frac{1}{n}$, where $n$ is the number of cabinet parties. Adding the `equal share` variable to any regression model of government formation makes it almost equivalent to estimating a class-fixed effects model, where classes describe cabinets with the same number of parties. Our specification of cabinet-fixed effects absorbs the `equal share` variable, which is why we do not compute it in our replication. We add the PM party variable to Cox' (2021: p. 922, Table 1) Model 2, and re-estimate the linear model with robust standard errors (circles) and the country-fixed effects model (triangle). Figure A5 displays the results. Within the Core-14 states, we cannot reject the null of no PM party advantage. However, all other samples lead us to estimate a sizable PM party advantage significant at least at the 10% level (India, state-FE specification).

Table A17: Linear regressions on partisan portfolio share with Cox' (2021) model specification in core-14 European and global states, 1946-2020. Drop one random party per cabinet.

| | **Postwar Core-14 Europe** | | | **Postwar Global** |
|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** |
| Seat share | $0.76^{***}$ | $0.76^{***}$ | $0.79^{***}$ | $0.78^{***}$ |
| | (0.02) | (0.03) | (0.01) | (0.03) |
| PM Party | $-0.01$ | $-0.01$ | $0.08^{***}$ | $0.08^{***}$ |
| | (0.01) | (0.01) | (0.01) | (0.02) |
| Equal Share | $0.25^{***}$ | $0.23^{***}$ | $0.14^{***}$ | $0.16^{***}$ |
| | (0.02) | (0.04) | (0.02) | (0.03) |
| Constant | $-0.001$ | | $-0.001$ | |
| | (0.01) | | (0.01) | |
| Country-FEs | No | Yes | No | No |
| Cabinet-FEs | No | No | Yes | No |
| N | 675 | 675 | 1097 | 1097 |

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Table A18: Linear regressions on partisan portfolio share with Cox' (2021) model specification in Europe (1919-1939) and Indian states (1977-2018). Drop one random party per cabinet.

| | Interwar Europe | | | Indian States |
|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** |
| Seat share | 0.46*** | 0.46*** | 0.82*** | 0.84*** |
| | (0.02) | (0.07) | (0.04) | (0.05) |
| PM Party | 0.13*** | 0.13*** | 0.07** | 0.05 |
| | (0.01) | (0.03) | (0.02) | (0.03) |
| Equal Share | 0.42*** | 0.41*** | 0.12* | 0.17* |
| | (0.04) | (0.08) | (0.05) | (0.08) |
| Constant | −0.003 | | 0.004 | |
| | (0.01) | | (0.01) | |
| Country-FEs | No | Yes | No | No |
| Cabinet-FEs | No | No | Yes | No |
| N | 699 | 699 | 236 | 236 |

***p < .001; **p < .01; *p < .05

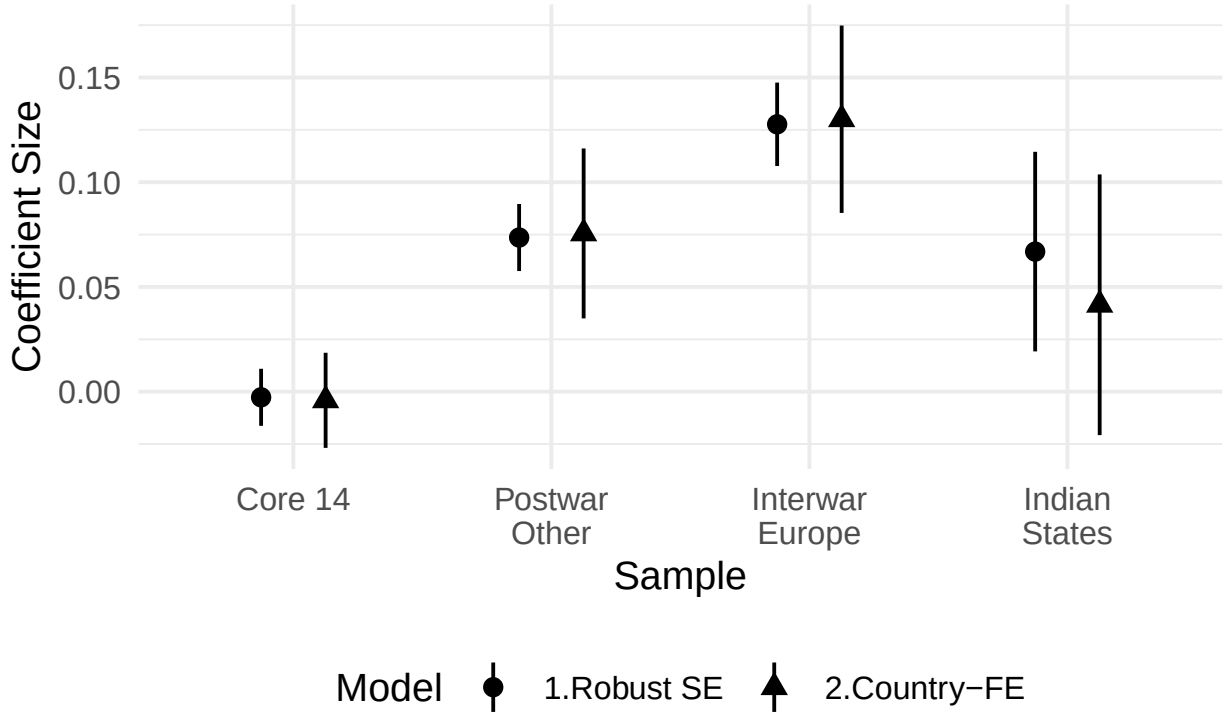



Figure A5: Cox (2021) specification (Tables A17-A18)

## C.7 N-1 random observations: Banzhaf weights

Ansolabehere et al. (2005) argue that the logic of theoretical models evolves around parties' voting weights rather than seat shares, and estimate a corresponding empirical model that uncovers a PM party advantage in the Core-14 sample.[10] We re-estimate our models using the voting weights calculated through the Banzhaf power index (Penrose, 1946).[11] We replicate Ansolabehere et al.'s findings for the Core-14 countries but find significantly larger PM party effects for the three other samples (Figure A6). Note that we do not have information on non-cabinet party seat shares in many formation opportunities in Africa, Asia & Oceania, and Latin America. It is thus impossible to compute voting weights for these formation opportunities, and the sample size for our postwar global sample is correspondingly smaller.

Table A19: Linear regressions on partisan portfolio share in core-14 European and global states, 1946-2020, using coalition weights (Banzhaf values) instead of seat shares. Drop one random party per cabinet.

| | **Postwar Core-14 Europe** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Banzhaf value | 0.52*** | 0.54*** | 0.54*** | 0.56*** | 0.63*** | 0.55*** |
| | (0.02) | (0.04) | (0.03) | (0.02) | (0.05) | (0.06) |
| PM Party | 0.10*** | 0.05* | 0.08** | 0.18*** | 0.10*** | 0.17*** |
| | (0.01) | (0.02) | (0.03) | (0.01) | (0.02) | (0.04) |
| Constant | 0.11*** | | | 0.08*** | | |
| | (0.01) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 652 | 652 | 652 | 548 | 548 | 548 |

***p $<$ .001; **p $<$ .01; *p $<$ .05

[10] For a critical assessment of Ansolabehere's approach, see Laver, de Marchi and Mutlu (2011).
[11] We use the R package `powerindexR` to compute the weights.

Table A20: Linear regressions on partisan portfolio share in Europe (1919-1939) and Indian states (1977-2018) using coalition weights (Banzhaf values) instead of seat shares. Drop one random party per cabinet.

| | **Interwar Europe** | | | **Indian States** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Banzhaf value | 0.33*** | 0.26** | 0.30*** | 0.50*** | 0.52*** | 0.49*** |
| | (0.02) | (0.08) | (0.07) | (0.04) | (0.08) | (0.06) |
| PM Party | 0.22*** | 0.17*** | 0.21*** | 0.20*** | 0.12 | 0.18** |
| | (0.01) | (0.03) | (0.03) | (0.03) | (0.06) | (0.05) |
| Constant | 0.13*** | | | 0.08*** | | |
| | (0.01) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 699 | 699 | 699 | 236 | 236 | 236 |

***p < .001; **p < .01; *p < .05

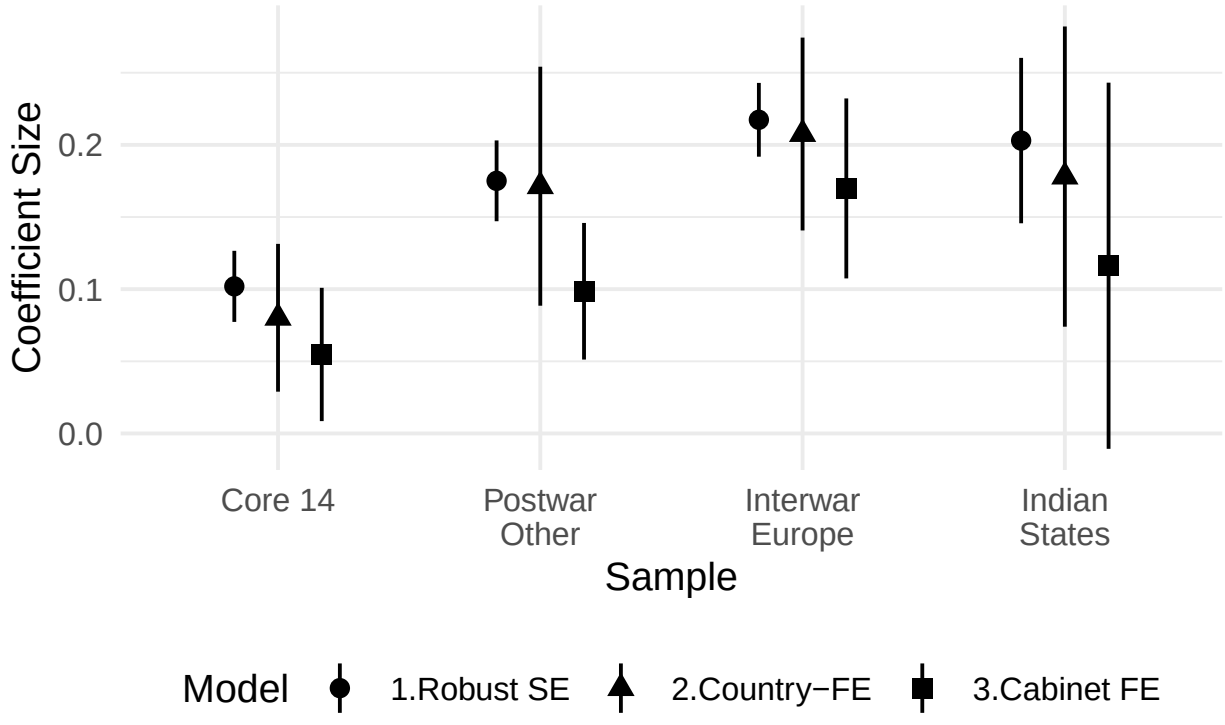



Figure A6: Voting weights (Banzhaf) (Tables A19-A20)

## C.8 All observations: only majority coalitions

Table A21: Linear regressions on partisan portfolio share of majority coalitions in core-14 European and global states, 1946-2020.

| | Postwar Core-14 Europe | | | Postwar Global | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.84*** | 0.76*** | 0.80*** | 0.84*** | 0.80*** | 0.82*** |
| | (0.01) | (0.04) | (0.03) | (0.01) | (0.04) | (0.03) |
| PM Party | −0.02*** | −0.01 | −0.02 | 0.06*** | 0.07** | 0.07** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.02) |
| Constant | 0.06*** | | | 0.03*** | | |
| | (0.004) | | | (0.003) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 795 | 795 | 795 | 1140 | 1140 | 1140 |

***p < .001; **p < .01; *p < .05

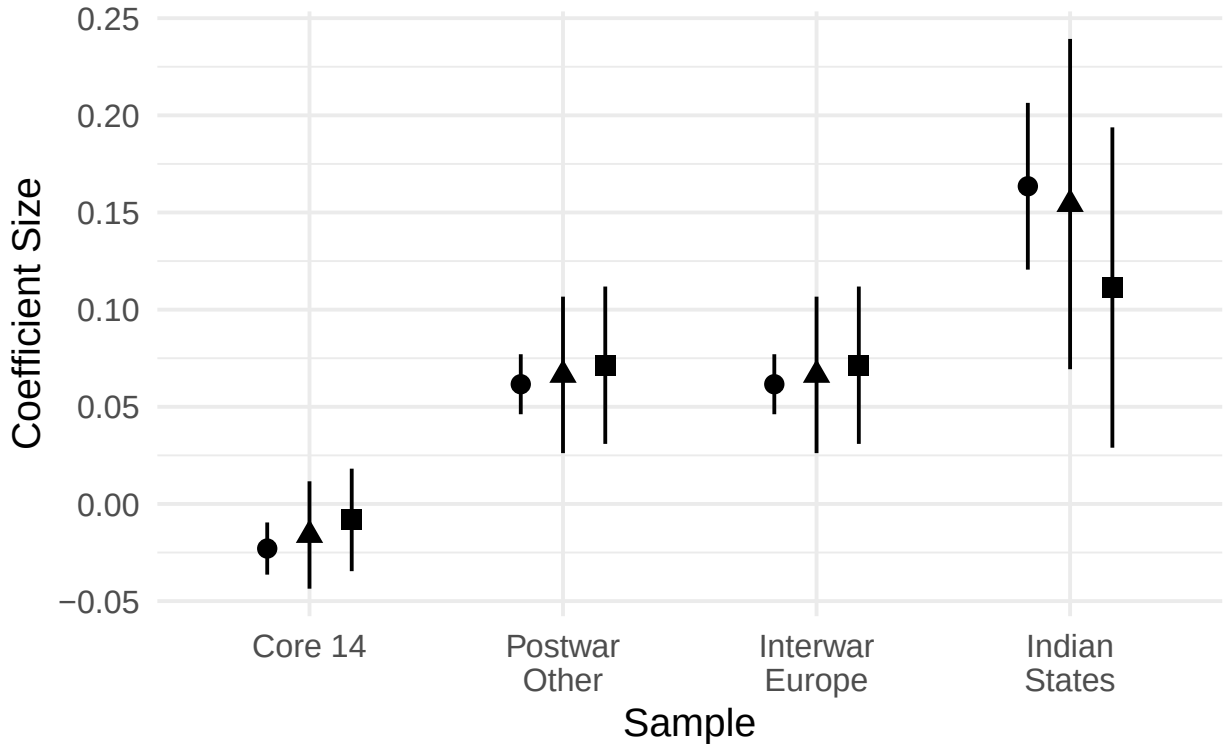
Table A22: Linear regressions on partisan portfolio share of majority coalitions in Europe (1919-1939) and Indian states (1977-2018)

| | Interwar Europe | | | Indian States | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.84*** | 0.80*** | 0.82*** | 0.98*** | 1.11*** | 1.00*** |
| | (0.01) | (0.04) | (0.03) | (0.05) | (0.11) | (0.10) |
| Formateur | 0.06*** | 0.07** | 0.07** | 0.16*** | 0.11* | 0.15** |
| | (0.01) | (0.02) | (0.02) | (0.02) | (0.04) | (0.04) |
| Constant | 0.03*** | | | 0.05*** | | |
| | (0.003) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1140 | 1140 | 1140 | 325 | 325 | 325 |

***p < .001; **p < .01; *p < .05

In this section, we re-estimate our main models on the subset of majority cabinets. Formal models of portfolio allocation make no predictions for minority governments. Dropping minority from the empirical analysis does not lead to substantively different results for the core-14 and postwar other samples compared to our main analysis (see Figures 1a and A7). In contrast, we recover a significantly smaller estimate for

Figure A7: Estimated PM party bonus in all samples (majority governments only). Underlying regression results reported in Tables A21 and A22.




the PM party advantage in the Interwar Europe sample and a slightly larger though not statistically different bonus in the Indian states sample.

## C.9 All observations: joint likelihood of becoming PM party and portfolio distribution

Table A23: Joint likelihood of PM party status and partisan portfolio share.

| | Core-14 | Postwar Global | Interwar Europe | Indian States |
|---|---|---|---|---|
| **Outcome: Portfolio Share (Linear Model)** | | | | |
| PM Party | 1.5068*** | 1.8035*** | 1.3279*** | 1.3341** |
| | (0.1454) | (0.0819) | (0.0538) | (0.1912) |
| Seat Share | 0.5445*** | 0.1823*** | 0.8500*** | 0.4749*** |
| | (0.0361) | (0.0271) | (0.0303) | (0.0533) |
| Banzhaf Value | 0.3543*** | 0.3882*** | 0.0645** | 0.4541*** |
| | (0.0205) | (0.0147) | (0.0157) | (0.0293) |
| **Outcome: PM Party (Probit)** | | | | |
| Seat Share | 2.5639** | 0.5507 | 3.4033** | 3.4346 |
| | (0.6897) | (0.5353) | (0.5532) | (1.9176) |
| Banzhaf Value | 3.1425*** | 2.3480*** | 0.6413* | 3.5459*** |
| | (0.4084) | (0.2840) | (0.3155) | (0.8772) |
| Intercept | -2.6853*** | -2.1026*** | -1.9931*** | -3.0047*** |
| | (0.1359) | (0.0724) | (0.0711) | (0.4158) |
| log$\sigma$ | -1.8973*** | -1.8461*** | -2.0160*** | -2.0267*** |
| | (0.0115) | (0.0066) | (0.0080) | (0.0158) |

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Taking inspiration from Cutler et al. (2016), we jointly estimate the "ex-ante" likelihood of becoming the PM party and the "ex-post" probability of portfolio shares. We implement a probit-linear regression mixture model with a multivariate normal error distribution (Teixeira-Pinto and Normand, 2009). As Cutler et al. (2016), we add both seat shares and bargaining weights as predictors to both equations. Across all samples, we find a sizable and statistically significant positive effect of *predicted* PM party status on portfolio allocation (Table A23). Only the Postwar Global Sample retains its edge over the Core-14 Sample. Seat shares and voting weights positively affect both outcomes.[12]

However, we do not place our full confidence into these results for two reasons. First, our treatment (becoming the prime minister) is obviously not randomly assigned, and we are not aware of any exogenous instrument that would predict prime minister status but not affect portfolio allocation. In other words, the model depicted in Table A23 is only identified on observables.[13] Second, political scientists usually use far

[12] Adding country or cabinet-fixed effects makes these models more difficult to estimate but does not change the results.

[13] The same reservations apply to the results presented by Cutler et al. (2016).

more complex models to predict the PM party than we do here (cf. Glasgow, Golder and Golder, 2011). Future research will have to probe whether our results remain robust to such more complex approaches.

## C.10 All observations: Bayesian estimation w/ theoretical priors

We disaggregate the global postwar sample into several regions to probe whether any one region drives the positive PM party effect we find. Unlike in our previous specifications, we estimate our models in a Bayesian framework with a positive prior for the PM party variable that we derive from the theoretical prediction by Baron and Ferejohn (1989).[14] A Bayesian approach is preferable to estimating Ordinary Least Squares for two reasons. First, both theoretical models of coalition bargaining and our empirical results for the non-core 14 samples yield a positive PM party effect. We do not want to ignore this relevant information. Second, disaggregating the postwar models into different regions results in small sample sizes that lack statistical power (see Table A5). Using theoretically informed priors helps us to overcome this lack of statistical power. Figure A8 displays the results. We find substantively positive PM party effects for all regions outside Western Europe with strong between-region heterogeneity. The credible intervals of three regional estimates do not overlap with the PM party effect estimated for the expanded Western European sample.[15] Eastern European cabinets exhibit the weakest PM party effect outside Western Europe, and we would fail to uncover a statistically significant PM party effect using OLS. Last but not least, estimating the PM party effect with a theoretically informed prior even yields credible intervals that exclude 0 for the cabinet-fixed effects specification in the Western European sample!

[14] Baron and Ferejohn (1989) argue that the PM party should receive 2/3 of all portfolio shares in a two-party coalition, or twice the number of portfolios as the junior partner. We compute the difference in the 66.67th and 33.33th quantile of portfolio shares in each region, and use that difference as the prior for our regressions.

[15] The original Core-14 sample does not include 21 cabinets from the French 4th Republic, five cabinets from post-Cold War Greece, and one cabinet from the United Kingdom (see Tables A1 and A2).

Table A24: Bayesian linear regressions on partisan portfolio share in Africa and the Americas with theoretical priors of positive formateur effect.)

| | Africa | | | Americas | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.85 | 0.84 | 0.83 | 0.76 | 0.75 | 0.75 |
| | (0.76, 0.95) | (0.74, 0.94) | (0.72, 0.93) | (0.54, 0.96) | (0.53, 0.98) | (0.53, 0.99) |
| PM Party | 0.07 | 0.08 | 0.08 | 0.18 | 0.19 | 0.19 |
| | (0.02, 0.12) | (0.02, 0.13) | (0.02, 0.14) | (0.07, 0.30) | (0.06, 0.31) | (0.06, 0.31) |
| Constant | | 0.33 | 0.34 | | 0.48 | 0.48 |
| | (0.0001, 0.04) | (0.23, 0.43) | (0.28, 0.40) | (−0.05, 0.10) | (0.40, 0.56) | (0.43, 0.53) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 59 | 59 | 59 | 31 | 31 | 31 |

Table A25: Bayesian linear regressions on partisan portfolio share in Asia and Eastern Europe.

| | Asia | | | Eastern Europe | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.84 | 0.83 | 0.80 | 0.83 | 0.83 | 0.78 |
| | (0.81, 0.87) | (0.79, 0.86) | (0.76, 0.84) | (0.79, 0.88) | (0.78, 0.87) | (0.73, 0.84) |
| PM Party | 0.08 | 0.08 | 0.09 | 0.02 | 0.02 | 0.04 |
| | (0.06, 0.10) | (0.06, 0.10) | (0.07, 0.11) | (0.0001, 0.05) | (0.002, 0.05) | (0.01, 0.06) |
| Constant | | 0.31 | 0.34 | | 0.35 | 0.36 |
| | (0.01, 0.03) | (0.26, 0.35) | (0.32, 0.35) | (0.04, 0.06) | (0.32, 0.37) | (0.35, 0.38) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 833 | 833 | 833 | 519 | 519 | 519 |

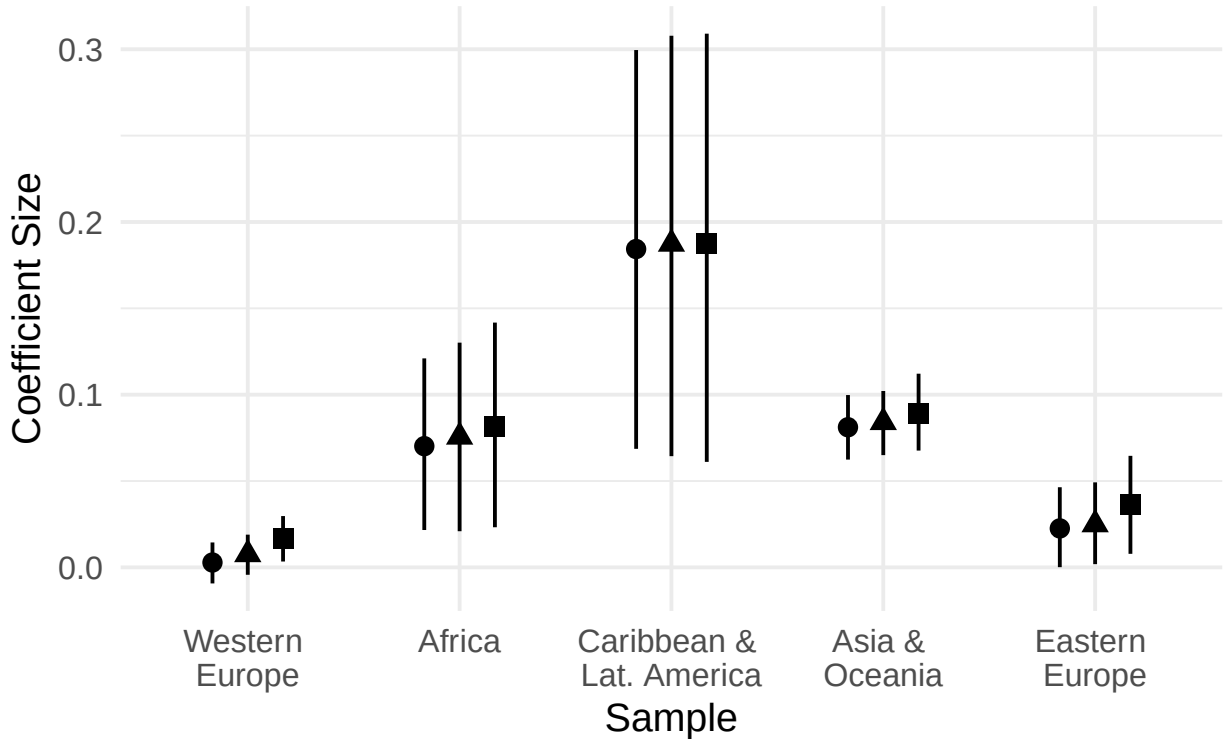



Figure A8: Postwar regions w/ positive prior (Tables A24-A25).

## C.11 All observations: Bayesian estimation w/ empirical priors

Our final robustness checks constitutes the hardest test for our propositions. We return to our original analysis of the four regional samples but re-estimate the 12 models with a negative prior for the PM party variable based on previous empirical findings in the Core-14 sample.[16] In spite of a negative prior, we continue to find positive PM party effects with credible intervals outside zero for the postwar other and the interwar Europe samples. The Core-14 sample is now consistently negative across all three specifications, while the Indian state sample shows negative PM party effects with credible intervals including zero, which reflects the greater power of the prior in the the small sample size of Indian states (see Figure A9).

Table A26: Bayesian linear regressions on partisan portfolio share in Core-14 and postwar other sample with negative priors based on previous formateur findings.

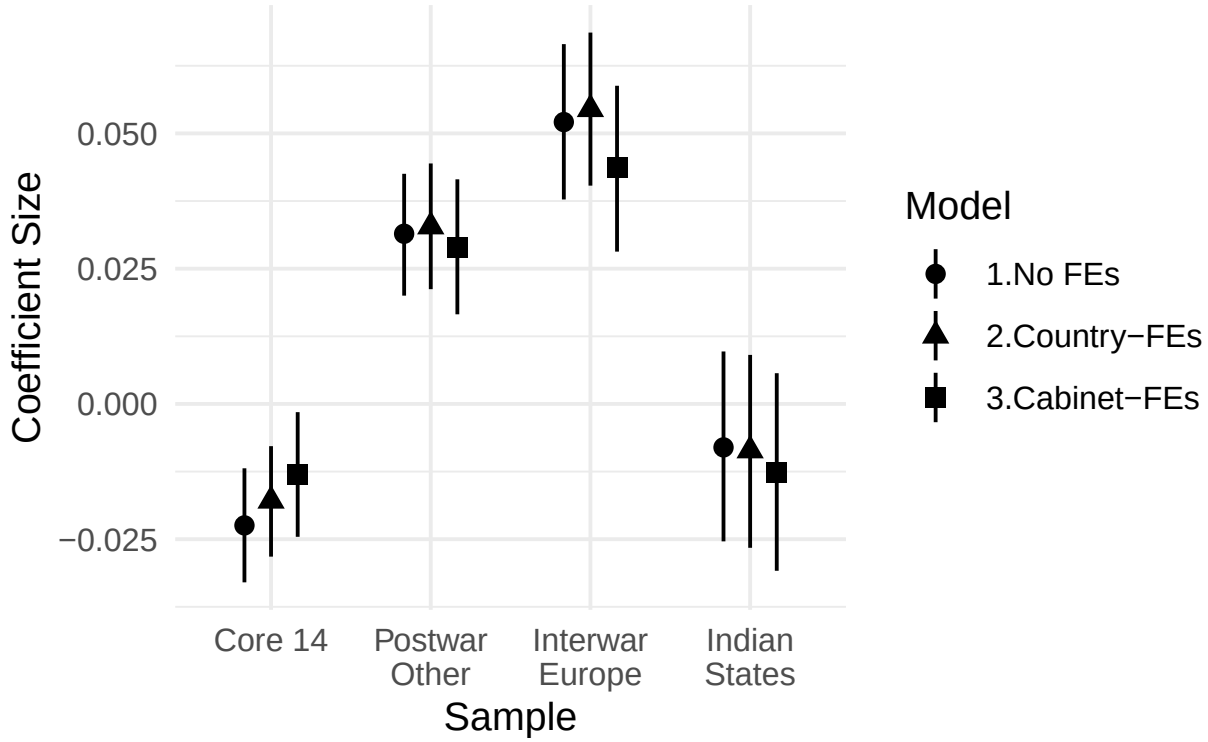
| | **Core-14** | | | **Postwar Global** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.83 | 0.76 | 0.80 | 0.88 | 0.86 | 0.87 |
| | (0.81, 0.86) | (0.74, 0.79) | (0.78, 0.83) | (0.86, 0.90) | (0.83, 0.89) | (0.85, 0.89) |
| PM Party | −0.02 | −0.01 | −0.02 | 0.03 | 0.03 | 0.03 |
| | (−0.03, −0.01) | (−0.03, −0.002) | (−0.03, −0.01) | (0.02, 0.04) | (0.02, 0.04) | (0.02, 0.04) |
| Constant | | 0.37 | 0.38 | | 0.35 | 0.34 |
| | (0.06, 0.07) | (0.36, 0.39) | (0.33, 0.43) | (0.02, 0.03) | (0.33, 0.36) | (0.32, 0.37) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1019 | 1019 | 1019 | 1573 | 1573 | 1573 |

[16] We choose the PM party estimate for the Core-14 sample reported by Ariotti and Golder (2018: p.358, Table 2, Model 5).

Table A27: Bayesian linear regressions on partisan portfolio share in interwar Europe and Indian states samples with negative priors based on previous formateur findings.

| | Interwar Europe | | | Indian States | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.65 | 0.60 | 0.55 | 0.94 | 0.93 | 0.93 |
| | (0.62, 0.68) | (0.56, 0.64) | (0.51, 0.59) | (0.90, 0.98) | (0.88, 0.97) | (0.88, 0.98) |
| PM Party | 0.05 | 0.05 | 0.04 | −0.01 | −0.01 | −0.01 |
| | (0.04, 0.07) | (0.04, 0.07) | (0.03, 0.06) | (−0.03, 0.01) | (−0.03, 0.01) | (−0.03, 0.01) |
| Constant | | 0.35 | 0.32 | | 0.39 | 0.36 |
| | (0.08, 0.10) | (0.31, 0.40) | (0.31, 0.33) | (0.01, 0.04) | (0.35, 0.43) | (0.33, 0.38) |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 984 | 984 | 984 | 347 | 347 | 347 |

Figure A9: Estimated PM party bonus in four different samples using Bayesian estimation and negative priors. Underlying regression results reported in Tables A26 and A27.



## C.12 All observations in Core-14 states: postwar and interwar Europe

In this section, we compare different time periods of the Core-14 states. First, we replicate the analysis on the entire postwar period. Second, we use the Warwick and Druckman (2006) sample (1946-2000). Third, we employ the Cox (2021) sample (1946-2012). Finally, we subset the interwar period to the Core-14 democracies minus Ireland, which did not feature coalition governments during the interwar period. We do not find any variation in the different temporal slices of the postwar period, which all return a negative or near-zero coefficient on the PM party variable. In stark contrast, we estimate a very strong and statistically significant positive PM party effect in interwar Europe's Core-14 states.

Table A28: Linear regressions on partisan portfolio share in core-14 European states (1946-2020) and Warwick & Druckman sample (1946-2000)

| | **Postwar Core-14 Europe** | | | **Warwick & Druckman (2006)** | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | $0.83^{***}$ | $0.75^{***}$ | $0.80^{***}$ | $0.81^{***}$ | $0.72^{***}$ | $0.78^{***}$ |
| | (0.01) | (0.03) | (0.03) | (0.01) | (0.03) | (0.03) |
| PM Party | $-0.02^{**}$ | $-0.004$ | $-0.01$ | $-0.02^{**}$ | $-0.01$ | $-0.02$ |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Constant | $0.06^{***}$ | | | $0.07^{***}$ | | |
| | (0.004) | | | (0.004) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 1019 | 1019 | 1019 | 747 | 747 | 747 |

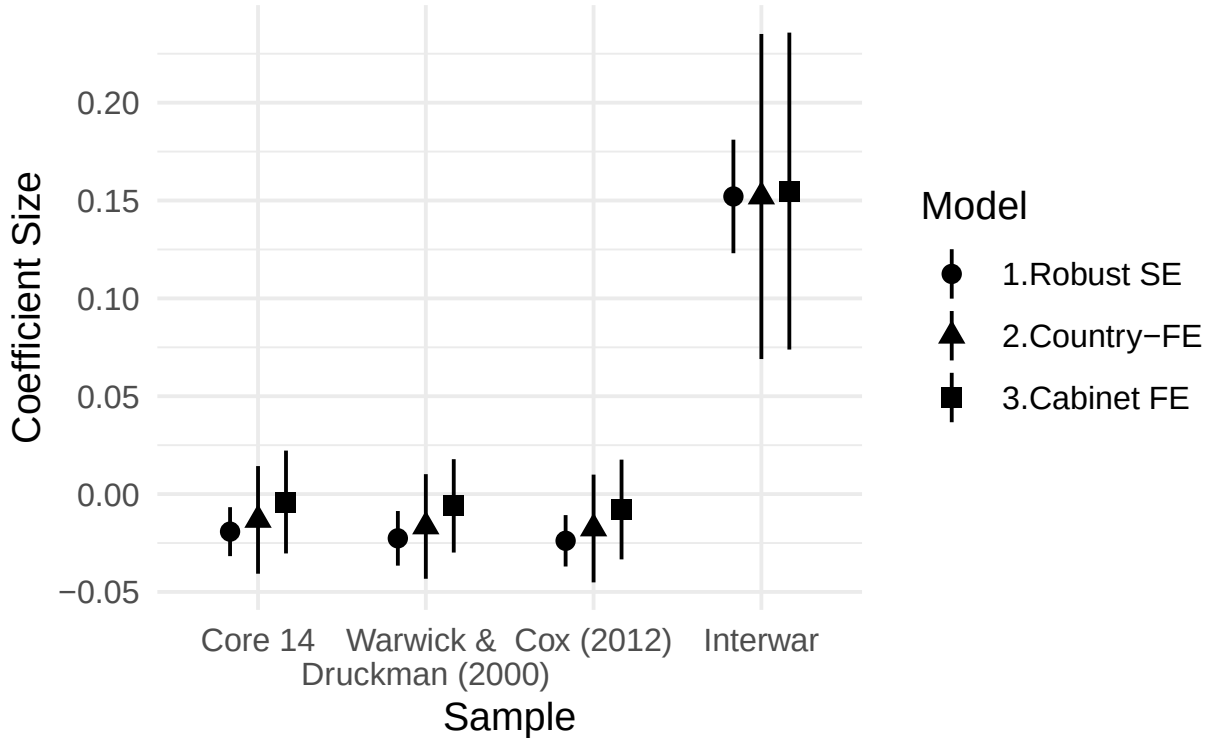
$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

Table A29: Linear regressions on partisan portfolio share in core-14 European states, Cox (2021) sample (1946-2012) and interwar Europe sample (1919-1939).

| | Cox (2021) | | | Interwar Europe | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Seat share | 0.83*** | 0.75*** | 0.80*** | 0.47*** | 0.35*** | 0.43*** |
| | (0.01) | (0.03) | (0.02) | (0.03) | (0.08) | (0.06) |
| PM Party | −0.02*** | −0.01 | −0.02 | 0.15*** | 0.15** | 0.15** |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.04) | (0.04) |
| Constant | 0.06*** | | | 0.13*** | | |
| | (0.004) | | | (0.01) | | |
| Country-FEs | No | Yes | No | No | Yes | No |
| Cabinet-FEs | No | No | Yes | No | No | Yes |
| N | 919 | 919 | 919 | 487 | 487 | 487 |

***p < .001; **p < .01; *p < .05

Figure A10: Estimated PM party bonus in core 14 states in different time periods. Underlying regression results reported in Tables A28 and A29.



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