



LUND UNIVERSITY

Cabinets, Prime Ministers and Corruption. A Comparative Analysis of Parliamentary Governments in Post-War Europe

Bäck, Hanna; Teorell, Jan; Lindberg, Staffan I

2016

Document Version:
Other version

[Link to publication](#)

Citation for published version (APA):

Bäck, H., Teorell, J., & Lindberg, S. I. (2016). *Cabinets, Prime Ministers and Corruption. A Comparative Analysis of Parliamentary Governments in Post-War Europe*. (STANCE Working Paper Series; Vol. 2016, No. 6). Department of Political Science, Lund University.

Total number of authors:
3

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

STANCE

State-Making and the Origins of Global Order
in the Long Nineteenth Century and Beyond

Cabinets, Prime Ministers and Corruption.

A Comparative Analysis of Parliamentary
Governments in Post-War Europe

Hanna Bäck, Jan Teorell and Staffan Lindberg

Working Paper Series, 2016:6
STANCE, Lund University



LUND
UNIVERSITY

STANCE is a six-year research program at the Department of Political Science at Lund University, Sweden. The program, consisting of several separate but connected research projects, aims to answer the question of how state-making and the international system co-evolved in the long 19th century (1789-1914) and beyond. The program is constructed around three research themes: (1) How did the different dimensions of state-making evolve? What actors and organized interests supported or put up resistance to these processes?; (2) How were these dimensions of state-making affected by geopolitical competition, warfare and the diffusion of novel political technologies?; and (3) What were the consequences for the international system, both with respect to the type of state that emerged and what entities were granted membership in the state system? The program aims to bridge the gaps between comparative politics and IR, as well as those between the study of political thought and positive empirical political science. The research has been made possible by the Bank of Sweden Tercentenary Foundation (Riksbankens Jubileumsfond). Visit the research program's website at www.stanceatlund.org

Please address comments and/or queries for information to:

Email address: info@stanceatlund.org

Mailing address: STANCE
Department of Political Science
Lund University
Box 52, SE-221 00 Lund, Sweden

In Series 2016:

1. "STATE CAPACITY AS POWER: A CONCEPTUAL FRAMEWORK", Johannes Lindvall and Jan Teorell
2. "THE LAY OF THE LAND: INFORMATION CAPACITY AND THE MODERN STATE", Thomas Brambor, Agustín Goenaga, Johannes Lindvall, and Jan Teorell
3. "STEPPE STATE MAKING", Martin Hall
4. "WAR, PERFORMANCE AND THE SURVIVAL OF FOREIGN MINISTERS", Hanna Bäck, Jan Teorell, and Alexander von Hagen-Jamar
5. "THE NATION-STATE AS FAILURE: NATIONALISM AND MOBILITY, IN INDIA AND ELSEWHERE", Erik Ringmar
6. "CABINETS, PRIME MINISTERS, AND CORRUPTION. A COMPARATIVE ANALYSIS OF PARLIAMENTARY GOVERNMENTS", Hanna Bäck, Jan Teorell and Staffan Lindberg

STANCE working papers are available in electronic format at www.stanceatlund.org

COPYRIGHT © 2016 by authors. All rights reserved.

Cabinets, Prime Ministers and Corruption

A Comparative Analysis of Parliamentary Governments

in Post-War Europe¹

Hanna Bäck
Professor of Political Science
Lund University

Jan Teorell
Professor of Political Science
Lund University

Staffan Lindberg
Professor of Political Science
University of Gothenburg

Abstract

Why are some states more corrupt than others? Previous research explaining corruption suggests that multiparty governments are associated with higher levels of corruption since it is difficult for voters to hold parties in such cabinets accountable. Drawing on the literature on coalition governance, we suggest that a lack of government corruption has more to do with the ability of other key political actors to control the agents that have been delegated power in cabinet. We use a new dataset (*Varieties of Democracy*), giving us more specific measures on governmental corruption across a longer time-period. We show that corruption is significantly lower when the Prime Minister (PM) has strong constitutional powers, suggesting that the PM as a principal reduces agency problems.

¹ We are very grateful for the help provided by Torbjörn Bergman, Svante Ersson, and Holger Döring, and for the excellent research assistance provided by Talib Jabbar. Hanna Bäck and Jan Teorell carried out most of the work on this article should be given the main credit for it.

I Introduction

Why are some states able to combat corruption, whereas others are not? The aim of this paper is to contribute to the literature explaining corruption in democratic contexts, more specifically in parliamentary systems. One conclusion in the previous literature is that political institutions that allow for greater *clarity of responsibility*, for example having majority, single-party cabinets, have lower levels of corruption. Tavits (2007: 218) suggests that political corruption should depend on ‘the ability of the voters to monitor their representatives, to detect those responsible for unsatisfactory outcomes, and to hold them accountable by voting them out of office’.

In this paper, we present an alternative theoretical argument about what political-institutional features should influence governmental corruption, more in line with the literature on coalition governance in parliamentary democracies. The literature on coalition governance takes its starting point in the so called ‘parliamentary chain of delegation’, which suggests that power-relationships in a parliamentary democracy can be described as a four-step chain, where voters delegate power to representatives, who in turn delegate power to a cabinet and a Prime Minister (PM), who delegates power to line ministers within the cabinet, and ministers in turn delegate to civil servants. Hence, delegation from citizens, to those who govern in parliamentary democracies has to go through a number of steps, in an indirect way (see e.g. Strøm 2003; Strøm, Müller and Bergman 2003). We suggest, following this argument, that what should matter for reducing government corruption has more to do with the ability of key political actors to control each other when in government, and hence enforce a non-corrupt equilibrium, as opposed to the voters’ ability to do so. In terms of O’Donnell’s (1998) famous distinction, we thus argue that it is horizontal rather than vertical accountability that matters for eliminating corruption.

In this paper, we specifically focus on the third step in this chain, and on the principal-agent relationship between the PM and his or her cabinet ministers. Our main expectation is that governmental corruption should be lower in systems where the constitutional power of the PM is high. We here present original hypotheses about some specific political-institutional features that have not been in focus in the previous literature, suggesting that governmental corruption is likely to be lower in systems where the constitutionally provided power of the PM to appoint and dismiss ministers is high, in systems applying a cabinet decision rule favoring the PM, and in systems applying a constructive vote of no confidence.

A general approach we rely on is the theory of collective action and the development of public goods, where the absence of corruption can be characterized as one type of ‘public good’ (see e.g. Persson, Rothstein and Teorell 2013). However, as opposed to the high-corruption equilibria found in most developmental countries, where corruption is the norm and non-corrupt actors are in scarce supply, the scope of our theory is limited to situations where non-corruption is the norm and at least

some actors (in our case primarily PMs) can be assumed to be non-corrupt. In other words, we will in this paper draw on the limiting case where we think a principal-agent framework is most appropriate for understanding corruption (Rose-Ackerman 1978; Klitgaard 1988).

We make an empirical contribution to the literature by evaluating our hypotheses using a completely new dataset on corruption, drawing on the *Varieties of Democracy* data (Coppedge et al. 2015), allowing us to obtain more specific measures on the perception of governmental corruption across longer periods of time (McMann et al. 2016). Adding data on Western and Eastern European cabinets during the post-war period from the *European Representative Democracy Data Archive* (Andersson et al. 2014), we are able to evaluate our hypotheses. In short, our results show that corruption levels are significantly lower in countries where the PM has strong constitutional powers, suggesting that the PM acts as an important principal, reducing agency problems, such as corruption, within the cabinet.

II Theory and hypotheses

Previous research on political institutions and corruption

A generally agreed upon definition of corruption is “the abuse of public office for private gain”. There is a large literature focusing on explaining the existence of such abuse across countries and over time, where some scholars have focused on the level of economic development, finding consistently that lower perceived corruption correlates closely with higher economic development (see e.g. La Porta et al. 1999; Treisman 2000; Treisman 2007), whereas other authors have turned to looking at the role of various institutional features when explaining corruption. For example, a number of articles focus on the effect of *democratization* on perceived corruption, where most scholars have found a curvilinear, or J-shaped relationship, between democracy and corruption, finding highest corruption levels among newly or partly democratized countries, whereas highly autocratic states display lower levels of corruption, and highly democratic regimes are least corrupt (see e.g. Montinola and Jackman 2002; Bäck and Hadenius 2008; Charron and Lapuente 2010).

However, even within democratic systems there seems to be a variation in corruption levels, and therefore several authors have looked at other political institutional features as predictors of perceived corruption. This is the literature that our work relates most closely to. Looking at democratic regimes more specifically, we ask: what political-institutional features explain why some countries display higher or lower levels of corruption?

Treisman (2007) gives an excellent overview of the field, which we refer to for more in-depth information, but to sum up this literature very briefly, scholars have looked at four different types of institutional features, focusing on: (1) the relative degree of *press freedom* (see e.g. Brunetti & Weder 2003; Adsera et al. 2003), suggesting that freedom of the press is particularly important for exposing corrupt politicians; (2) *presidentialism*, arguing that presidential systems are associated with higher levels of corruption (see e.g. Gerring and Thacker 2004; Lederman et al. 2005; Gerring et al. 2009); (3) *political decentralization*, suggesting that federalism is associated with higher levels of corruption (see e.g. Goldsmith 1999; Treisman 2000; Gerring & Thacker 2004), and (4) *electoral systems*, where for example Persson and colleagues (2003) suggest that whereas representatives elected by plurality rule tend to be less corrupt, larger electoral districts tend to diminish the level of corruption, which on balance produces small differences overall between PR and majoritarian electoral systems (see also Golden and Chang 2007 and Kunicová and Rose Ackerman 2005 for somewhat different arguments about the effect of electoral systems).

Drawing on such work on political institutions, and especially the literature focusing on electoral systems and corruption, Tavits (2007) presents an argument about *clarity of responsibility* and corruption, arguing that several political-institutional features can be seen as ‘accountability enhancing’ (also see Schwindt-Bayer and Tavits, forthcoming). The main argument made by Tavits (2007: 218) is that ‘political corruption depends on the effectiveness of the democratic process, i.e. the ability of the voters to monitor their representatives, to detect those responsible for unsatisfactory outcomes, and to hold them accountable by voting them out of office’. She evaluates this argument by looking at a number of indicators of clarity of responsibility, drawing on the work by Powell (2000) and Powell and Whitten (1993). One such indicator, which according to Powell (2000) is the most important feature in determining clarity of responsibility, is the majority status of the government. The argument is that when a party holds the PM post, but lacks the votes needed to control the legislature, it becomes more difficult for the voters to identify who should be held responsible for decisions made.

Tavits (2007: 221) argues that four features can be seen as indicators of clarity of responsibility: (1) the cabinet type (single-party and majority status), following the work by Powell as described above, arguing that single-party majority cabinets are the ‘clearest’ cabinet types; (2) the duration of the cabinet, suggesting that ‘it should be easier to assess responsibility in a durable government than in a brief government’; (3) the degree of oppositional influence, arguing that ‘opposition parties can diffuse responsibility through controlling a policy-making institution’ (e.g. by holding important committee posts); and (4) the number of parties in parliament, suggesting that more parties in parliament makes it more difficult for voters to have clear alternatives when throwing incumbents out of office. Analyzing data from 39 countries, including the OECD and Eastern Europe, using data from Transparency

International and the World Bank Governance Indicators, Tavits (2007) finds that majority governments, cabinets with higher duration, and legislatures with fewer parties are associated with lower corruption levels.

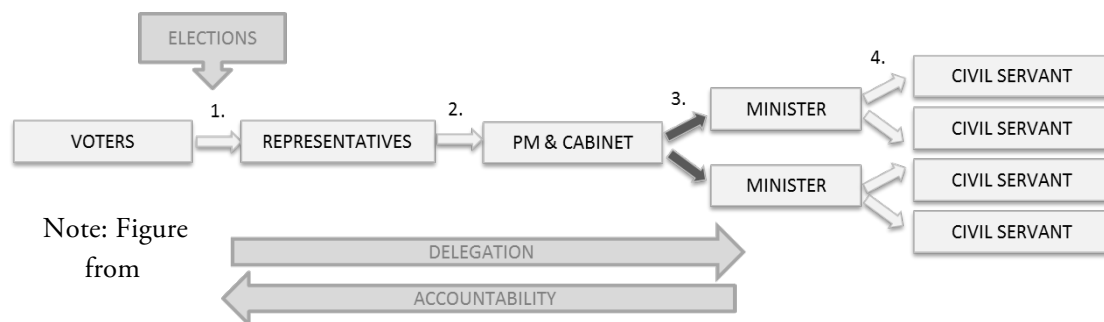
In trying to replicate Tavits' findings below, we also suggest looking at coalition status specifically, since it may be more difficult to hold individual parties accountable when multiple parties are in government (see e.g. Powell 2000). In fact, Tavits measures majority status of governments by combining both coalition and minority status in the variable, giving the highest clarity of responsibility score to majority cabinets, with coalition governments receiving lower scores, and minority cabinets an even lower score (see also Powell 2000). She also does not take into account whether the cabinet is oversized (i.e. includes parties that are not necessary for reaching majority status), something that according the clarity of responsibility theory might be expected to reduce accountability despite being majority governments. As an alternative, we propose to estimate the effect of coalition, majority and oversized status separately, and evaluate whether there is an interaction between majority and coalition status.

There is also a related literature that we should mention here that asks whether and why 'voters throw the rascals out' (see e.g. Welch and Hibbing 1997; Dimock and Jacobson 1995). According to Bågenholm (2013: 596), few systematic comparative studies exist in this field, but the 'prevailing view is that corrupt politicians are punished less frequently by the voters in mature democracies than one would expect'. When looking at the electoral impact of corruption allegations and corruption scandals in 215 election campaigns in 32 democracies, Bågenholm (2013: 596) finds that only corruption allegations have an independent effect on governmental electoral performance when controlling for other important features, concluding that 'voters actually punish corrupt politicians, but to a quite limited extent'. He also concludes that there is a large variation across and within countries when it comes to whether corrupt politicians are punished by the voters, suggesting that more work needs to be done analyzing when corrupt politicians are held accountable (see also de Souza and Moriconi 2013; Bågenholm and Charron 2014; cf. Klasnja, Tucker and Degan-Krause 2015). Xezonakis, Kosmidis and Dahlberg (2016) in recent work cast additional doubt over the strength of the individual-level accountability mechanisms through which voters are supposed to be able to 'throw the rascals out'.

The literature on coalition governance

As mentioned above, the literature on coalition governance takes its starting point in the so called ‘parliamentary chain of delegation’, which suggests that power-relationships in a parliamentary democracy can be described as a four-step chain, where (1) citizens (voters) delegate power to representatives, (2) who in turn delegate power to a cabinet and a Prime Minister (PM), (3) who delegates power to line ministers within the cabinet, and (4) ministers, in their capacity as heads of department, in turn delegate to civil servants. Hence, one of the main points made in this literature is that delegation from citizens, who can be seen as the ‘ultimate principal’ to those who govern in parliamentary democracies has to go through a number of steps, in an indirect way (see e.g. Strøm 2003; Strøm, Müller and Bergman 2003). The parliamentary chain of delegation is illustrated in figure 1.

Figure 1. The parliamentary chain of delegation



Strøm (2003: 65; slightly modified by the authors).

Several scholars have applied principal-agent theory to analyze delegation problems within parliamentary systems (see e.g. Strøm, Müller and Bergman 2003), and two main threats to the principal’s ability to control the agent have been identified: ‘adverse selection’ and ‘moral hazard’. The problem of adverse selection arises when the principal does not have access to relevant information about potential agents before they are selected. Moral hazard problems arise when agents, once selected, have motives to act in ways that are contrary to the principal’s interests (Strøm 2000: 270-271). Applied to ministerial selection, the PM faces a problem of adverse selection because at the time of appointment, the PM does not have complete information about a minister’s abilities and preferences to run a department effectively and in accordance with the PM’s wishes. Moral hazard problems can arise here because, as described by Indridason and Kam (2008: 624), ‘all ministers have motive and opportunity to use their portfolios in a manner that runs against the PM’s interests’.

What is thus important to note in figure 1, is that there is an arrow of delegation, but also an arrow of accountability that goes in the opposite direction, which means that in parliamentary democracies, actors in each step have to be able to hold the ones they delegate power to accountable (Strøm 2003). Or put in principal-agent terms, there has to be some control mechanism in place for principals to be able to control and sanction the agents. For example, the PM has to be able to hold the ministry heads accountable, which he or she can do through the power of being able to fire ministers and reshuffle the cabinet.

In democratic societies, citizens delegate power to politicians first and foremost through elections. Strøm et al. (2003) describe the double nature of elections, allowing for delegation as well as accountability. As mechanisms of delegation, elections vest politicians and parties with a mandate for the future. Hence, voters are giving a prospective vote or a mandate, and the idea is that parties and politicians present their policy programs to the voters and are elected on the basis of the voters policy choices. As a mechanism of accountability, elections provide the opportunity to hold politicians and parties responsible for their actions in office. Elections can induce accountability if holding office is seen as something attractive for the politicians, since the fear of electoral punishment is then a strong incentive for incumbents to remain true to the wishes of the electorate. What is most important for our purposes is that, even though the voters can be seen as the ‘ultimate principal’ (in delegating power to politicians), other principals in this chain can also hold various agents responsible. Hence, it is not only through elections that politicians as agents are controlled, which we will argue is mostly assumed in the previous literature on ‘clarity of responsibility’. In short, there may be other specific institutional mechanisms at work controlling politicians in office in parliamentary democracies, and hence, reducing corruption within such systems.

According to the previous literature on coalition governance, there exists a number of control mechanisms, besides elections where voters are seen as principals, to mitigate the threat of agency loss (see e.g. Strøm et al. 2011). In this literature, scholars distinguish between *ex ante* mechanisms, that apply before power is delegated (efforts to sort out good agents), and *ex post* mechanisms which represent ways to contain agency loss after delegation. Parliamentary democracies often lack *ex post* mechanisms providing credible oversight, while the *ex ante* control mechanism of screening and selecting candidates plays a central role for aligning the preferences of the candidates for key political offices (Strøm 2003). This extensive screening of prospective parliamentarians as well as potential cabinet members is often assumed to be performed by centralized, cohesive, policy-oriented political parties (cf. Müller 2000). Dismissals of ‘bad’ ministers or ‘rematching’ of portfolio and talent serve to mitigate problems of adverse selection *ex post* (e.g. Huber & Martinez-Gallardo 2008). ‘Rematching’ ministers and portfolios can also be seen as an instrument to deal with moral hazard problems (see Indridason & Kam 2008).

Hypotheses about the role of the PM in controlling corruption

Even though we do see the literature focusing on the clarity of responsibility and corruption as highly valuable as it points to important institutional features that may matter for corruption, we suggest that this literature does not fully take the institutional structure of parliamentary systems into account. The literature on clarity of responsibility has a very distinct focus on the voters, and their ability to hold politicians accountable, which for example becomes clear in this quote by Tavits (2007: 218):

[...] political corruption depends on the effectiveness of the democratic process, i.e. the ability of the voters to monitor their representatives, to detect those responsible for unsatisfactory outcomes, and to hold them accountable by voting them out of office.

However, we suggest that this view of an effective democratic process, especially within parliamentary systems, is somewhat incomplete. As described above, we draw on the literature on parliamentary government, arguing that it is not only through elections that politicians as agents are controlled. They are not only controlled directly by the voters, but instead by other politicians, acting as principals in that specific principal-agent relationship. We suggest that this is highly important to consider when discussing ‘grand’ or government corruption, as voters are not likely to be fully informed about potential malpractice within the government or departments. Here, we suggest that politicians, holding various important offices, are much more likely to be informed about potential misconduct, and that we should rather focus on the potential for politicians to control each other when in office. Hence, there may be other specific institutional mechanisms at work controlling politicians in office in parliamentary democracies, rather than elections, and such features are important to consider when explaining corruption levels across countries.

Even though there are a number of control mechanisms available in parliamentary systems, we have here chosen to focus on some specific features that we believe should influence corruption levels, and which has also been presented as a solution to ‘common pool problems’ in the economic literature, namely the power and ability of the Prime Minister to control his or her ministers. In this literature some scholars have argued that coalition governments are ‘weak’, with lower economic efficiency in general, due to that coalition governments face more severe ‘common pool problems’ since parties use their control over specific ministries to advance their specific spending priorities rather than practice budgetary discipline (see e.g., Hallerberg and von Hagen 1999). The so-called ‘fiscal institutionalist’ literature has identified some institutional rules that are expected to curb government spending, and one such institutional remedy suggests that the common pool problem

may be reduced by delegating veto right to offices, such as the Minister of Finance, or the Prime Minister, not bound by the particular interests of any spending department, as they will give more weight to the collective interest of the government, such as keeping a balanced budget (see e.g., von Hagen and Harden 1995).²

Hence, we here focus specifically on the role of the PM, and the third step in the parliamentary chain of delegation (see Figure 1), where the PM is the main principal delegating power to line ministers. Here we can draw on the literature on ministerial selection and cabinet reshuffles (see e.g. Dowding and Dumont 2009), where the selection and de-selection of cabinet ministers have been modelled as a delegation problem, where both problems of adverse selection and moral hazard may occur (see e.g. Huber and Martinez-Gallardo 2008). As described above, authors like Indridason and Kam (2005) even go so far and suggest that all ministers have the opportunity and incentives to act against the interests of the PM. Applying such an argument when explaining corruption, basically characterizing corruption as an agency problem, we suggest that the PM can be expected to have an interest in reducing corruption within the cabinet and among his or her ministers. One reason for this is that the PM and the cabinet may be punished by the opposition parties if corruption levels are high, and may be replaced by an alternative cabinet, and thus, reducing corruption may be of interest to the PM due to office- and policy-seeking reasons (assuming that holding office also entails a higher possibility of influencing policy-outcomes). Limiting corruption within government could also be a goal for the PM due to that corruption may lead to policy outcomes that are less efficient, and less in line with the policy goals of the PM and the cabinet (if corrupt politicians push policies to accommodate actors who have ‘bribed’ them).³

However, if the PM is not fully informed about what happens within the various ministries, or if he or she does not have the ability to punish ministers who behave ‘badly’, it will be more difficult for the PM to hold various ministers accountable,

² However, most scholars in this literature suggest that the delegation approach is a remedy only for single-party cabinets since in coalitions no single office holder enjoys the trust of all government parties. Partisan Ministers of Finance and PMs thus would be suspected to benefit ministers from their own party and hence coalitions would not delegate this power. Instead, coalitions are more likely to adopt a so-called ‘contract approach’, particularly those cabinets characterized by large ideological distance and a high level of competition between the cabinet parties (Hallerberg et al. 2007, 2009; De Haan et al. 2013). This approach suggests that coalitions aim at negotiating overall spending targets and rules at the beginning of the term and each minister works under pre-set spending limits (see also Bäck et al. 2013).

³ One can of course question whether the PM always has an interest in reducing corruption levels, or in other words, whether the PM can be characterized as a ‘good principal’ (Persson, Rothstein and Teorell 2013). The assumption that we make here is not that PMs are inherently ‘good’, but rather that PMs have a higher interest in reducing corruption within the cabinet than the individual ministers due to the reasons mentioned above (e.g. policy- and office-seeking reasons). However, we recognize that this may be a problematic assumption and we therefore discuss this potential problem with our theoretical argument in the concluding remarks of this paper.

and moral hazard problems should be higher in such systems. Also, if we instead see governmental corruption as an adverse selection problem, implying that ‘bad’ agents are selected to become ministers due to lack of information about them before selection, the power of the PM to appoint ministers should play a role. If the PM has the ability to select whomever he or she prefers, adverse selection might instead be minimized. This argument is similar to an argument made in the literature on ministerial selection, where some authors have argued that one way of minimizing agency problems, more specifically that line ministers act in a way that does not coincide with the wishes of the principal, is to try to appoint ministers whose interests do not clash with the principal’s interest (see e.g. Kam et al. 2010; Bäck et al. 2013).

We know from previous studies that the constitutionally provided powers of PMs vary significantly across countries. For example, Bergman and colleagues (2003, 179-180) identify a number of sources of PM influence: the ability to appoint and decide the jurisdiction of cabinet members; to dismiss other cabinet members; to instruct ministers; to prevent ministers from bringing issues to attention of the cabinet (agenda control); and to significantly influence cabinet decision-making (cf. King 1994; O’Malley 2007). Hence, appointment and dismissal powers can be identified as some of the most important powers of the PM, clearly distinguishing the PM from the other cabinet members. Other rules are also important, such as the PM’s ability to determine ministerial jurisdictions – in countries, where the PM has such powers, the PM can easily shift policy areas between ministries and thereby exercise power. Bergman et al. (2003) have constructed an index of PM powers, which includes a number of features, such as the powers discussed above, but also other formal rules and the personnel resources at the disposal of the PM. According to this index, institutionally powerful PMs are found in Germany, UK and Spain, whereas institutionally weak PMs are found in for example Finland and the Netherlands. Hence, there is a clear variation in PM power across parliamentary systems, or as Sartori (1994: 102-103) puts it:

The head of government may relate to the members of his government as: i) a first *above unequals*; ii) a first *among unequals*, iii) a first *among equals*. [...] they are indeed very different formulas. A British prime minister stands as a *primus* (first) above unequals, for he or she truly runs the government and has a free hand in picking and firing truly ‘subordinate’ ministers; the German Chancellor is less pre-eminent but is still a *primus* among unequals (not among equals); whereas a prime minister in an ordinary parliamentary system is a *primus inter pares*, among equals, and thus not much of a *primus* either.

We suggest that such institutional powers are important to consider when explaining the variation in corruption across countries, and we therefore present a main argument about the role of the PM in reducing governmental corruption. Our main

expectation, which is also influenced by the literature on economic policy-making and the role of PMs (see e.g. von Hagen and Harden 1995), is therefore:

Governmental corruption is likely to be lower in systems where the constitutionally provided power of the PM is high (H1).

However, to specify our expectations somewhat, we also present two sub-hypotheses about two specific PM powers expected to influence governmental corruption:

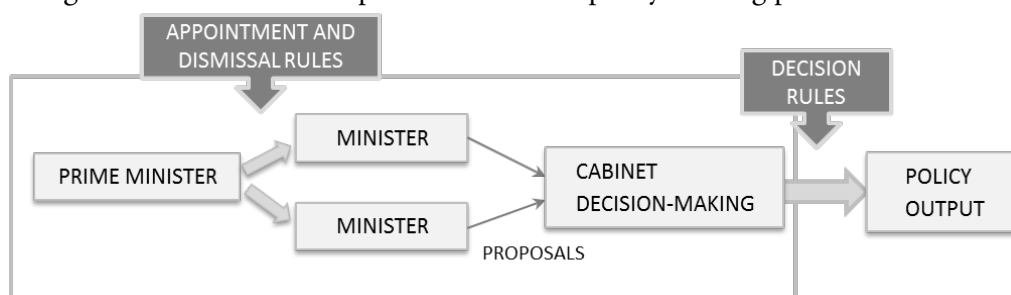
Governmental corruption is likely to be lower in systems where the power of the PM to appoint and dismiss ministers is high (H1a)

Governmental corruption is likely to be lower in systems applying a cabinet decision rule that favors the PM (H1b)

From the discussion above it should be clear that *appointment and dismissal powers (H1a)* are important features to consider when discussing PM power and corruption. A PM with strong appointment and dismissal powers should simply be able to ‘root out’ corruption, either by selecting ‘good’ cabinet members, and hence avoiding adverse selection problems, or by deselecting or firing ‘bad’ cabinet members, when moral hazard problems occur after a minister has been selected, that is, when corruption is detected in a ministry.

Besides these important constitutional provisions, Bergman and colleagues (2003) also suggest that it is important to consider the role of the PM in the cabinet decision-making process when determining the power of the PM. Hence, not only appointment and dismissal rules, should matter, but also various *cabinet rules* (H1b). They here distinguish between two cabinet rules, focusing on if cabinet decisions are to be made in unanimity, and whether the PM is the one defining whether there is a consensus or not, or summing up the cabinet discussion. A *unanimity rule* in cabinet puts limits on PM power in decision-making, since that gives all the ministers veto power when decisions are made, whereas a *PM defining the consensus rule* increases the power of the PM within the cabinet.

Figure 2. The role of PM powers within the policy-making process in cabinets



Note: For a similar figure, see Bergman et al. (2003: 180).

In figure 2, we illustrate the role of the various PM powers in the policy-making process of cabinets, following Bergman and colleagues (2003: 180). The figure focuses on the third step within the parliamentary chain of delegation, the delegation relationship between the PM and his or her cabinet ministers. The appointment and dismissal powers of the PM comes in at an early ‘delegation’ stage of the decision-making process. We suggest that these rules are most important to consider when aiming to explain governmental corruption, as the power to select ‘good’ ministers and dismiss ‘bad’ ministers should be highly important here. However, as described above, there are also other rules that we should consider, and here the cabinet decision rules comes in, which relate to a later stage in the policy-making process, when actual decisions are made within the cabinet, before resulting in specific policy outputs. A PM able to control policy output at this stage may also be able to control corruption in the sense that ministers are not able to individually make decisions favoring specific clients, which may be necessary for them to take bribes.

Finally, when measuring the institutional power of the PM, Bergman and colleagues (2003) suggest that the *constructive vote of no confidence* could also be included in an index of PM power. The authors suggest that PM power is high when there is a constructive vote of no confidence, that is, when parliament is only allowed to withdraw confidence from a PM or cabinet if there is an absolute majority for a chosen successor as PM. Bergman and colleagues (2003: 180) here draw on the work by Sartori (1994), who argues that ‘the German Chancellor is ‘first above equals’ in part because of two institutional rules, the most important of which is the constructive vote of no-confidence. This rule was first implemented in Germany, to avoid cabinet instability, but is currently applied in several additional countries, for example in Hungary and Spain (see e.g. Louwerse 2014). Sartori (1994: 107) suggests, when speaking about the German system, that the effectiveness of the constructive vote ‘should not be sneezed at, for it is far easier to assemble a negative majority, a majority that simply ousts a government, than to bring together a positive majority that also agrees on the new chancellor’. Since this feature is somewhat different from the other institutional powers of the PM, we present a separate hypothesis saying that:

Governmental corruption is likely to be lower in systems applying a constructive vote of no confidence (H2)

III Methods and data

Data and measurement

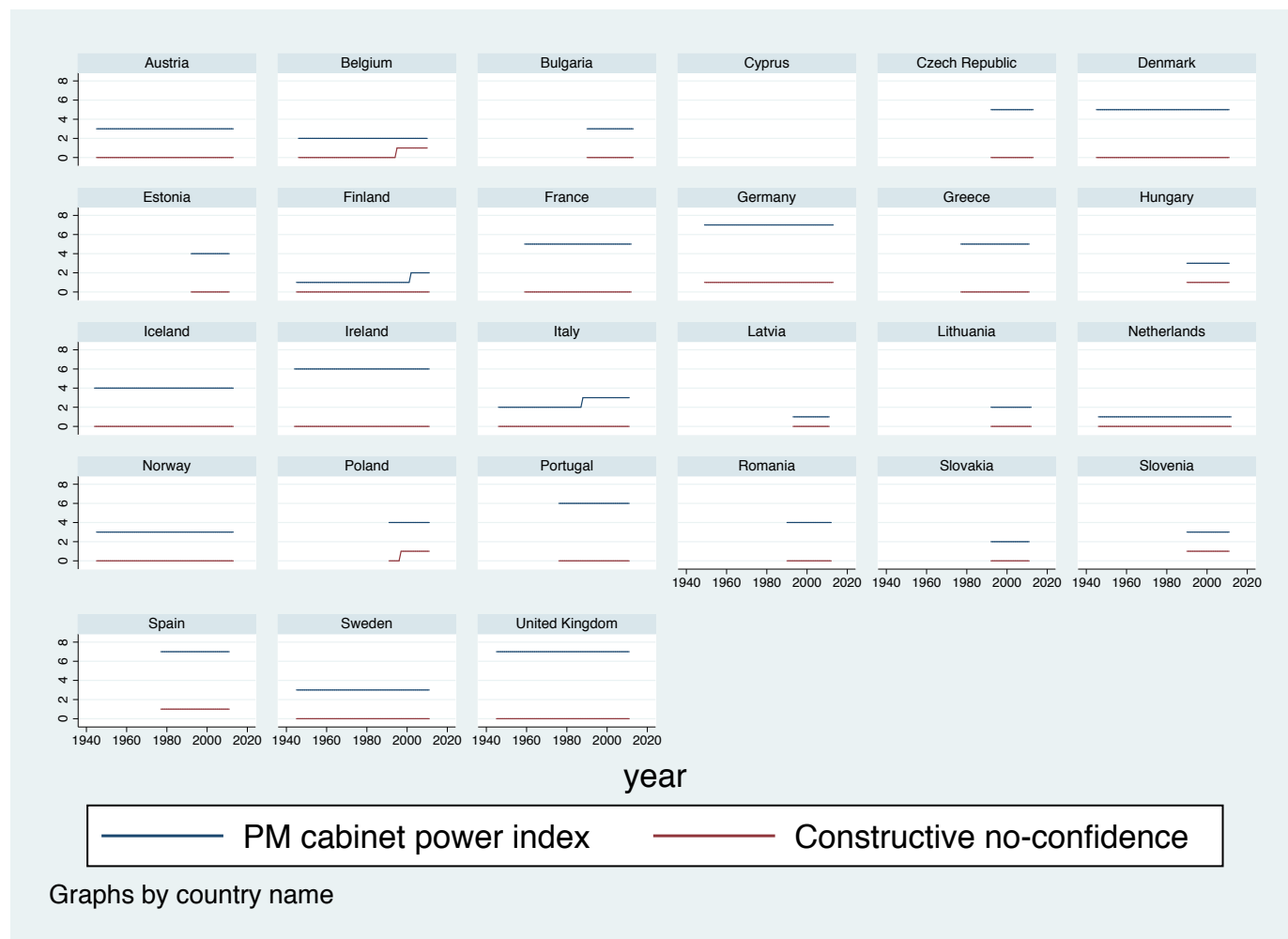
To the best of our knowledge, the only data source including systematic cross-national measures of the constitutional powers of PMs is the *European Representative Democracy Data Archive* (www.erdda.se; Andersson et al. 2014), covering 29 countries from 1945–2013.⁴ This is thus our source for measuring our independent variables of primary interest. Our test of H1 relies on an overall *PM cabinet power index*, which consists of: (i) the existence of an actual decision rule for cabinet decision-making (one point if the PM sums up the cabinet discussion or if majority voting applies, and zero if cabinet decisions are made unanimously); whether the PM has the right to (ii) appoint and (iii) dismiss ministers; whether (iv) ministers can only be removed by parliament if parliament dismisses the PM/full cabinet; whether (v) the PM has the right to decide ministry jurisdiction; whether (vi) the PM has steering or co-coordinating rights vis-à-vis ministers; and whether (vii) the PM has control over cabinet agenda (see Bergman et al. 2003: 183–194). The data for this index, which can thus vary from 0–7, is for the estimation sample countries presented in Figure 3. As expected, the PM of UK scores a maximum of seven, but as a matter of fact also the German chancellor wields equal powers by this measure. On the other side of the spectrum, Belgian and Dutch PMs are relatively weak in relation to their cabinets, as is also the case in Latvia, Lithuania and Slovakia. Only two countries have shifted powers over time: Finland in 2002 and Italy in 1988.

When testing the sub-hypotheses H1a and H1b, we draw on two elements of this overall index: one index combining (ii) and (iii) on appointment and dismissal rules, and the dummy variable for (i), the existence of a decision rule stating that the PM defines the consensus or that majority voting applies. In order to test H2, we rely on a dummy variable for *constructive no-confidence vote*, which is coded 1 when parliament is only allowed to withdraw confidence from a PM/cabinet if there is an absolute majority for a chosen successor as PM (otherwise 0). As shown in Figure 3, Germany, Hungary and Spain have provided the constructive vote of no-confidence throughout the sample period, whereas two countries have installed it: Belgium in

⁴ O'Malley (2007) presents expert survey data on the powers of PMs in a sample of 22 Western parliamentary democracies from 1980–2000, but as pointed out by O'Malley (2007, 12) himself, this rather simplistic single-item indicator cannot distinguish between the power of the PM vis-a-vi cabinet ministers (what we want to capture) and the status of the PM within the parliamentary policy-making process in general.

1995 and Poland in 1997. All other countries have constantly been relying on the more permissive form of no-confidence.

Figure 3. PM powers and constructive no-confidence in sample countries



Before testing our main (positive) argument, we will also provide an empirical test of the clarity of responsibility argument. Unlike Tavits (2007), however, we disaggregate the concept of clarity of responsibility into its constitutive elements. This implies a dummy for *majority cabinet status*, for *coalition cabinet status*, and, as an addition to the clarity of responsibility theory, for *oversized cabinet status* (i.e. cabinets including one or more parties than necessary for reaching majority status). Moreover, now following Tavits (2007), we also test the effect of (logged) *cabinet duration* (in days) as well as the *effective number of parties* in the legislature. Finally, to provide a more direct test of the notion that corruption is reduced by the mechanism of voters ‘throwing the rascals out’, we also include a measure of *government turnover* (whether the partisan makeup of the cabinet changed, the identity of the prime minister changed, or there was a general election). All these variables are also measured in the ERDDA dataset (Andersson et al. 2014).

Our measure of *corruption* comes from the new *Varieties of Democracy* dataset (Coppedge et al. 2015; www.vdem.net). The V-Dem data are primarily based on coding by five or more country experts, recruited on the basis of their local country-specific expertise, their seriousness of purpose and impartiality. The data cover the entire globe from 1900-2012 (or, for a subsample of countries, 2014). In order to aggregate up from coders to the level of country-years, the V-Dem data are processed through an IRT measurement model that allows both for coder-specific reliability parameters and thresholds varying across coders (Pemstein et al 2015). Through so-called “lateral” and “bridge” coding, meaning that a substantial number of coders also provide information for more than one country over time or for a particular year (2012), these measurement model estimates also attempt to correct for potential problems of incomparability across countries.

V-Dem includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption (see McMann et al. 2016 for exact details). Within the executive realm, the measures also distinguish between corruption mostly pertaining to bribery and corruption due to embezzlement. Finally, they differentiate between corruption in the highest echelons of the executive (at the level of the rulers/cabinet) on the one hand, and in the public sector at large on the other. The measures thus potentially tap into several distinguished types of corruption: both ‘petty’ and ‘grand’; both bribery and theft; both corruption aimed and influencing law making and that affecting implementation. But as shown by McMann et al. (2016), these measures are also strongly correlated, which based on Bayesian factor analysis warrants the construction of an overall index of corruption.

Two features thus make the V-Dem corruption measures preferable to other extant measures, such as the *Worldwide Governance Indicators* measure of the Control of Corruption or the Corruption Perceptions Index produced by *Transparency International*, with which they are strongly correlated (McMann et al. 2016). The first is the possibility to disaggregate corruption into different sub-types, a rare opportunity we take advantage of in a more refined test of our hypotheses below. Second, by asking exactly similarly worded questions for each year going back to 1900, the V-Dem measures should allow comparisons over time for a hitherto unprecedentedly long time series of corruption. In combination with the ERDDA data, our estimation sample consists of a maximum of 27 countries covered by both datasets going back to 1945.⁵

These corruption estimates are in Figure 4 presented in red for the in-sample years (for which there is also ERDDA data), and in blue for the previous time-

⁵ Luxembourg and Malta are the two ERDDA countries not covered by V-Dem. Also, as seen in Figure 3, there is no data on PM cabinet powers in the ERDDA data for Cyprus, restricting the tests of our main hypothesis to 26 countries.

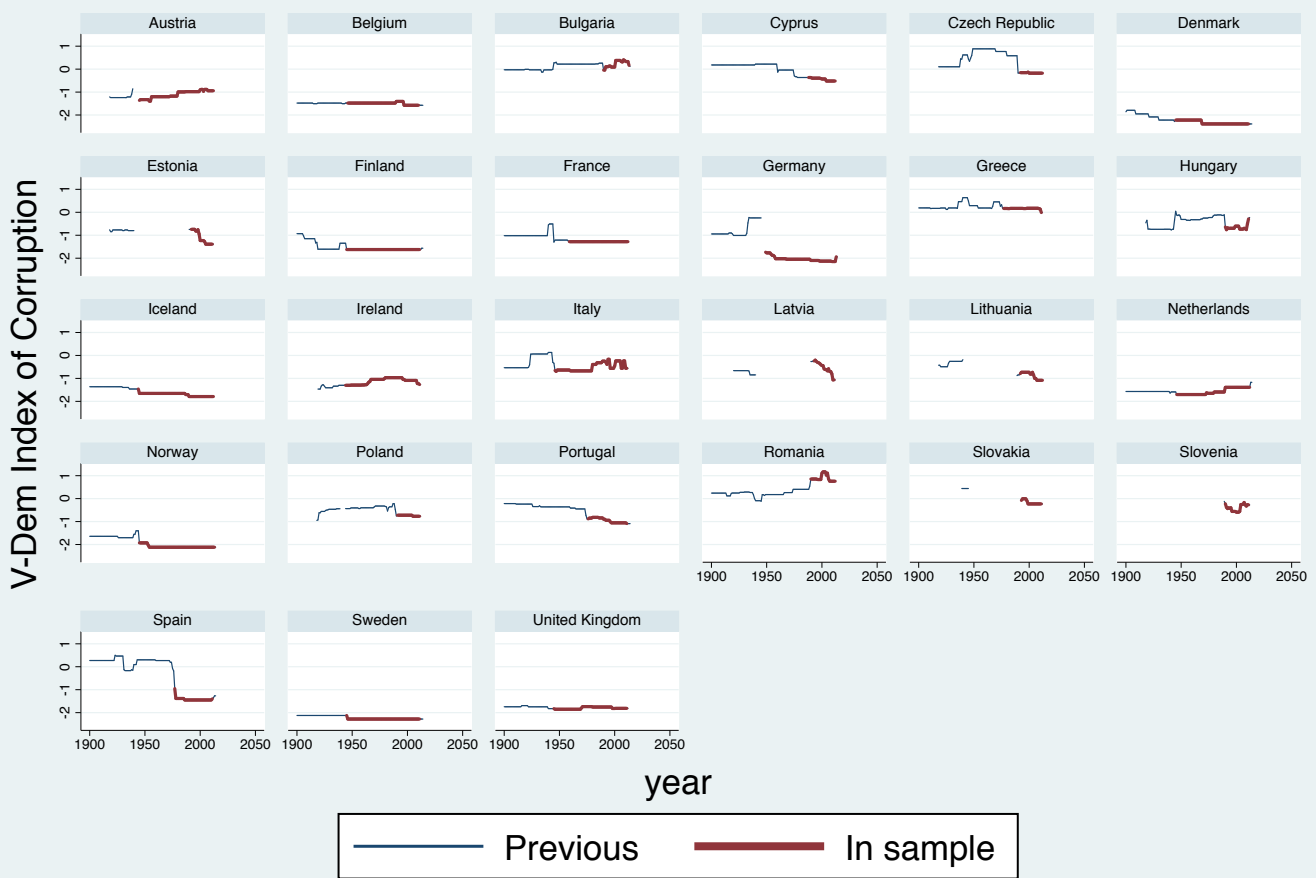
periods of each country (mostly during authoritarianism or prior to WWII). As is well-known from the previous literature on corruption in Europe (see, e.g., Charron, Laupente and Rothstein 2013), there is both a North-South and an East-West divide in terms of corruption levels, where more corrupt countries are located toward the East and the South. What Figure 4 also makes clear, and this is more news since corruption has never been measured over such an extensive period before, is that there is precious little variation within countries over time. Corruption, much as its absence, is a very strong equilibrium. One minor exception to this rule in the in-sample period seems to be the Baltic countries, where a decline in corruption can be seen from the 1990s onward. Also, there seems to be a slight upward gradual trend in corruption levels in the Netherlands, and a more abrupt rise in recent years in Hungary. (The more profound changes seem to concur with the out-of-sample transitions from authoritarianism to democracy, which we return to below.)

Finally, drawing on the previous literature, we control for a series of other determinants of corruption that could potentially also be related to the powers of the PM. These are first and foremost a set of structural characteristics well-known to be related to corruption, and also included by Tavits (2007): *ln(GDP/capita)*; the *level of democracy*; a dummy for *post-communist countries*, known to have a stronger and very different legacy of corruption; the *share of protestants* in the population; and the degree of *ethnic fractionalization*. Except for the level of democracy, measured by the V-Dem index of polyarchy (Coppedge et al. 2015), data on these structural variables have been drawn from the *QoG dataset* (Teorell et al. 2015). It should be noted that the V-Dem polyarchy index, following Dahl (1971), not only captures electoral aspects of democracy such as free and fair elections and universal suffrage, but also key political rights and freedoms necessary to make elections meaningful instruments for vertical accountability. This means, among other things, extensive controls for freedom of the press. Since the agency problems driving corruption according to our theory depend on the level of informational asymmetry between the PM and cabinet ministers, we find it key to control for the extent to which “transparency” in this sense is present in the political system at large.

As a second set of controls, we also include measures of two potential institutional determinants of corruption: a dummy for *semi-presidentialism* (from the ERDDA data described above), and two features of the electoral system in use, the (logged) average *district magnitude* and a dummy for whether *PR or a mixed majoritarian/PR formula* was in use (with data from Borman & Golder 2013). We also control for the *cabinet preference range* (the ideological distance on a left-right dimension between the parties to the ‘extremes’ in a cabinet) since some authors have suggested that ideologically cohesive cabinets can be expected to be less corrupt (see Strøm et al. 2003: 726).⁶

⁶ The preference range variable is from the ERDDA-dataset, based on party manifesto data.

Figure 4. The level of corruption in sample countries



Graphs by country name

A time-series cross-section model

Given the pooled times-series cross-section structure of our data, we will in this paper rely on the standard Beck and Katz (1995) panel-corrected standard errors in order to take panel heteroskedasticity and spatial autocorrelation into account. A more complicated issue, given the nature of our data, is how to deal with serial autocorrelation and endogeneity bias. Unfortunately the standard fix to both these problems, the lagged dependent variable (Beck & Katz 1996), is not quite appropriate given the extremely sluggish behavior of both our outcome measure of corruption and our key independent variables, PM cabinet powers and the existence of a constructive vote of no-confidence (see Figures 3–4 above). By introducing a lagged dependent variable, we would substantively change the nature of our explanatory enterprise into one concerned with explaining change within countries.

Given the precious little amount of such change, however, we would then essentially be looking for the drivers of the very few outlying cases displaying some change over time (such as the Baltics). By the same token, we would throw away almost all of the cross-country variation in our data. Since the differences in the power of the PM across countries is mainly an institutional feature, however, we think that the most interesting variation to look at within this sample lie at the national level. Hence, introducing a lagged dependent variable would not only give us incorrect answers, but even be asking an incorrect question.⁷

For these reasons, we will instead rely on the Prais-Winsten estimator to correct for serial autocorrelation. This however leaves the issue of endogeneity bias unaddressed. Lagging the independent variable takes one step toward addressing that issue,⁸ but is of course no perfect cure. Most importantly, how can we exclude the possibility that countries facing serious problems with corruption historically are not also the ones introducing constitutional and other safeguards for strengthening the powers of the prime minister vis-à-vis the cabinet? By just looking at the levels of corruption across countries, this potential form of backwards causation cannot be ruled out. But as already noted, this is another unique feature of the V-Dem data on corruption: they cover the histories of all countries for the entire 20th century, also during authoritarian spells. We can thus systematically measure the ‘corruption legacy’ of each country by taking the average of its corruption level from the year 1900 (or the first year of its existence as a semi-sovereign entity if that comes after 1900) up until the year in which it first enters our estimation sample. Referring back to Figure 4, this implies taking the country-specific average of the thin blue lines predating the thick red ones.⁹ These estimates of corruption legacy will then be entered as control variables in our models.

⁷ For the very same reason, our data are not suitable for country-level fixed effects, which would systematically throw out all countries with no over-time change in the independent variables. This would thus be tantamount to basing the regression estimates on case studies of Finland and Italy for the PM cabinet powers index, and Belgium and Poland for the constructive no-confidence variable.

⁸ Whether we lag or do not lag the independent variables make no difference whatsoever for the substantive results presented below. For now, we have thus opted for presenting the unlagged results.

⁹ In the case of Slovakia and Slovenia, with very brief or no history of independence prior to the 1990s, there is precious little information about such a legacy (as Figure 4 makes clear). We thus replace the legacy variable for Slovakia with the one for Czechoslovakia (in effect the Czech Republic in the V-Dem data), and for Slovenia with one for Yugoslavia (or in effect for Serbia since 1918).

IV Empirical analysis

Evaluating the clarity of responsibility argument

Since one of the main arguments of this paper is that the accountability mechanisms operating at higher steps in the chain of delegation (see Figure 1) are more important than the relationship between voters and representatives for explaining corruption, at least within democratic countries, we will start by showing some results for a test of the clarity of responsibility argument. These are presented in Table 1. In the first model, we look directly at the three components of Tavits's (2008) index of clarity of responsibility for which we have measures: majority status, the (logged) cabinet duration, and the effective number of parties in the legislature.¹⁰ By the logic of clarity of responsibility theory, more durable governments enjoying majority status, as well as having fewer parties to choose from, should be conducive to reduced levels of corruption, since that would make it easier for voters to 'vote the rascals out'. However, in model 1 we find precisely little support for this proposition.

This is also the case when we introduce our control variables in model (2). Overall, the controls operate as expected: on average richer, more democratic and Protestant countries are less, whereas post-communist countries are more corrupt. Somewhat surprisingly, all else equal, ethnically fractionalized countries are *less* corrupt in this sample of countries. We find no systematic differences between semi-presidential and more purely parliamentary systems. In line with Persson et al. (2003), countries with PR (or mixed) formulas tend to be more corrupt, whereas the effect of district magnitude runs in the other direction.

In model (3), we instead introduce a more comprehensive model of cabinet status, which also separately takes into account whether the cabinet is a coalition and whether that coalition contains *more* parties than what is necessary to achieve majority status (i.e., over-sized cabinets). According to clarity of responsibility theory, both features should increase corruption. Finally, we include the variable measuring cabinet preference range to test for the argument by Strøm et al. (2003: 726) that corruption is likely to be higher the larger the ideological divisions within the cabinet. Again, however, none of the clarity of responsibility variables exert effects achieving statistical significance, and the preference range variable seems to operate in the opposite direction than expected: more ideological divisions within the cabinet leads to *less* corruption. The same result holds when we in model (4)

¹⁰ The fourth component, for which we have not been able to find any appropriate empirical measures, is 'Opposition influence', measured by the existence and status of committees in the legislature (Tavits 2008, 223).

Table 1. Clarity of Responsibility and Corruption

	(1)	(2)	(3)	(4)	(5)	(6)
Majority cabinet	.0013 (.0090)	.0031 (.0061)	.0063 (.0070)	-.0002 (.0113)	.0063 (.0070)	.0084 (.0077)
Coalition cabinet			.0069 (.0084)	.0041 (.0097)	.0068 (.0084)	.0059 (.0093)
Coalition*Majority cabinet				.0104 (.0137)		
Oversized cabinet			.0089 (.0074)	.0080 (.0078)	.0089 (.0074)	.0103 (.0082)
ln(cabinet duration)	.0006 (.0039)	.0011 (.0029)	-.0000 (.0032)	-.0002 (.0033)	.0003 (.0033)	.0000 (.0036)
Effective no. of parties	-.0082 (.0066)	-.0083* (.0049)	-.0019 (.0054)	-.0018 (.0057)	-.0019 (.0054)	-.0015 (.0060)
Cabinet preference range			-.0004** (.0002)	-.0004** (.0002)	-.0004** (.0002)	-.0004** (.0002)
Cabinet turnover (overall)					.0013 (.0024)	
Cabinet turnover: partisanship						.0046 (.0039)
General election						.0006 (.0034)
ln(Gdp/cap)		-.0490* (.0279)	-.0463* (.0263)	-.0468* (.0258)	-.0462* (.0263)	-.0443* (.0251)
Level of democracy		-.8102*** (.1336)	-.8933*** (.1473)	-.9361*** (.1505)	-.8915*** (.1472)	-1.002*** (.1578)
Post-communist		.8610*** (.0498)	.9108*** (.0461)	.9096*** (.0446)	.9106*** (.0461)	.9087*** (.0420)
Religion: Protestant		-.0114*** (.0005)	-.0113*** (.0005)	-.0113*** (.0005)	-.0113*** (.0005)	-.0114*** (.0004)
Ethnic fractionalization		-.6859*** (.1585)	-.6996*** (.1423)	-.7088*** (.1371)	-.6991*** (.1425)	-.7240*** (.1286)
Semi-presidential system		.0107 (.0336)	.0237 (.0369)	.0281 (.0383)	.0241 (.0369)	.0382 (.0405)
ln(District Magnitude)		-.0224* (.0121)	-.0201* (.0107)	-.0174 (.0107)	-.0202* (.0107)	-.0130 (.0108)
PR/Mixed		.1851*** (.0329)	.1932*** (.0328)	.2020*** (.0339)	.1933*** (.0328)	.2226*** (.0359)
Constant	-1.130*** (.0546)	.1708 (.2928)	.1601 (.2821)	.1915 (.2787)	.1560 (.2823)	.1893 (.2753)
Rho (ρ)	.9270	.9305	.9223	.9155	.9224	.9030
R-squared	.1502	.6267	.6755	.6817	.6755	.6910
Number of countries	27	27	27	27	27	27
Average no. of years/country	43.8148	38.2963	36.4444	36.4444	36.4444	36.4444
Observations	1183	1034	984	984	984	984

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ Note: Entries are Prais-Winsten regression coefficients with panel-corrected standard errors with parentheses.

interact majority with coalition status in order to separate out the effect of being a minority from being a single-party government.

As a final test of clarity of responsibility, we look in models (5)–(6) at government turnover directly. If voters punish corrupt politicians, we should see less corruption in countries with a higher rate of cabinet turnover. This is however again not the case, not even when we split the turnover variable and concentrate on the incidence of changes in partisan composition only, while separately controlling for general elections.

In sum, we find no evidence in this sample of parliamentary democracies that countries with less clarity of responsibility are more corrupt, or that voters are ‘voting the rascals out’.

Evaluating the argument about role of the PM in reducing corruption

Turning instead to our positive argument about the role of the PM, we introduce in Table 2 a first test of our two types of measures of PM cabinet status. This first test looks at the overall index of PM powers over the cabinet (H1) as well as the constructive vote of no-confidence (H2). As can be seen, both are statistically significant, as expected asserting a negative impact on corruption. This also holds when we in model (2) introduce the full set of variables capturing the characteristics of the cabinet from a clarity of responsibility perspective (majority, coalition and over-sized status, duration, and preference range). The importance of the powers of the PM thus seems to operate independently of the type of cabinet in power. Even more importantly, both results are not only robust but even strengthened when we control for the corruption legacy in model (3).¹¹

In concrete terms, every addition on one type of power in the PM cabinet power index leads, all else equal, to an expected average reduction in the level of corruption by -0.0793 , for a maximum difference of $6 \times 0.0793 = 0.4758$ when comparing a system with only 1 to one with all 7 PM powers. This could be compared to the sample standard deviation of $.7517$; hence a pretty substantial effect. The corresponding average difference between systems with constructive no-confidence is -0.1485 in the level of corruption. This is of course a smaller effect in substantive terms, but should be seen in relation to the fact that we control for the other host of PM powers in the index.

¹¹ The result for constructive no-confidence even holds in the presence of a lagged dependent variable and country-fixed effects. For reasons explained above we are however not very convinced by any results from these estimators in this particular data setting.

Table 2. The Power of Prime Ministers and Corruption

	(1)	(2)	(3)	(4)	(5)	(6)
PM cabinet power index	-.0455*** (.0148)	-.0444*** (.0086)	-.0793*** (.0109)			
PM appoint/dismissal power				-.0670*** (.0239)	-.0640*** (.0154)	-.1136*** (.0201)
Majority/PM Consensus				-.2095** (.0838)	-.2435*** (.0530)	-.1177** (.0553)
Constructive no-confidence	-.0755** (.0341)	-.2117*** (.0464)	-.1485*** (.0308)	-.0937** (.0377)	-.2099*** (.0477)	-.1625*** (.0350)
Corruption legacy			.5695*** (.0284)			.5518*** (.0301)
Majority cabinet		.0070 (.0082)	.0011 (.0057)		.0078 (.0081)	.0014 (.0058)
Coalition cabinet		.0044 (.0098)	.0094 (.0067)		.0027 (.0098)	.0090 (.0068)
Oversized cabinet		.0088 (.0084)	.0073 (.0059)		.0090 (.0085)	.0078 (.0060)
ln(cabinet duration)		-.0001 (.0039)	.0014 (.0024)		.0001 (.0040)	.0012 (.0025)
Cabinet preference range		-.0004 (.0002)	-.0004*** (.0001)		-.0004 (.0002)	-.0004** (.0002)
Effective no. of parties	-.0111** (.0044)	-.0064 (.0065)	-.0047 (.0042)	-.0120*** (.0047)	-.0080 (.0067)	-.0056 (.0044)
ln(Gdp/cap)	-.0321 (.0321)	-.0081 (.0232)	-.0478* (.0258)	-.0275 (.0308)	-.0059 (.0228)	-.0510* (.0261)
Level of democracy	-.6177*** (.1250)	-.8587*** (.1682)	-.4621*** (.1348)	-.6898*** (.1288)	-.9559*** (.1684)	-.5430*** (.1350)
Post-communist	.8647*** (.0709)	.9289*** (.0431)	.3462*** (.0600)	.7950*** (.0824)	.8254*** (.0510)	.4186*** (.0695)
Religion: Protestant	-.0121*** (.0008)	-.0122*** (.0005)	-.0064*** (.0006)	-.0107*** (.0008)	-.0104*** (.0007)	-.0053*** (.0006)
Ethnic fractionalization	-.6877*** (.2299)	-.7264*** (.1329)	-.4918*** (.1792)	-.5539** (.2338)	-.5368*** (.1466)	-.4587** (.2092)
Semi-presidential system	-.0230 (.0305)	.0273 (.0435)	-.0387* (.0207)	-.0343 (.0364)	.0123 (.0470)	-.0486** (.0232)
ln(District Magnitude)	-.0369*** (.0134)	-.0298*** (.0104)	-.0435*** (.0095)	-.0352*** (.0132)	-.0276*** (.0100)	-.0424*** (.0096)
PR/Mixed	.1415*** (.0288)	.2617*** (.0361)	.0819*** (.0206)	.1578*** (.0303)	.2635*** (.0370)	.0852*** (.0208)
Constant	.1106 (.3416)	-.0541 (.2491)	.7410*** (.2746)	.1329 (.3201)	.0282 (.2487)	.7470*** (.2715)
Rho (ρ)	.9513	.8860	.9413	.9421	.8826	.9405
R-squared	.5642	.7201	.7435	.5934	.7257	.7411
Number of countries	26	26	26	26	26	26
Average no. of years/country	39.4615	37.4615	37.4615	39.4615	37.4615	37.4615
Observations	1026	974	974	1026	974	974

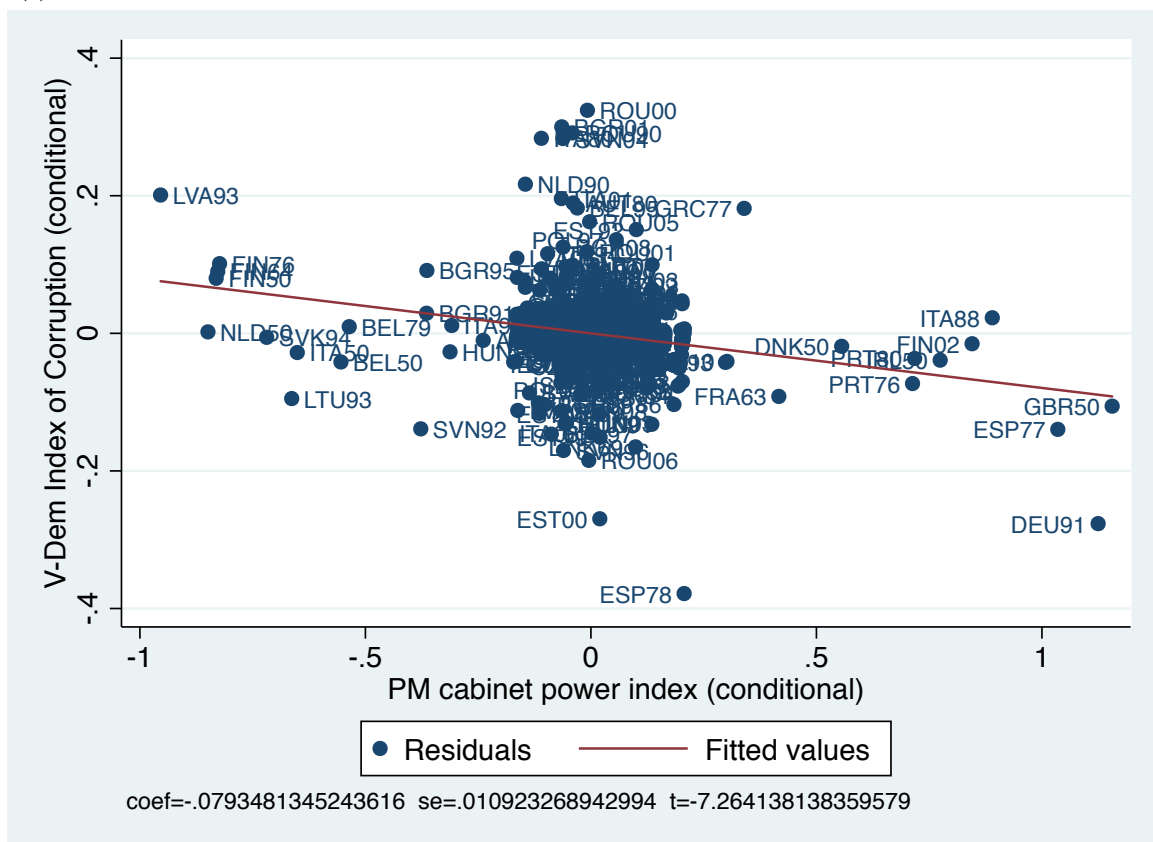
Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *Note:* Entries are Prais-Winsten regression coefficients with panel-corrected standard errors with parentheses.

The conditional relationship between PM powers and corruption, taking all control variables into account, is portrayed in Figure 5. The upper figure (a) displays the relationship for the full estimation sample. Since this seems to indicate the influence of a few extreme outliers, such as Germany in 1991, Great Britain in 1950, Spain in 1977 and Latvia in 1993, we re-estimated the relationship in a narrower sample of countries in the lower figure (b). As can be seen, the conditional effect of PM powers is even strengthened once these extremely influential outliers are eliminated.¹²

Figure 5. The Conditional Effect of PM Powers

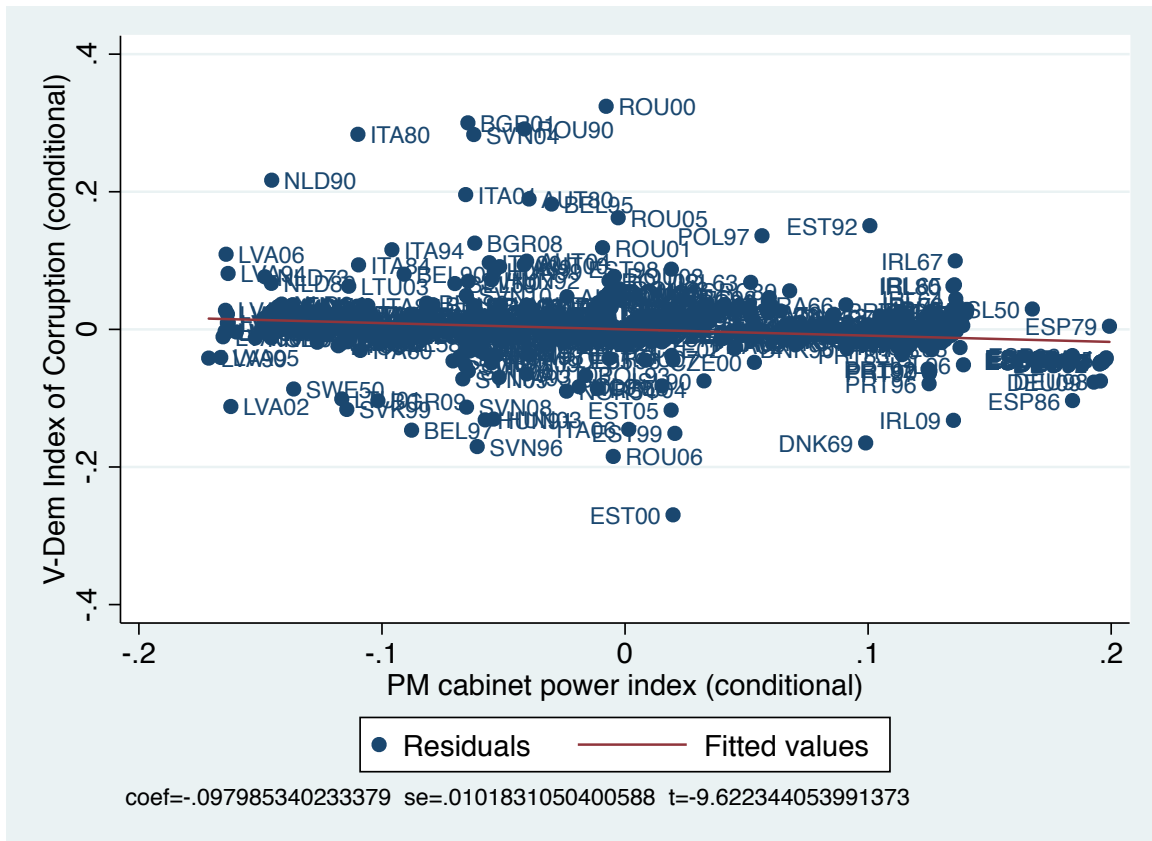
(a) including and (b) excluding outliers

(a)



¹² Similarly, the effect of constructive no confidence is heavily suppressed by two disconfirming and extremely influential outliers: Belgium in 1995 and Poland in 1997. Once they (and four other extreme outliers) have been eliminated, the coefficient on constructive no confidence increases substantially to $-.577$.

(b)



In models (4)–(6), we turn to our test of the more specific sub-hypotheses H1a and H1b, stating that the powers of PMs to appoint and dismiss cabinet ministers, together with a cabinet decision rule favoring the PM, should be the most important mechanisms for combatting corruption (see Figure 2). The negative and statistically significant coefficients for these variables again confirm both these claims. Here we can also see that in substantive terms each three of these components of PM powers exert effects on corruption approximately on par with each other.

In Table 3, finally, we test our main hypotheses against three different types of corruption, roughly corresponding to the three different branches of government represented in Figure 1: the cabinet, the ‘civil servants’ in the public sector at large, and the legislature. The proposition most obviously related to our theory is of course that cabinet or ‘executive’ corruption should be most directly affected by the authority of the PM. We have less clear expectations when it comes to corruption in the public sector at large, sometimes also referred to as ‘bureaucratic’ corruption, but if accountability in the third step in the chain of delegation in Figure 1, between PMs and minister, translates also into the fourth one, between ministers and civil servants, we can hypothesize the same general effects on this type of corruption. Since the legislature (elected representatives) is located before the PM and cabinet in the chain of delegation, we do not expect any effects of PM powers on this type of corruption. To the extent that systemic corruption produces similar equilibria across

Table 3. The Power of Prime Ministers and Three Types of Corruption

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Executive</i>	<i>Executive</i>	<i>Bureau- cratic</i>	<i>Bureau- cratic</i>	<i>Legislative</i>	<i>Legislative</i>
PM cabinet power index	-.0204 (.0134)	-.0374*** (.0133)	-.0104 (.0094)	-.0604*** (.0106)	-.0185 (.0113)	-.0422*** (.0125)
Constructive no-confidence	-.1149*** (.0379)	-.1521*** (.0365)	-.1348*** (.0397)	-.2057*** (.0363)	.1102*** (.0356)	.0141 (.0315)
Executive corruption legacy		.2397*** (.0530)				
Bureaucratic corruption legacy				.5757*** (.0345)		
Legislative corruption legacy						.3183*** (.0420)
Executive corruption			.4344*** (.0453)	.1901*** (.0474)	.4259*** (.0342)	.4407*** (.0326)
Bureaucratic corruption	.2997*** (.0453)	.2350*** (.0539)			.1124*** (.0338)	.0280 (.0321)
Legislative corruption	.3525*** (.0347)	.3424*** (.0353)	.1150*** (.0358)	.0597* (.0311)		
Majority cabinet	-.0032 (.0089)	-.0041 (.0088)	.0032 (.0098)	-.0034 (.0073)	.0113 (.0103)	.0141 (.0100)
Coalition cabinet	.0193* (.0102)	.0206** (.0101)	-.0197* (.0112)	-.0029 (.0087)	-.0022 (.0116)	-.0049 (.0113)
Oversized cabinet	-.0005 (.0092)	.0008 (.0092)	.0062 (.0104)	.0103 (.0082)	.0083 (.0109)	.0058 (.0101)
ln(cabinet duration)	.0026 (.0036)	.0029 (.0035)	.0013 (.0044)	.0027 (.0035)	-.0054 (.0038)	-.0045 (.0036)
Cabinet preference range	-.0005** (.0002)	-.0006*** (.0002)	.0001 (.0002)	-.0001 (.0002)	.0001 (.0003)	.0001 (.0002)
Effective no. of parties	-.0021 (.0059)	-.0023 (.0057)	-.0084 (.0063)	-.0043 (.0055)	.0058 (.0064)	.0017 (.0059)
ln(Gdp/cap)	.0554* (.0328)	.0289 (.0308)	-.0481* (.0268)	-.0903*** (.0283)	-.0236 (.0297)	-.0272 (.0284)
Level of democracy	-.1222 (.1513)	-.1142 (.1560)	-.1659 (.1835)	.2744** (.1296)	-.8162*** (.1633)	-.7031*** (.1590)
Post-communist	.2730*** (.0724)	.1096* (.0618)	.5568*** (.0625)	.0329 (.0592)	.3152*** (.0482)	.3149*** (.0451)
Religion: Protestant	-.0023*** (.0008)	-.0014** (.0007)	-.0066*** (.0006)	-.0043*** (.0006)	-.0062*** (.0005)	-.0039*** (.0006)
Ethnic fractionalization	-.5453*** (.1569)	-.5189*** (.1480)	-.3199** (.1250)	-.1828 (.1413)	-.1224 (.1367)	-.1862 (.1344)
Semi-presidential system	-.0239 (.0302)	-.0422 (.0277)	.1109*** (.0295)	-.0178 (.0204)	-.0433** (.0192)	-.0595*** (.0192)
ln(District Magnitude)	-.0828*** (.0146)	-.0867*** (.0145)	.0301** (.0144)	-.0068 (.0125)	.0032 (.0135)	-.0075 (.0127)
PR/Mixed	.1845*** (.0317)	.1670*** (.0312)	.1917*** (.0388)	.0171 (.0267)	-.0474 (.0317)	-.0713** (.0326)
Constant	-.8574**	-.3646	-.0130	.6760**	1.0236***	1.1973***

	(.3605)	(.3241)	(.2877)	(.2980)	(.2936)	(.2835)
Rho (ρ)	.9250	.9167	.8692	.9204	.8610	.8524
R-squared	.6823	.7099	.7446	.7487	.7095	.7448
Number of countries	26.0000	26.0000	26.0000	26.0000	26.0000	26.0000
Average no. of years/country	37.4615	37.4615	37.4615	37.4615	37.4615	37.4615
Observations	974	974	974	974	974	974

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Note: Entries are Prais-Winsten regression coefficients with panel-corrected standard errors with parentheses.

different sub-systems or branches of government, however, there can of course be indirect effects of PM powers also on legislative corruption.

To test for these claims, we must not only look at different types of corruption as dependent variables (and control for different types of corruption legacies), we must also control for the other respective types in each regression. In line with expectations, as seen in models (1)–(2), both PM powers and a constructive no-confidence reduces executive (or cabinet) corruption, particularly when we control for the historical legacy of such corruption.

Interestingly the same result holds up and is even stronger with respect to bureaucratic corruption (models 3–4). There thus seems to be something to the chain of delegation that goes beyond the cabinet as such (and beyond the indirect pathway passing through the level of executive/cabinet corruption) that equips a strongly positioned PM with powers to reduce also corruption in the public sector at large. With respect to legislative corruption, finally, the results are more mixed. The PM cabinet powers index is negative and significant also in this case, once the corruption legacy is being controlled for, but this is not the case for the constructive no-confidence requirement. That variable even has a *positive* effect on legislative corruption, which however goes away once we control for the corruption legacy.

V Concluding remarks

The aim of this paper has been to contribute to the literature explaining corruption in parliamentary systems. One conclusion in the previous literature is that multiparty and minority governments are associated with higher levels of corruption since, due to a lack of clarity of responsibility, it may be more difficult for voters to hold parties in such cabinets accountable for their performance in office. Drawing on the literature on coalition governance in parliamentary democracies, we suggest that what should matter for reducing corruption has more to do with the ability of key political actors, as principals, to control the agents that have been delegated power in cabinet, and we here present original hypotheses drawing on this argument. Using a new measure of corruption from the *Varieties of Democracy* data, allowing us to obtain

more specific measures on the perception of corruption across longer periods of time, our results show that corruption is significantly lower in countries where the PM has strong constitutional powers, suggesting that the PM acts as an important principal, reducing agency problems within the cabinet.

In this paper, we have simply assumed that the PM has an interest in reducing corruption within the cabinet and among his or her ministers, for example since corruption may influence the policy-making ability of the cabinet, and the ability of the PM and the cabinet to stay in power. However, this assumption can of course be questioned. Persson, Rothstein and Teorell (2013: 452) even suggest that ‘if the supposed principal is also corrupt and does not act in the interest of the public good, the principal-agent framework becomes useless as an analytical tool since there will simply be no actors willing to monitor and punish corrupt behavior’. The fact that we find systematic evidence supporting our main hypothesis based on this assumption of ‘corruption-averse’ PMs of course indirectly also supports the assumption. However, this begs the question when and why we can expect to find PMs with an interest in combatting corruption. Do even parliamentary systems in themselves promote ‘good’ principals?

One argument presented in the literature on parliamentary governance could potentially help us in answering this question. In this literature, it is often assumed that the extensive screening of prospective parliamentarians as well as potential cabinet members and PMs is performed by centralized, cohesive, policy-oriented political parties (cf. Müller 2000a). Strøm (2003: 94) suggests, when comparing presidential and parliamentary systems, that ‘parliamentarism benefits from the role that political parties play as devices of preference alignment and screening’. Hence, assuming that parties play an important role in screening politicians, we may also expect PMs to be relatively ‘good’ in these systems, since they have typically gone through extensive screening procedures within parties. That said, a question to be addressed in future work is when we might expect such ‘good’ principals, or more specifically PMs, who have an interest in achieving a non-corrupt cabinet.

A related discussion is if our arguments about PM power also transfers to presidential systems. That is, would we expect presidents, who typically wield strong powers over their respective cabinets, to achieve lower corruption levels? In the literature on parliamentary systems there are recent claims that executive-legislative relations in parliamentary democracies are undergoing important changes owing to a ‘presidentialization’ of domestic political systems, suggesting a strengthening of the PM within the cabinet and towards the legislature (see e.g. Poguntke and Webb 2005; Bäck et al. 2009). Following such an argument, the leap would not be too far to argue that strong presidents may also act as ‘good’ principals, selecting ‘good’ agents, and punishing ‘bad’ ones. However, here we know from the previous empirical literature on corruption that presidential systems are typically associated with *higher* levels of corruption (see, e.g., Gerring and Thacker 2004; Lederman et al. 2005; Gerring et al. 2009). We can only speculate about the potential explanation

for this, and why our argument might not transfer from parliamentary to presidential systems, but one explanation can be drawn from the previous literature on coalition governance. Strøm (2003: 94) presents an argument for why parliamentary democracy may have an advantage over presidentialism when it comes to reducing certain agency problems:

the institutional simplicity of parliamentary democracy may enhance the principals' incentive to exert effort in monitoring agents. If such oversight allows the principal [...] to claim exclusive credit, and if their efforts to control their agents are not thwarted by other 'overseers', then these principals should put more effort into their constitutional responsibilities. Hence parliamentary democracy is at an advantage, particularly compared to collegial presidentialism, in providing incentives for principals to monitor and for agents not to shirk.

Hence, there may be other institutional reasons for expecting parliamentary systems to perform better than its presidential counterparts, having less to do with the power of political leaders, and having more to do with the simplicity and indirectness of the parliamentary chain of delegation. This could increase the incentives for principals to monitor and control agents, which could perhaps explain why parliamentary systems perform better here. This is another important topic worthy of further study.

References

- Andersson, Staffan, Torbjörn Bergman, and Svante Ersson. (2014). "The European Representative Democracy Archive. Release 3". *Main sponsor: Riksbankens Jubileumsfond*.
- Adsera Alicia, Boix Carles, Payne Mark. 2003. "Are you being served? Political accountability and the quality of government". *Journal of Law, Economics and Organization* 19(2):445–90
- Bawn, Kathleen, and Frances Rosenbluth. 2006. "Short versus Long Coalitions: Electoral Accountability and the Size of the Public Sector." *American Journal of Political Science* 50: 251–265.
- Bäck, Hanna, Patrick Dumont, Henk Erik Meier, Thomas Persson, and Kåre Vernby (2009). "Does European Integration Lead to a Presidentialization of Executive Politics? Ministerial Selection in Swedish Post-War Cabinets". *European Union Politics*, 10(2), 226–252.
- Bäck, Hanna, and Axel Hadenius. (2008). "Democracy and State Capacity. Exploring a J-shaped Relationship". *Governance* 21: 1–24.
- Bäck, Hanna, Marc Debus & Wolfgang C. Müller. 2013. "Intra-party Diversity and Ministerial Selection in Coalition Governments". *Paper presented at the ECPR General conference in Bordeaux, 4–7 September*.
- Bäck, Hanna, Wolfgang C. Müller & Benjamin Nyblade. 2013. "Multiparty Government and Economic Policy-Making. Coalition Agreements, Prime Ministerial Power and Spending in Western European Cabinets". *Paper presented at the 3rd Annual EPSA conference in Barcelona, 20–22 June*.
- Bäck, Hanna, Marc Debus & Wolfgang C. Müller. 2013. "Intra-party Diversity and Ministerial Selection in Coalition Governments". *Paper presented at the ECPR General conference in Bordeaux, 4–7 September*.
- Bågenholm, Andreas. 2013. "Throwing the rascals out? The electoral effects of corruption allegations and corruption scandals in Europe 1981–2011". *Crime Law Soc Change* 60:595–609
- Bågenholm, Andreas and Nicholas Charron. 2014. "Do Politics in Europe Benefit from Politicising Corruption?" *West European Politics*. vol 37 (5): 903-931.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What to do (and not to do) with Time-Series Cross-Section Data." *American Political Science Review* 89: 634–647.
- Beck, Nathaniel, and Jonathan Katz. 1996. "Nuisance vs. Substance: Specifying and Estimating Time-Series Cross-Section Models." *Political Analysis* 6: 1–36.
- Bergman, Torbjörn, Wolfgang C. Müller, Kaare Strøm, and Magnus Blomgren (2003). "Democratic Delegation and Accountability: Cross-National Patterns." In Kaare Strøm, Wolfgang C. Müller, and Torbjörn Bergman (eds.), *Delegation and Accountability in Parliamentary Democracies*. Oxford: Oxford University Press, 109–220.

- Bormann, Nils-Christian & Matt Golder. 2013. "Democratic Electoral Systems around the World, 1946-2011." *Electoral Studies* 32: 360-369.
- Brunetti A, Weder B. 2003. A free press is bad news for corruption. *J. Public Econ.* 87:1801–24.
- Chang, Eric C. C., and Miriam A. Golden. 2007. "Electoral Systems, District Magnitude and Corruption." *British Journal of Political Science*, 37:115-137.
- Charron, Nicholas and Victor Lapuente. 2010. "Does Democracy Produce Quality of Government?" *European Journal of Political Research*. Vol. 49 (4): 443-470.
- Charron, Nicholas, Victor Lapuente and Bo Rothstein. 2013. *Quality of Government and Corruption from a European Perspective*. Cheltenham: Edward Elgar.
- Coppedge, Michael, John Gerring, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Carl Henrik Knutsen, Kelly McMann, Daniel Pemstein, Megan Reif, Svend-Erik Skaaning, Jeffrey Staton, Eitan Tzelgov, Yi-ting Wang, and Brigitte Zimmerman. 2015. "Varieties of Democracy: Dataset v4." Varieties of Democracy (V-Dem) Project (www.v-dem.net).
- De Haan, Jakob, Richard Jong-A-Pin, and Jochen O. Mierau. 2012. "Do budgetary institutions mitigate the common pool problem? New empirical evidence for the EU". *Public Choice*. DOI 10.1007/s11127-012-9949-5.
- Dimock, M. A., & Jacobson, G. C. (1995). "Checks and choices: the house bank scandal's impact on voters in 1992". *Journal of Politics*, 57, 4.
- Dowding, Keith, and Patrick Dumont. (eds.) (2009). *The Selection of Ministers in Europe: Hiring and Firing*. London: Routledge.
- Gerring, John, and Strom C. Thacker. 2004. "Political Institutions and Corruption: The Role of Unitarism and Parliamentarism." *British Journal of Political Science* 34: 295–330.
- Gerring, John, Strom Thacker, and Carola Moreno. (2009.) Are Parliamentary Systems Better? *Comparative Political Studies* 42(3): 327-359
- Goldsmith, Arthur A. 1999. 'Slapping the grasping hand: correlates of political corruption in emerging markets'. *American Journal of Economics and Sociology* 58(4):865–83.
- Hallerberg, Mark, and Jürgen von Hagen. 1999. "Electoral Institutions, Cabinet Negotiations, and Budget Deficits in the European Union." In J. Poterba and Jürgen von Hagen (eds.), *Fiscal Institutions and Fiscal Performance*. Chicago, IL: University of Chicago Press.
- Huber, John D., and Cecilia Martínez-Gallardo (2008). "Replacing Cabinet Ministers: Patterns of Ministerial Stability in Parliamentary Democracies." *American Political Science Review* 102(2), 169–180.
- Indridason, Indridi H., and Christopher Kam (2008). "Cabinet Reshuffles and Ministerial Drift." *British Journal of Political Science*, 38(4), 621–656.

- Kam, Christopher, William T. Bianco, Itai Sened, and Regina Smyth (2010). "Ministerial Selection and Intraparty Organization in the Contemporary British Parliament." *American Political Science Review*, 104(2), 289–306.
- King, Anthony (1994). "Chief Executives in Western Europe," in I. Budge and D. McKay (eds), *Developing Democracy*. London: Sage
- Klašnja, Marko, Joshua A. Tucker and Kevin Deegan-Krause 2015. "Pocketbook vs. Sociotropic Corruption Voting". *British Journal of Political Science*, Available on CJO 2014 doi:10.1017/ S0007123414000088
- Klitgaard, Robert. (1988). *Controlling Corruption*. Berkeley, CA: University of California Press.
- Kunicová Jana, and Susan Rose-Ackerman. 2005. "Electoral rules and constitutional structure as constraints on corruption". *British Journal of Political Science* 35:573–606.
- Lederman, D., Loayza, N., & Soares, R. R. (2005). "Accountability and corruption. Political institutions matter". *Economics and Politics*, 17(1), 1–35.
- Louwerse, Tom. 2014. "Unpacking 'positive' and 'negative' parliamentarism". Paper presented at the ECPR Joint Sessions, Salamanca, Spain, April 10–15.
- McMann, Kelly, Daniel Pemstein, Brigitte Seim, Jan Teorell and Staffan Lindberg. (2016.) "Strategies of Validation: Assessing the Varieties of Democracy Corruption Data", *V-Dem Working Paper Series 2016:23*, The Varieties of Democracy Institute, University of Gothenburg.
- Montinola, Gabriella R., and Robert W. Jackman. 2002. "Sources of Corruption: A Cross-Country Study." *British Journal of Political Science* 32: 147–170.
- Müller, Wolfgang C. (2000). "Political Parties in Parliamentary Democracies: Making Delegation and Accountability Work." *European Journal of Political Research*, 37(3), 309–333.
- Müller, Wolfgang C., and Thomas M. Meyer (2010). "Meeting the Challenges of Representation and Accountability in Multiparty Governments." *West European Politics*, 33: 1065–1092.
- O'Donnell, Guillermo (1998). "Horizontal Accountability in New Polyarchies," *Journal of Democracy* 9(3): 112–126.
- O'Malley, Eoin (2007). "The Power of Prime Ministers: Results of an Expert Survey." *International Political Science Review*, 28(1), 7–27.
- Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang and Farhad Miri. 2015. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data." *V-Dem Institute Working Paper Series 2015: 21*, December 2015
- Persson, Anna, Bo Rothstein and Jan Teorell. 2013. "Why Anticorruption Reforms Fail—Systemic Corruption as a Collective Action Problem". *Governance: An International Journal of Policy, Administration, and Institutions* 26:449–471.
- Persson, Torsten, Guido Tabellini, and Francesco Trebbi. 2003. "Electoral Rules and Corruption." *Journal of the European Economic Association* 1: 958–989.

- Roubini, Nouriel, and Jeffrey D. Sachs. 1989. "Political and Economic Determinants of Budget Deficits in the Industrial Democracies." *European Economic Review* 33: 903–938.
- Poguntke, Thomas and Paul Webb (eds) (2005) *The Presidentialization of Politics: A Comparative Study of Modern Democracies*. Oxford: Oxford University Press.
- Powell, Bingham G. (2000). *Elections as Instruments of Democracy*. New Haven: Yale University Press.
- Powell, Bingham G., and Guy D. Whitten. (1993). "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37(2):391–414.
- Rose-Ackerman, Susan. (1978). *Corruption: A Study in Political Economy*. New York: Academic Press.
- Sartori, Giovanni. 1994. *Comparative Constitutional Engineering*. London: MacMillan.
- Schwindt-Bayer, Lesley and Margit Tavits. 2016. *Clarity of Responsibility, Accountability and Corruption*. Cambridge: Cambridge University Press, forthcoming.
- Strøm, Kaare (2000). "Delegation and Accountability in Parliamentary Democracies." *European Journal of Political Research*, 37(3), 261–289.
- Strøm, Kaare. 2003. "Parliamentary Democracy and Delegation". In Kaare Strøm, Wolfgang C. Müller, and Torbjörn Bergman (eds.), *Delegation and Accountability in Parliamentary Democracies*. Oxford: Oxford University Press.
- Strøm, Kaare, Wolfgang C. Müller, and Torbjörn Bergman (eds.). 2003. *Delegation and Accountability in Parliamentary Democracies*. Oxford: Oxford University Press.
- Strøm, Kaare, Wolfgang C. Müller, and Daniel Markham Smith. 2010. "Parliamentary Control of Coalition Governments." *Annual Review of Political Science* 13: 517–535.
- Tavits, Margit. 2007. "Clarity of Responsibility and Corruption." *American Journal of Political Science* 51: 218–229.
- Teorell, Jan, Michael Coppedge, John Gerring & Staffan Lindberg. (2014.) "Measuring Electoral Democracy with V-Dem Data: Introducing a New Polyarchy Index", *Paper prepared for presentation to the Annual Meeting of the American Political Science Association, Washington, August 27-30, 2014*.
- Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Felix Hartmann & Richard Svensson. (2015.) *The Quality of Government Standard Dataset*, version Jan15. University of Gothenburg: The Quality of Government Institute, <http://www.qog.pol.gu.se>.
- Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76: 399–457.
- Welch, S., & Hibbing, J. R. (1997). "The effects of charges of corruption on voting behavior in congressional elections, 1982–1990". *Journal of Politics*, 59, 1.

- Von Hagen, Jürgen, and Ian J. Harden. 1995. "Budget processes and commitment to fiscal discipline". *European Economic Review* 39: 771–779.
- Xezonakis, Georgios, Spyros Kosmidis and Stefan Dahlberg. 2016. "Can Electors Combat Corruption? Institutional Arrangements and Citizen Behavior", *European Journal of Political Research* 55(1): 160-176