European Journal of Political Research **57**: 450–472, 2018
doi: 10.1111/1475-6765.12234

Dodging the bullet: How crises trigger technocrat-led governments

CHRISTOPHER WRATIL[1] & GIULIA PASTORELLA[2]
[1] *University of Cologne, Germany;* [2] *London School of Economics and Political Science, UK*

Abstract. Governments led by nonpartisan, 'technocratic' prime ministers are a rare phenomenon in parliamentary democracies, but have become more frequent since the late 1980s. This article focuses on the factors that lead to the formation of such cabinets. It posits that parliamentary parties with the chance to win the prime ministerial post will only relinquish it during political and economic crises that drastically increase the electoral costs of ruling and limit policy returns from governing. Statistical analyses of 469 government formations in 29 European democracies between 1977 and 2013 suggest that political scandals and economic recessions are major drivers of the occurrence of technocratic prime ministers. Meanwhile, neither presidential powers nor party system fragmentation and polarisation have any independent effect. The findings suggest that parties strategically choose technocrat-led governments to shift blame and re-establish their credibility and that of their policies in the face of crises that de-legitimise their rule.

Keywords: technocratic government; technocracy; government formation; economic crisis; scandal

> I think that these cabinets … are the product of the unthinkable economic crisis that occurred and the need to take extreme measures in a very short period of time. (Panagiotis Pikrammenos, 'Technocratic' prime minister of Greece, May–June 2012)[1]

Introduction

Technocrat-led governments, defined as governments headed by a prime minister (PM) with no political party affiliation, are a rare form of cabinet, making up less than 5 per cent of all governments in European democracies (McDonnell & Valbruzzi 2014). Despite being the very opposite of omnipresent partisan-led governments, technocrat-led governments have become more frequent in European party democracies over the last few decades, most recently during the euro crisis. They present a puzzle: why would political parties accept a nonpartisan individual as PM? Or more precisely, why would office- and policy-motivated politicians (Strøm 1990) prefer to leave the office of the PM to a nonpartisan individual, even though the post could be filled with a party member, and parties need to control the key political offices of the state to deliver policy to their voters?

Clearly, if the essential function of parties is that of representation, it is important to study the one occurrence in which parties voluntarily abdicate – at least part of – this very function. Yet, while we know some facts about the appointment of technocratic cabinet ministers (Amorim Neto & Samuels 2010; Amorim Neto & Strøm 2006; Schleiter & Morgan-Jones 2010), so far no work has systematically investigated what factors explain the occurrence of technocratic PMs specifically. Understanding what drives the formation of such governments is not only interesting *per se*, as the key studies on the selection of PMs

have excluded nonpartisan ones (e.g., Glasgow et al. 2011), but is also important as a means to evaluate what the recent diffusion of technocrat-led governments signals about the status of European party democracies.

Here, we provide the first quantitative comparative study of the formation of technocrat-led governments. We present a theoretical model of the formation of these governments that is based on the idea that those parties that would normally be tasked with forming a new government (i.e., 'potential formateur parties') are pivotal actors in appointing technocrats as PMs. We posit that these parties must relinquish their claim of the premiership for a technocrat to be appointed and will only do so if their expected policy benefits derived from the PM's office are low and the electoral costs of ruling quite high. We argue that these conditions typically occur in 'moments of crisis', such as when these parties are plagued by political scandals eroding voters' trust, or when a national economy in deep recession limits policy options and promises strong future blaming of PM parties by voters. In these situations, potential formateur parties expect few policy returns and strong electoral losses from the PM post (e.g., Clark 2009; Hernández & Kriesi 2016; Pitlik & Wirth 2003) but have the option to let the cup pass by selecting, or at least tolerating, a non-accountable technocrat as PM instead. Hence, technocrat-led governments allow potential formateur parties to avoid (or even shift) blame, regain credibility and increase the credibility of policy commitments (e.g., Alesina & Tabellini 2005; Thatcher & Sweet 2002; Weaver 1986).

Statistical analyses of a dataset covering all cabinet formations in 29 European democracies between 1977 and 2013 provide strong support for the hypotheses of the 'crisis model'. The probability of a technocrat-led government is starkly increased after political scandals and during economic recessions, in many cases by 25–35 percentage points for each type of crisis. We also demonstrate the presence of time dependence (Carter & Signorino 2010): technocrat-led governments are more likely in the first couple of formations following an initial technocrat-led cabinet, reflecting some proximate agglomeration of technocrat-led governments in some countries. We contrast these results with the empirical performance of an alternative model of technocrat-led cabinet formations derived from the existing literature. This alternative focuses on presidential powers as well as party system fragmentation and polarisation (Amorim Neto & Strøm 2006; Schleiter & Morgan-Jones 2010). Our data provides no evidence for the claim that technocrat-led governments are a result of a power game between a president and parliament, in which parliament must accept a nonpartisan PM due to difficulties in forming a government in fragmented and polarised legislatures.

Thus, our findings indicate that the occurrence of technocrat-led governments does not signify that parties have lost control over the government formation process. Quite the contrary, they suggest that forming and tolerating technocrat-led governments may be a clever 'survival strategy' used by potential formateur parties to shirk electoral responsibility and re-establish their credibility and that of their policies.

Conceptualising technocrat-led governments and their formation

Technocrat-led governments are a political phenomenon that is under-studied and under-conceptualised in the academic literature. McDonnell and Valbruzzi's (2014) exercise of defining and classifying technocrat-led governments is the most comprehensive and valuable

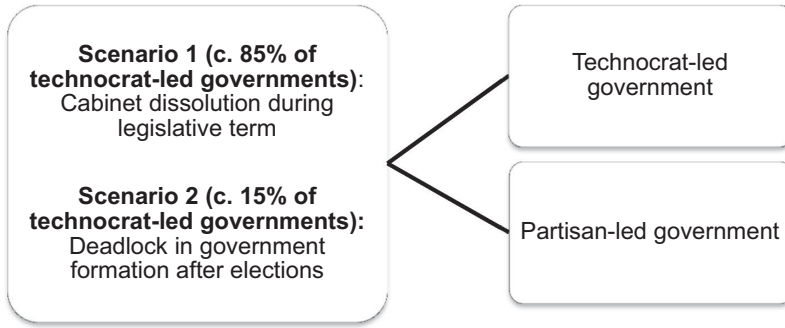

Figure 1. Scenarios for technocrat-led government formations.

treatment of the subject to date, but it could not provide in-depth analyses of either the explanations for, or the consequences of, technocratic rule. According to McDonnell and Valbruzzi (2014: 657–658) a technocrat-led government[2] is defined by a PM fulfilling the following three criteria:

> [A]t the time of his/her appointment to government, he/she: (1) has never held public office under the banner of a political party; (2) is not a formal member of any party; (3) is said to possess recognized non-party political expertise which is directly relevant to the role occupied in government.

According to this definition, there have been a total of 25[3] technocrat-led governments in the 27 member states of the European Union (EU) (i.e., not including Croatia) plus Norway and Iceland,[4] in the timespan from 1945 to 2013, only considering governments in the democratic periods of these countries.[5]

Historically, technocrat-led governments have formed in one of two generic scenarios (see Figure 1). In Scenario 1, the empirically much more prevalent case, the technocrat-led government is formed following cabinet dissolution during the legislative term.[6] From the point of view of the cabinet, dissolution can happen either voluntarily as a strategic choice (e.g., to make room for a non-electoral replacement cabinet) (Schleiter & Issar 2015; Schleiter & Morgan-Jones 2009a) or involuntarily (e.g., due to the intervention of the head of state with the right to dissolve the government) (Bergman et al. 2003). In both cases, a non-electoral replacement cabinet in the form of a technocrat-led government is possible.

In Scenario 2, the formation of a technocrat-led government follows a deadlock in cabinet formation after national elections. The deadlock may be due to lack of support from parliament for a proposed government coalition or failure to form a coalition in the first place. Occasionally, European constitutions specify what needs to be done in such an event, but mostly there is a discretionary margin of manoeuvre as to what steps to take next in the formation process. This margin leaves room to potentially form a technocrat-led government. A glance at the empirical cases reveals that the first scenario occurs much more frequently than the second, with roughly 85 per cent of technocrat-led governments formed after dissolution of the cabinet.

We posit that whether each of the two scenarios leads to a technocrat-led government is largely a choice of the 'potential formateur party' – that is, the party that would first be tasked

with government formation if it was willing to form one. This party can decide to either take up the formateur role and form a partisan-led government itself or pass on its formateur role (therefore it is the 'potential' formateur) and initiate/tolerate a government formation led by a nonpartisan PM instead. We thus assume that technocrat-led governments are not imposed upon parties (i.e., heads of state cannot simply appoint a technocrat against the will of major parliamentary parties) as these parties, despite their varying power in different systems (e.g., parliamentary versus semi-presidential), wield the vital threat of 'no-confidence' motions. Importantly, the potential formateur party varies between the two scenarios. On the one hand, in non-electoral replacements after cabinet dissolution (Scenario 1) the party of the outgoing PM becomes the formateur party in most cases (Bäck & Dumont 2008). This is not only due to the fact that in the absence of new elections the parliamentary majorities are unchanged and favour the outgoing PM party, but also that many cabinet dissolutions themselves are a strategic choice of PM parties, which they only dare make if they expect to remain in the driving seat (Lupia & Strøm 1995; Schleiter & Morgan-Jones 2009a). On the other hand, formateur status is more open after new elections and may regularly pass from the outgoing PM to the major opposition party (Scenario 2).

A crisis model of technocrat-led governments

If force does not explain technocrat-led governments, we argue that the central puzzle is why potential formateur parties decide to relinquish the premiership and select, or at least tolerate, a nonpartisan PM. Consider a standard rationalist framework for understanding party behaviour distinguishing policy-, office- and vote-seeking behaviour (Strøm 1990). Selecting a technocratic PM seems to be at obvious odds with any significant preference for office. It is also puzzling in terms of policy returns: to deliver their policy programmes, parties should try to secure the PM post for one of their members to be in full command of the PM's steering capacity. Only in terms of vote-seeking behaviour does it appear beneficial to abstain from selecting the PM from the party in order to avoid the electoral costs of ruling (e.g., Paldam 1986). But the omnipresence of partisan rule suggests that office benefits usually compensate sufficiently. Why then would a potential formateur party give up the key political office it normally wants to 'win' (Glasgow et al. 2011)?

From our perspective, the reason is that in some extraordinary situations potential formateur parties expect the policy and vote returns from becoming the future PM party to be clearly *negative* – so negative, indeed, that these losses are no longer outweighed by the perks of office. On a theoretical level, this likely corresponds with situations in which the future PM party will be unable to implement its partisan policy programme, or even has to implement policies contradicting its policy motivations, as well as situations in which the electoral costs of ruling are unusually high. The potential formateur party can then decide to concede government formation to a technocrat not affiliated with the party, ideally one chosen by the party who shares its broad policy goals and is preferable to candidates from other parties (e.g., the opposition). At the same time, the party may still preserve significant influence over the composition of the future cabinet and parliamentary coalitions supporting the government. The technocratic PM improves the relinquishing party's policy returns if she or he is more successful in delivering the party's policy programme than the party itself. Equally or even more importantly, the electorally

non-accountable technocrat improves the party's vote returns by liberating it from the costs of ruling that a PM party would face, since voters focus on the PM as the decision maker with proposal power when attributing responsibility for collective decision making (Duch et al. 2015).[7] These advantages should not dilute the fact that the technocratic option carries substantial costs in terms of office benefits and policy influence for parties, rendering it a rare choice.

In what situations then, would we expect a future PM party's expected policy and vote returns to be clearly negative? Due to the difficulty such situations pose to parties, we argue that they are rather unlikely to emerge endogenously as a consequence of previous strategic choices by the potential formateur parties. They are unlikely to be driven by factors such as positional party competition, parties' policy-making activity or attributes of the incumbent government that parties control to a considerable extent. Instead, we expect them to result from unintended, largely exogenous shocks that pose severe difficulties and dangers to potential formateur parties – that is, we expect them to result from '*moments of crises*'.[8] As the overwhelming majority of technocrat-led governments occur after cabinet dissolution (see Scenario 1 in the last section), the literature on government termination provides the obvious starting point in search of different types of crises that could end in technocratic replacements. In fact, the existing literature on the topic stresses the contributory role of random exogenous shocks or 'critical events' that cannot be fully anticipated by parties in explaining cabinet dissolution (King et al. 1990; Laver & Shepsle 1998; Lupia & Strøm 1995). Of the critical events regularly mentioned in the literature, 'economic shocks and scandals' are the two principal events that qualify as clear 'crises' in terms of their pronounced effect on potential formateur parties' expected policy and vote returns from staffing the PM's office (Browne et al. 1984; Laver 2003; Schleiter & Morgan-Jones 2009a: 500).[9] In the following, we specify in what way these two types of crises can trigger the formation of technocrat-led governments.

First, political scandals caused by politicians' misconduct (corruption, dishonesty, immoral behaviour, clientelism, etc.) represent what Laver and Shepsle (1998) call 'public opinion shocks'. The effects of scandals on political systems are studied with increased scholarly interest (Berlinski et al. 2012; Garrard & Newell 2006; Markovits & Silverstein 1988). Scandals create disorder in voting patterns, particularly by lowering electoral support and probably increasing the costs of ruling for the party(ies) involved in the scandal (Abney et al. 2011; Clark 2009; Mondak 1995). This, in turn, creates incentives for unaffected parties to politicise scandals electorally (Bågenholm & Charron 2014; Curini & Martelli 2015).

Scandals may also incentivise other parties and actors, such as coalition partners or presidents, to dissociate themselves from the party to avoid a spill-over of responsibility for the scandal. On a more fundamental level, some scandals diminish parties' reservoirs of 'democratic legitimacy', understood not only as requiring the absence of coercion, but also 'a tissue of relationships between government and society' (Rosanvallon 2011: 9). This means scandals can transform from the personal failing of individual politicians into 'system failures' of effective government and democracy (Kumlin & Esaiasson 2012). This is particularly likely when the scandal involves parties from the pool of potential formateur parties, such as the incumbent PM party or the second major party. In sum, scandals have the potential to change parties' preferences: rather than being in power, it might be

better for them to delegate government to technocrats for a period, regain credibility and reconstruct some of the lost capital of trust. In fact, some scholars have already claimed that technocrat-led governments are occasionally used as a remedy to prevent distrust in parties from becoming too rooted (Cotta & Verzichelli 2002; Tucker et al. 2000). Hence, whenever the potential formateur parties are plagued by scandals, we should expect them to be more inclined to select or tolerate a technocrat (of their choice) instead of taking office themselves or leaving it to other parties (e.g., the opposition – if the potential formateur is the outgoing PM party), let alone facing new elections during scandals:

H1: Political scandals involving the potential formateur party increase the likelihood of the formation of a technocrat-led government.

Second, economic shocks represent what Laver and Shepsle (1998: 36) call 'policy shocks', providing the example of bankruptcies and currency crises. Economic crises often force governments to enact specific, mostly unpopular, reforms in order to comply with constitutional provisions (e.g., on public deficits) and get the economy running again (e.g., Pitlik & Wirth 2003). In many instances, these constraints are complemented by international arrangements, such as programmes of the International Monetary Fund (IMF) or EU bail-outs, which add external pressures to carry out economic reforms. As a result, economic crises often limit parties' ability to deliver their policy programmes – for example, due to fiscal adjustment programmes – and lower policy benefits from incumbency. Equally importantly, economic crises increase the electoral costs of ruling as a simple result of an unpopular policy agenda and economic voting – that is, voters' tendency to sanction incumbents for bad economic performance (e.g., Powell & Whitten 1993; Whitten & Palmer 1999). Several studies have now shown that PM parties suffer more losses from economic voting than other cabinet parties, as voters attribute responsibility to them even if they do not hold the economic portfolio (Anderson 2000; Debus et al. 2014; Duch & Stevenson 2008). In addition, recent work investigating economic voting in European democracies during the 'Great Recession' post-2008 has demonstrated that electoral losses of incumbents have been larger in proportion to the state of the economy than losses during minor economic downturns (Hernández & Kriesi 2016; LeDuc & Pammett 2013).

Delegating to technocrats might then be wise so that potential formateur parties can avoid taking the full blame for bad economic conditions and unpopular reforms (Thatcher & Sweet 2002; Weaver 1986). The blame avoidance strategy sometimes takes the form of consensual solutions underpinned by ideals of national unity (Lodge & Wegrich 2012) in which all parties share the blame for the tough measures. Scholars have even identified lack of ability and willingness to reform as the prime driver for the appointment of technocrat-led governments (Fabbrini 2013). Besides blame avoidance, technocracy may also help to increase the credibility of political commitments. Having 'expert technocrats' as central bankers, finance ministers and PMs reassures both markets and voters (Hallerberg & Wehner 2016). Some research has demonstrated a significant correlation between economic problems and the appointment of nonpartisan members of the executive (Amorim Neto & Samuels 2010). Recent work also shows that non-electoral replacement of cabinets following

cabinet termination is often due to shaky economic conditions (Schleiter & Issar 2015). Our expectation is therefore:

H2: Economic crises increase the likelihood of the formation of a technocrat-led government.

It is important to note that besides the appointment of technocratic PMs, the process of government formation offers some further tools with which potential formateur parties can go some way towards shifting responsibility and regaining credibility. Most prominently, these tools include the appointment of technocrats to key cabinet posts (e.g., economic minister) or the allocation of 'problematic' cabinet posts to coalition partners. In some situations, these options may suffice and explain why technocrat-led governments are not an omnipresent phenomenon; rather they are an extreme option on a continuum. All this, however, is fully compatible with the idea that scandals and economic crises marginally increase the probability of a technocrat-led government.

An alternative explanation

Our 'crisis model' of technocrat-led governments emphasises dramatic political and economic situations that drastically lower potential formateur parties' expected policy benefits from ruling and increase the expected electoral costs associated with ruling. Importantly, neither political institutions nor party systems play any role in our model. Thereby, the model departs from what could be called the 'president-parliament power model' (in particular, Schleiter & Morgan-Jones 2010), which has been employed to explain the appointment of nonpartisan cabinet ministers. The president-parliament power model explains technocratic ministerial appointments as the result of a game between parliamentary parties (or the formateur party, see Amorim Neto & Strøm 2006) and the president, in which the president prefers nonpartisans as they are more likely to behave as his agents. In this model, factors impeding government formation among parties weaken parties' power and strengthen the president in appointing nonpartisans to the cabinet.

While the general logic of the model is compelling, we contend that even in situations of very strong presidential negotiation power, the *one* concession we would expect classic office- and policy-seeking parties to obtain from the president is the PM's office. Hence, we accept that the model explains why parties must concede cabinet posts to technocrats, but it probably provides no complete theoretical account for why formateur parties would *specifically* give up the PM post. In contrast, the crisis model identifies the factors that make the PM post inherently unattractive and potential formateur parties more likely to relinquish it and can, for instance, account for technocrat-led governments in which the majority or even all ministers are partisans. To test our conjecture that the president-parliament power model does not provide a comprehensive alternative explanation for technocratic PMs, we derive three key hypotheses of how the model could potentially explain the formation of technocrat-led governments.

The first hypothesis concerns the power of the president. Parties are not alone in determining the cabinet composition and the effects of a stronger president on cabinet composition can be identified (e.g., Blondel & Müller-Rommel 2001). In particular, in

political systems where tensions between the president's mandate and that of his or her parliamentary party are considerable, cabinet members drawn from the president's party are not automatically good agents for the president (Schleiter & Morgan-Jones 2010). Instead, technocrats can be good alternative agents for even very partisan presidents. Indeed, studies have provided evidence that stronger presidential powers correlate with a higher share of nonpartisan cabinet ministers (Amorim Neto & Samuels 2010; Amorim Neto & Strøm 2006; Schleiter & Morgan-Jones 2009b, 2010). In some countries, such as Portugal, Finland and Italy, technocratic governments were even called 'presidential governments', formed by the president and relying primarily on his support (Amorim Neto & Lobo 2009; Fusaro 2013; Raunio 2004). Extrapolating from cabinet ministers to the PM, the expectation is:

H3: A powerful president increases the likelihood of the formation of a technocrat-led government.

Moreover, if technocrat-led governments result from a weak bargaining position of the formateur *vis-à-vis* the president, the likelihood of their occurrence should increase with parties' inability to act (i.e., inability to form a government) as this is a prime driver of the low bargaining power of parties (Schleiter & Morgan-Jones 2010: 1423). This inability is chiefly related to bargaining complexity in the legislature that increases with fragmentation and ideological polarisation (e.g., Golder 2010; Martin & Stevenson 2001). Indeed, Amorim Neto and Samuels (2010) have shown that the proportion of nonpartisan ministers in the cabinet tends to increase as parliamentary fragmentation increases, no matter whether the system is semi-presidential or not (see also, Schleiter & Morgan-Jones 2010: 1434). In terms of the scenarios we have outlined above, both party fragmentation and polarisation arguably not only increase the chance of a deadlock in cabinet formation (Scenario 2), but also the chance of an early dissolution of the cabinet (Scenario 1). Hence, the president-parliament power model suggests:

H4: Party fragmentation increases the likelihood of the formation of a technocrat-led government.
H5: Party polarisation increases the likelihood of the formation of a technocrat-led government.

Data and measurement

To test these expectations, we collected a dataset of all government formations in 29 European democracies between 1977 and 2013.[10] Thus, the single government formation (or 'formation opportunity') is our unit of analysis and the number of related observations (government formations/formation opportunities) is 469. We take the identification of cabinets from the ParlGov database (Döring & Manow 2016) and hence our data delineates governments by the following criteria: 'new cabinets are defined for (I) any change in the set of parties holding cabinet membership; (II) any change in the identity of the prime minister; (III) any general election; (IV) any substantively meaningful resignation'. The dependent and independent variables are measured as follows.

Government type

The dependent variable is binary with '1' indicating the formation of one of 22 technocrat-led governments formed in our time frame, and '0' if the appointed PM was partisan. This information is taken directly from Table 1 in McDonnell and Valbruzzi (2014: 659).

Political scandal

In order to measure the occurrence of political scandals as a 'sequence of events in which significant public attention is focused on alleged illegal, immoral or otherwise inappropriate conduct by identifiable politicians or high-rank officials',[11] we extend the existing 'scandal database' collected by Kumlin and Esaiasson (2012: 271). Our extended version covers 18 Western European countries, the ten postcommunist EU countries as well as Cyprus and Malta from 1977 up to and including 2013. Using Kumlin and Esaiasson's (2012) methodological approach, we code scandals on the basis of their inclusion in national election reports published in the journals *Electoral Studies* and *West European Politics*.

Compared to the original version of the database, we add several pieces of information: first, we include approximate dates for the revelation of each scandal allowing us to identify the affected government formation following the scandal. We also determine for each and every scandal which parties were affected. In the case of inter-election formations (Scenario 1), our scandal variable is '1' if the outgoing PM party was affected by a scandal in the preceding period,[12] and '0' otherwise. This best reflects the fact that the outgoing PM party is the formateur in most inter-election formations (Bäck & Dumont 2008). In the case of post-election formations (Scenario 2), when formateur status is more open, the variable is '0.5' if either the outgoing PM party or the largest of the remaining parties by seats in the legislature (almost without exception the main opposition party) was affected, and '1' if both were affected by scandals. Importantly, we show in the Online Appendix that we obtain the same results if we assume that both major parties can be potential formateurs in post-election as well as inter-election formations – that is, when we assign '0' (= neither PM nor other main party affected), '0.5' (= either PM or other main party affected) and '1' (= PM *and* other main party affected) across the entire sample. All our new codings and re-codings of Kumlin and Esaiasson (2012) were checked for plausibility by a second coder, providing for high data reliability. The full database and coding instructions are reported in the Online Appendix as well as various robustness checks relating to the scandal variable.

Economic recession

The theoretical expectations view the appointment of technocratic PMs as a result of dramatic crises rather than normal macroeconomic cycles. The measure of economic crisis should reflect this severity: hence, we use a dummy variable for economic recession that is '1' if the country's gross domestic product (GDP) (inflation-adjusted) contracted over the course of the three years preceding the government formation occasion, including the

formation year.[13] The advantage of this measure is its simplicity as well as its availability across countries and time. We also use an economic 'misery index' as an alternative measure by standardising (based on the whole sample) GDP contraction over the preceding three years as well as growth in unemployment over the same period and simply summing the two z-scores. However, due to the limited availability of cross-nationally comparable unemployment figures, we face about 40 per cent missing values on the misery index and so we only use it as a robustness check (see below). The GDP growth and unemployment figures were taken from the World Bank.

Presidential power

We employ Alan Siaroff's (2003) coding of nine different presidential powers as the most complete measure in terms of geographical scope and time frame. However, Siaroff's assessments do not include constitutional monarchies. Given the ceremonial role of monarchs and in line with common practice (e.g., Elgie 2011), we code presidential power as '0' for constitutional monarchies. The variable is the sum of all presidential powers and therefore has a value between '0' (none of the powers) and '9' (all powers).

Party fragmentation and polarisation

Party fragmentation is operationalised as the effective number of parliamentary parties that entered the legislature in the preceding election, taken from Gallagher (2013). Party polarisation is measured on the basis of party positions from the Comparative Manifesto Project's (CMP) coding of election manifestos (Lehmann et al. 2015). The focus is on left-right polarisation as the major dimension of party competition throughout Europe that is captured by the CMP's RILE (right-left) scale. Polarisation is operationalised according to Dalton (2008), where i denotes parliamentary parties, N is the number of parliamentary parties and 'Parties' Average RILE' is the simple average RILE of all parliamentary parties:

$$Polarisation = \sqrt{\sum_{i=0}^{N} Party's\ seat\ share_i * \left(\frac{Party's\ RILE_i - Parties' Average\ RILE}{5}\right)^2} \quad (1)$$

Analysis and results

We model our data of government formation occasions with logistic regressions. The main challenge is the small number of technocrat-led governments ('positive' outcomes on the dependent variable) that restricts the quantity of information that can be extracted from the sample. On the one hand, the rather low fraction of technocrat-led governments ($\frac{22}{469} = 0.047$) introduces 'rare events' bias of logistic regression estimates that will generally yield probabilities of technocrat-led government formations ($Pr(Y = 1)$) that are too small (King & Zeng 2001). However, as technocrat-led governments still make up 4.7 per cent

of the sample, they are much more frequent than most outcomes in typical rare event analyses (such as wars or coups). On the other hand, maximum likelihood (ML) estimation of the logistic model is more generally known to be biased in finite samples and this bias greatly depends on the absolute number of the rarer outcome. From this perspective, 22 technocrat-led governments are very few. We adopt two remedies to address this problem. First, penalised maximum likelihood (Firth 1993) is used to estimate the models as this method corrects for bias of the ML estimator in finite samples and has been widely used in rare events analysis. Second, a low number of predictors is included in each model (typically no more than two to three substantive predictors) to sustain a workable ratio between positive outcomes and parameters.

Two further issues need to be addressed: the clustering of observations in countries, and the time dimension of the data. With regard to countries, we demonstrate in the section on robustness checks (see below) that our results hold with a random intercept on the country level as well as with country-clustered standard errors obtained from a nonparametric bootstrap.[14] In contrast, we explicitly model dynamics over time in all models. While many traditional analyses of government formation data (e.g., Martin & Stevenson 2001; Schleiter & Morgan-Jones 2010) do not address the issue of time but simply assume serial independence, some recent work (e.g., Döring & Hellström 2013; Schmitt 2016) has addressed this shortcoming and borrowed models from the analysis of time-series cross-section (TSCS) data. To be sure, data of government formations is *not* 'classical' TSCS data, as units are observed at different time points and at varying time intervals, but many TSCS methods can nevertheless be employed to model dynamics in this type of data.[15] In the context of our study, the issue boils down to the substantive question of whether the baseline probability of technocrat-led governments is constant over time *or* depends on how many cabinets/time have/has passed since the last technocratic PM. Our conjecture is that technocrat-led governments should be more likely in the aftermath of an initial technocrat-led government as actors 'get used' to the situation. To model these dynamics most efficiently, we employ the approach recently suggested by Carter and Signorino (2010) and include a variable indicating the number of cabinets since the last technocrat-led government as well as its quadratic and cubic polynomials (t, t^2, t^3).[16]

Finally, we have to account for the fact that 19 of the 22 technocrat-led governments analysed were appointed as a result of cabinet dissolution and only three directly after elections. To avoid omitted variable bias and to model the two formation scenarios outlined above, we include a dummy variable that is '1' for post-election appointments and '0' otherwise. As we are faced with some missing values on all independent variables (between 0.4 per cent for presidential powers and 12.4 per cent for political scandals due to missing election reports), we obtain 30 multiply imputed datasets using predictive mean matching with chained equations, with the dependent variable, the post-election dummy, t, t^2, t^3, and country dummies as predictors.[17]

In the first analysis step, we test the empirical evidence for our crisis model of technocrat-led governments. All results are reported in Table 1. Model A1 regresses the dependent variable on the modelling fundamentals, t and its polynomials as well as the post-election dummy, excluding any substantive predictor. The results demonstrate that the theoretical expectations about the dynamics and scenarios of technocrat-led formations were appropriate. Technocrat-led governments are less likely to be formed after elections

Table 1. Crisis model of technocrat-led government formations

	Model A1	Model A2	Model A3	Model A4
Political scandal		1.773 (0.660)***		1.967 (0.679)***
Economic recession			1.272 (0.569)**	1.448 (0.601)**
Post-election	−2.411 (0.631)***	−2.625 (0.661)***	−2.560 (0.669)***	−2.929 (0.748)***
t	−0.502 (0.141)***	−0.495 (0.146)***	−0.489 (0.142)***	−0.475 (0.146)***
t^2	0.015 (0.006)**	0.014 (0.007)**	0.015 (0.006)**	0.014 (0.007)**
t^3	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)*	−0.000 (0.000)
Constant	0.364 (0.515)	0.105 (0.541)	−0.062 (0.557)	−0.429 (0.597)
Countries	29	29	29	29
N	469	469	469	469

Notes: Logistic regression models estimated with Firth's penalised ML method. Multiple imputation using predictive mean matching with chained equations. Standard errors in parentheses; *p < 0.1; **p < 0.05; ***p < 0.01.

and this effect is highly statistically significant. In terms of time, the coefficient on t is clearly negative, indicating that technocrat-led governments tend to follow each other and become less likely the longer partisan-led cabinets alternate with each other. However, the positive and significant coefficient on t^2 indicates that this trend is not linear but flattens out after long periods of partisan PMs. Figure 2 plots the dynamics in terms of average predicted probabilities (based on the results from model A4, see below). It indicates that the baseline 'risk' of a second technocrat-led government immediately following a first in the sequence is about 20 per cent but drops below 10 per cent after three consecutive partisan cabinets.

Reverting to Table 1, model A2 tests whether political scandals increase the likelihood of technocrat-led governments by adding the dummy variable for scandals. The results provide strong support for the hypothesis. The coefficient is positive and highly statistically significant at the 1 per cent level. Model A3 tests the second hypothesis that economic

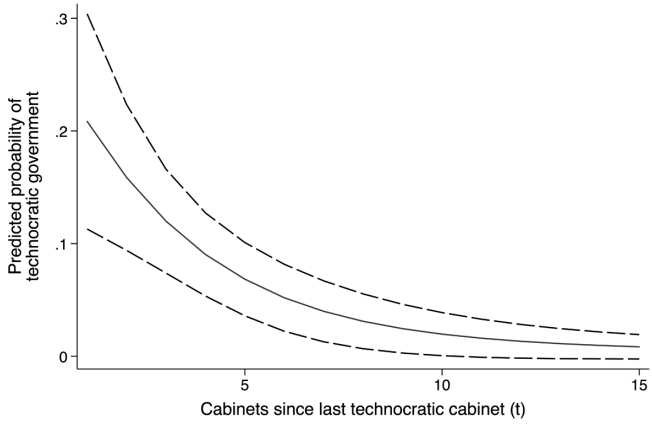

Figure 2. The dynamics of technocrat-led government formations.
Note: Average predicted probabilities; 95 per cent confidence intervals as dashed lines.

crises increase the odds of forming a technocrat-led government. Again, the hypothesis is supported by the data with a significant coefficient at the 5 per cent level. As both variables are dummies, their effects can be directly compared, which illustrates that the average marginal effect of scandals is bigger in magnitude than the effect of economic recessions, but this difference is not significant in statistical terms. Model A4 confirms that these effects hold if both predictors are included simultaneously.

We also tested an interaction effect between scandals and economic recession, but the interaction term was not statistically significant (see the Online Appendix). In total, the results provide strong evidence for the argument that technocrat-led governments are formed in times of crises, when it is electorally costly for potential formateur parties to rule, when policy gains from office are limited due to practical constraints, and when partisan policy making may suffer due to low credibility of commitments.

In the second step, we compare the performance of the crisis model with the main alternative explanation, the 'president-parliament power model', as outlined above. All results are reported in Table 2. Model B1 ascertains whether the powers of the president make a difference to the formation of technocrat-led governments (*H3*). Not only is this unsupported by the data, but the coefficient on presidential power is negative. Hence, we have no evidence that powerful presidents make technocratic PMs more likely. Model B2 investigates the effects of party fragmentation (*H4*). Again, the coefficient points in the unexpected direction and is indistinguishable from zero. Our data yields no support that more fragmented legislatures, in which coalition-building is expected to be more complex, are more likely to be forced to accept a technocrat as PM. Hence, while the literature has established that fragmentation increases the likelihood of the appointment of technocratic ministers (Amorim Neto & Samuels 2010; Schleiter & Morgan-Jones 2010), this explanation does not extend to the PM post.

This underscores our argument that the PM's office is the most valuable office and that parties prioritise obtaining it in negotiations with the president (i.e., 'the one' concession

Table 2. President-parliament power model of technocrat-led government formations

	Model B1	Model B2	Model B3	Model B4
Presidential power	−0.161 (0.123)			−0.154 (0.124)
Party fragmentation		−0.263 (0.164)		−0.292 (0.167)*
Party polarisation			0.075 (0.169)	0.133 (0.167)
Post-election	−2.553 (0.648)***	−2.587 (0.648)***	−2.383 (0.630)***	−2.739 (0.676)***
t	−0.532 (0.144)***	−0.526 (0.142)***	−0.487 (0.142)***	−0.544 (0.149)***
t^2	0.016 (0.006)**	0.016 (0.006)**	0.014 (0.006)**	0.016 (0.007)**
t^3	−0.000 (0.000)	−0.000 (0.000)*	−0.000 (0.000)	−0.000 (0.000)*
Constant	0.961 (0.679)	1.591 (0.898)*	0.096 (0.803)	1.839 (1.147)
Countries	29	29	29	29
N	469	469	469	469

Notes: Logistic regression models estimated with Firth's penalised ML method. Multiple imputation using predictive mean matching with chained equations. Standard errors in parentheses; *p < 0.1; **p < 0.05; ***p < 0.01.

to obtain), as long as its value for the potential formateur party is not diminished due to high electoral costs of ruling and policy agenda constraints.[18] Model B3 adds an ideological dimension to the fragmentation argument and tests whether party polarisation along the left-right dimension renders technocrat-led governments more likely (*H5*) due to the weak bargaining power of an infighting parliament *vis-à-vis* the president. The results are not supportive. Model B4 includes all predictors simultaneously. While presidential power and party polarisation remain statistically insignificant, the coefficient on party fragmentation is negative and weakly significant at the 10 per cent level, indicating that more fragmentation may even lead to *fewer* technocrat-led governments. In total, these results confirm that our data provides little evidence for the main alternative explanation to the crisis narrative.[19]

To illustrate the magnitude of the effects of scandals and economic recession, we obtain predicted probabilities of becoming a technocrat-led government for all cabinets in the dataset at the observed values of all covariates, and compare these predictions with alternative predictions in which we change the observations' values on the scandal and recession dummy variables. In other words, counterfactuals are investigated: what if there had been a scandal/no scandal, a recession/no recession? This reveals that the presence or absence of a scandal induces a change of about 10 percentage points in the predicted probability of a technocratic government for the average cabinet formation in the sample. The respective figure for economic recessions is 6 percentage points. However, the range of values is very wide as the marginal effects in terms of probabilities depend on the values of the covariates.

Figures 3a and 3b plot the strongest predicted effects for political scandals and economic recession from the sample (based on model A4) – that is, those which change the probability of a technocrat-led government by more than 25 percentage points. They provide clear face validity for the theoretical model when considering examples. For instance, the model predicts that the Czech government led by Josef Tosovsky had a probability of 38 per cent of being technocrat-led; without a political scandal preceding its formation this probability would have been 8 per cent. The party cabinet led by Vaclav Klaus (the Civic Democratic Party, ODS) had fallen in November 1997 over a party financing scandal. The ODS' coalition partners had left the government over the scandal and Tosovksy's appointment was widely seen as a reaction to the scandal reflected in a 30 percentage points change in the probability of a technocrat-led government estimated by our model.

We are also able to investigate more closely the plausibility of one of the central mechanisms of the crisis model – namely the idea that high electoral costs of ruling make potential formateur parties relinquish the PM post. If crises indeed operate through the costs of ruling, we would expect potential formateur parties that decide to form a government and take the PM's office in times of crises to pay more votes for ruling than PM parties taking office in less turbulent times. In the Online Appendix we provide a basic test of this intuition by comparing the PM party's average electoral loss for those partisan-led governments in our sample that had the highest probability of being technocrat-led according to our crisis model (henceforth, 'technocratic probability') with those partisan-led governments that had the lowest technocratic probabilities.

The results very strongly confirm our conjecture as PM parties seizing office in times of high technocratic probability (i.e., moments of crisis) lost 10.7 percentage points of their vote on average in the next election, whereas the same figure is just 3.1 for the PM parties

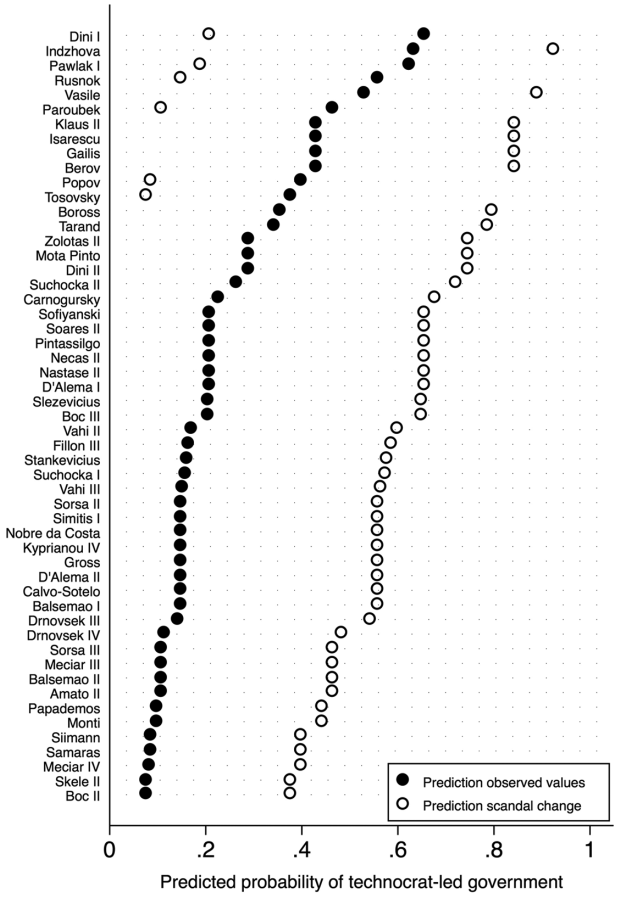

Figure 3a. Political scandals and technocrat-led governments.
Notes: Predicted probabilities for observations with complete data on scandals only. Scandal change sets 0 and 0.5 to 1 and 1 to 0.

with low technocratic probability. In addition, we also show that several of the partisan-led governments with a high technocratic probability were led by individuals that could be classified as 'technocrats' under less restrictive criteria than those employed by McDonnell and Valbruzzi (2014), whereas the same is not true of any of the PMs with low technocratic probability. These results underscore the strong empirical support for our model by directly illustrating the incentives for the potential formateur party to abstain from ruling and pass the buck to technocrats.

Robustness checks

In the last step, we perform several robustness checks reported in Table 3. First, in model R1 we test the misery index (described above) that combines GDP growth and unemployment rates as an alternative measure of economic crisis. The results entirely confirm the pivotal role of economic crises for the formation of technocrat-led governments with a statistically

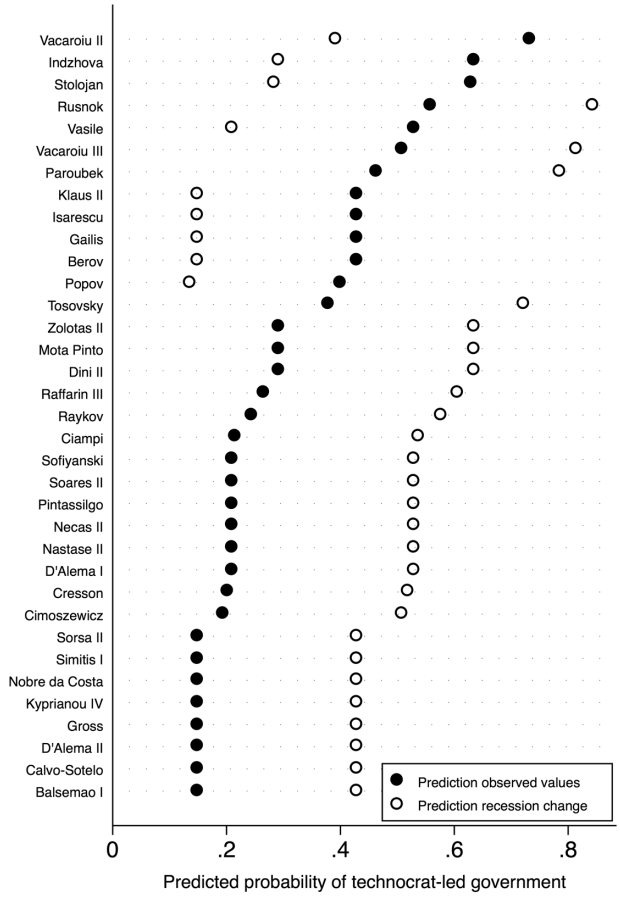

Figure 3b. Economic recession and technocrat-led governments.
Notes: Predicted probabilities for observations with complete data on recession only. Recession change sets 0 to 1 and 1 to 0.

significant coefficient at the 1 per cent level. Second, we address concerns about the clustering of observations within countries as the baseline models do not account for this. Including a random intercept at the country level and estimating the model with ML (model R2) as well as performing bootstrapping on the clusters with 500 replications using the Firth method on randomly re-sampled datasets (model R3) does not change any results. We also investigate whether our results may be driven by one or a few 'outlier' countries – for instance, those with very idiosyncratic sequences of short-lived technocrat-led governments such as Văcăroiu I–III in Romania. For this purpose, we perform a jackknife test on the country level that re-estimates the model 29 times, leaving out one country each time and obtaining standard errors from the variation in the estimates across replications (model R4). The results are virtually identical, demonstrating that 'influential' countries do not drive them.

Finally, we test whether our results are robust to using a different list of technocrat-led governments. While McDonnell and Valbruzzi's (2014) list of technocrat-led governments is

Table 3. Robustness checks

	Model R1	Model R2	Model R3	Model R4	Model R5
Political scandal	2.048 (0.729)***	2.902 (1.047)***	1.975 (0.725)***	1.975 (0.830)**	2.738 (0.674)***
Economic recession		2.167 (0.807)***	1.269 (0.571)**	1.269 (0.453)***	1.733 (0.553)***
Misery index	0.531 (0.142)***				
Post-election	−3.426 (0.923)***	−4.621 (1.189)***	−3.162 (1.281)**	−3.162 (1.749)*	−2.887 (0.691)***
t	−0.488 (0.157)***	−0.403 (0.194)**	−0.478 (0.192)**	−0.478 (0.210)**	−0.507 (0.137)***
t^2	0.014 (0.007)*	0.009 (0.009)	0.014 (0.012)	0.014 (0.014)	0.015 (0.007)**
t^3	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)
Constant	−0.391 (0.610)	1.257 (0.846)	−0.053 (0.740)	−0.053 (0.624)	−0.307 (0.522)
Countries	29	29	29	29	29
N	469	469	383	383	469
Robustness check	Misery index	Country random intercept	Country-cluster bootstrapped SEs	Country jackknife test	Alternative list of technocrat-led governments

Notes: Logistic regression models estimated with Firth's penalised ML method, except for model R3, which is a logistic regression with a random intercept for countries. Multiple imputation using predictive mean matching with chained equations, except for models R4 and R5. Standard errors in parentheses; *p < 0.1; **p < 0.05; ***p < 0.01.

most widely cited, Pastorella (2016a) has recently proposed an updated list, which contains six additional technocrat-led governments in our time frame not included by McDonnell and Valbruzzi. Using the updated list in model R5 yields exactly the same results – if anything with slightly greater magnitude. Several additional robustness checks are provided in the Online Appendix.

Conclusion

We have argued that technocrat-led governments represent a form of 'emergency politics' (Pastorella 2016b) and are most likely to be formed in moments of economic or political crisis. The potential office, policy and vote benefits from the PM post render technocratic PMs very unattractive for potential formateur parties under normal circumstances. Even if parliamentary parties are deeply fragmented, ideologically divided and face a strong president in negotiations over government formation, a partisan formateur will normally focus on obtaining the PM's office for an individual from his or her ranks. Only if economic recession and political scandals of the potential formateur parties greatly increase the electoral costs of ruling, force unpopular policy agendas onto future PMs and threaten the credibility of their policy commitments, do potential formateur parties consider passing the buck to a technocrat to avoid electoral losses, shift blame or re-establish credibility.

Our findings thus demonstrate that the factors that explain the appointment of technocratic cabinet ministers (Amorim Neto & Strøm 2006; Schleiter & Morgan-Jones 2010) do not neatly explain the appointment of technocratic PMs. The PM's office is not

a normal 'bargaining chip'. In fact, potential formateur parties may concede other cabinet posts to technocratic candidates of the president's choice precisely because they can secure the PM appointment from the president in exchange. But while our findings do not show a direct, unconditional effect of the president's bargaining power on the formation of technocrat-led governments, they definitely do not rule out potential interactions between the crisis model and the president-parliament power model. It is still entirely conceivable that a combination of (a) crises diminishing formateur parties' preference for the PM's office and (b) a strong president with substantial room to manoeuvre is particularly conducive to the formation of technocrat-led governments. The statistical power to identify such interaction effects with quantitative data will typically be low due to the very small number of technocrat-led governments (see the Online Appendix). Future work should therefore theorise and test interactions between the models using in-depth case knowledge and qualitative methods such as process tracing.

Future work could also investigate the role of supranational actors, such as the European Commission or the IMF, during economic crises with international bail-outs. Does the behaviour of these actors have an additional exogenous influence on the formation of technocrat-led governments? Due to the limited number of technocrat-led governments, we must for the time being rely on detailed case studies to tackle such questions. The same applies to the choice between different types of technocrat-led governments (e.g., full technocratic, technocrat-led partisan) that is likewise hard to analyse with quantitative methods.

Importantly, our study illuminates what the occurrence of technocrat-led governments signifies about the state of European party democracies. It suggests that while technocrat-led governments, in most cases, follow critical events causing difficulties for the major parties, they do not indicate that parties have lost control over the PM appointment process due to an inability to act *vis-à-vis* the head of state. Technocrat-led governments are much more a signal of a 'valence failure' (parties' inability to live up to integrity norms and run the economy) than of a 'competition failure' (a ruinous state of party system fragmentation and polarisation that precludes partisan agreement and weakens parties' influence).

As a consequence, chances for technocratic episodes are probably not limited to particular constitutional (e.g., semi-presidential) or party systems, but, in principle, could occur in any parliamentary democracy, assuming that economic recession and politicians' personal misconduct can happen anywhere. Our data indicates that 25 countries in our sample have experienced at least one scandal of a potential formateur party since 1977 and 22 countries have been in deep recession in at least one formation year. These figures indicate that over time, and due to chance, the pivotal conditions for technocrat-led governments could be given in nearly any context, although they are certainly more frequent in some countries. Technocratic rule is then not an 'Italian' or 'Greek' phenomenon, but rather a *modus operandi* that parties employ to deal with critical moments.

Acknowledgements

The authors would like to thank Damian Chalmers, Sara B. Hobolt, Petra Schleiter, Robert W. Walker, Jonathan White, and two anonymous reviewers for their excellent comments on earlier drafts of this article. We would also like to thank Hanna Bäck and Patrick Dumont

for sharing their data on formateur parties as well as Lucy Duggan, who provided the idea for the title, and Suzy Duggan, who proofread the final version. We acknowledge the generous funding of the UK Economic and Social Research Council (W88918G and P81669B) and of the Fritz Thyssen Foundation (20.16.0.045WW). All remaining errors are our own.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site.

Table A1: Overview of variables used in the paper
Table A2.1: Electoral performance of 26 PM parties leading cabinets with lowest technocratic probability
Table A2.2: Electoral performance of 29 PM parties leading cabinets with highest technocratic probability
Table A3: Predicted probability of technocrat-led government
Table A4.1: Additional robustness checks I
Table A4.2: Additional robustness checks II
Table A5: Scandals list, by country in chronological order

Notes

1. Interview, 7 August 2014; see Pastorella (2016a: 261).
2. While McDonnell and Valbruzzi (2014) further distinguish between different types of technocrat-led governments (e.g., full technocratic government, nonpartisan caretaker), we focus on the decision for a technocratic PM that is common to all types.
3. While McDonnell and Valbruzzi (2014) identified 24 technocratic governments, the Italian administration led by Lamberto Dini is often divided into two phases (Dini I and Dini II), which brings the number to 25.
4. Switzerland has been excluded from the analysis because the Swiss political system has no clear equivalent of a PM.
5. Hence, Spain, Portugal and Greece are only considered from the 1970s onwards, and Central and Eastern European countries from 1989 onwards.
6. Note that sometimes the decision in favour of a technocrat-led government precedes the dissolution of the cabinet (i.e., the dissolution may be strategic).
7. Due to voters' focus on the PM, the potential formateur party should even improve its vote returns in situations in which it participates in a technocrat-led government with cabinet ministers.
8. *Inter alia*, our crisis model was developed based on a series of interviews with former cabinet members of technocrat-led administrations, including former technocratic PMs Lamberto Dini, Mario Monti and Panagiotis Pikrammenos. Transcripts of the interviews are available from the authors upon request (see also Pastorella 2016a).
9. Other commonly mentioned events include wars/international conflicts as well as deaths/illnesses of key personalities. While wars are not relevant to our period of investigation, natural or accidental deaths of key personalities should not pose significant dangers to parties because they should leave policy and vote returns unaltered (if not improved due to voters' sympathy with the party).
10. We cannot go back further in time as our measure of political scandals is based on election reports that were not published before 1977. In the period covered, 22 of the 25 postwar technocrat-led governments were formed.

11. In this definition, 'scandals' always relate to concrete allegations against individuals and do not encompass generalised notions of a 'corrupted political elite' or similar.
12. To be assigned, the scandal must have occurred between the previous government and the new government formation. Notice that this period can vary considerably. However, as technocrat-led governments most often occur after cabinet dissolution, their preceding cabinet is typically short-lived. This makes it, *ceteris paribus*, less likely for a scandal to occur in this period and our scandal results are likely to be conservative.
13. Note that we obtain the same results when defining economic recession as a GDP contraction in the formation year as well as when using growth in the formation year or over the three preceding years (see the Online Appendix).
14. We cannot implement either for our baseline models as the approaches are incompatible with penalised ML and multiple imputation, respectively.
15. Note that we could construct more 'classical' TSCS data by including observations for all years between government formations with the dependent variable as '0' (no technocrat-led government formed). However, it is highly problematic to assume that there is a 'government formation opportunity' each year. Moreover, Schmitt (2016) demonstrates the potential pitfalls of year-level periodisation in a related context.
16. Carter and Signorino (2010) demonstrate that t polynomials outperform the dummy variable approach suggested by Beck et al. (1998) and perform as well as splines. By using the number of cabinets since the last technocrat-led formation as t rather than days/years, we redefine time 'off the calendar'. This reflects the fact that actors are more likely to think about the last couple of formation occasions than about the physical time elapsed (see also Döring & Hellström 2013). See the Online Appendix for various robustness checks regarding the treatment of time.
17. In the matching step, we randomly draw the imputed values from the five nearest neighbours.
18. One argument could be that the president-parliament power model may interact with the crisis model – for example, that presidential power and fragmentation/polarisation influence the likelihood of a technocrat-led government *conditional* on (prior) crises that have made the technocratic option sufficiently attractive to formateur parties. We test such interactions in the Online Appendix but find no support. However, our statistical power to identify such effects is low (also see our conclusions in the final section).
19. Clearly, further alternative explanations (e.g., party system endogenous factors) could be investigated in future work.

References

Abney, R. et al. (2011). When does valence matter? Heightened valence effects for governing parties during election campaigns. *Party Politics* 19(1): 61–82.

Alesina, A. & Tabellini, G. (2005). *Why do politicians delegate*? NBER Working Paper 11531. Cambridge, MA: National Bureau of Economic Research.

Amorim Neto, O. & Lobo, M.C. (2009). Portugal's semi-presidentialism (re)considered: An assessment of the president's role in the policy process, 1976–2006. *European Journal of Political Research* 48(2): 234–255.

Amorim Neto, O. & Samuels, D. (2010). Democratic regimes and cabinet politics: A global perspective. *Revista Ibero-Americana de Estudios Legislativos* 1: 10–23.

Amorim Neto, O. & Strøm, K. (2006). Breaking the parliamentary chain of delegation: Presidents and non-partisan cabinet members in European democracies. *British Journal of Political Science* 36(4): 619–643.

Anderson, C.J. (2000). Economic voting and political context: A comparative perspective. *Electoral Studies* 19(2–3): 151–170.

Bäck, H. & Dumont, P. (2008). Making the first move: A two-stage analysis of the role of formateurs in parliamentary government formation. *Public Choice* 135(3): 353–373.

Bågenholm, A. & Charron, N. (2014). Do politics in Europe benefit from politicising corruption? *West European Politics* 37(5): 903–931.

Beck, N., Katz, J.N. & Tucker, R. (1998). Taking time seriously: Time-series-cross-section analysis with a binary dependent variable. *American Journal of Political Science* 42(4): 1260–1288.
Bergman, T., Müller, W.C. & Strøm, K. (2003). *Delegation and accountability in parliamentary democracies*. Oxford: Oxford University Press.
Berlinski, S., Dewan, T. & Dowding, K. (2012). *Accounting for ministers: Scandal and survival in British government, 1945–2007*. Cambridge: Cambridge University Press.
Blondel, J. & Müller-Rommel, F. (2001). *Cabinets in Eastern Europe*. Basingstoke: Palgrave Macmillan.
Browne, E., Frendreis, J. & Gleiber, D. (1984). An 'events' approach to the problem of cabinet stability. *Comparative Political Studies* 17(2): 167–197.
Carter, D.B. & Signorino, C.S. (2010). Back to the future: Modeling time dependence in binary data. *Political Analysis* 18(3): 271–292.
Clark, M. (2009). Valence and electoral outcomes in Western Europe, 1976–1998. *Electoral Studies* 28(1): 111–122.
Cotta, M. & Verzichelli, L. (2002). Ministers in Italy: Notables, party men, technocrats and media men. *South European Society and Politics* 7(2): 117–152.
Curini, L. & Martelli, P. (2015). A case of valence competition in elections parties' emphasis on corruption in electoral manifestos. *Party Politics* 21(5): 686–698.
Dalton, R.J. (2008). The quantity and the quality of party systems: Party system polarization, its measurement and its consequences. *Comparative Political Studies* 27: 467–492.
Debus, M., Stegmaier, M. & Tosun, J. (2014). Economic voting under coalition governments: Evidence from Germany. *Political Science Research and Methods* 2(1): 49–67.
Döring, H. & Hellström, J. (2013). Who gets into government? Coalition formation in European democracies. *West European Politics* 36(4): 683–703.
Döring, H. & Manow, P. (2016). *Parliament and Government database (ParlGov): Information on parties, elections and cabinets in modern democracies*, development version. Available online at: www.parlgov.org/
Duch, R.M. & Stevenson, R.T. (2008). The distribution of responsibility and the economic vote. In R.M. Duch (ed.), *The economic vote: How political and economic institutions condition election results*. Cambridge: Cambridge University Press.
Duch, R.M., Przepiorka, W. & Stevenson, R. (2015). Responsibility attribution for collective decision makers. *American Journal of Political Science* 59(2): 372–389.
Elgie, R. (2011). *Semi-presidentialism: Sub-types and democratic performance*. Oxford: Oxford University Press.
Fabbrini, S. (2013). Political and institutional constraints on structural reforms: Interpreting the Italian experience. *Modern Italy* 18(4): 423–436.
Firth, D. (1993). Bias reduction of maximum likelihood estimates. *Biometrika* 80(1): 27–38.
Fusaro, C. (2013). The formation of the Monti government and the role of the President of the Republic. In A. Bosco & D. McDonnell (eds), *Italian politics: From Berlusconi to Monti*. New York: Berghahn.
Gallagher, M. (2013). *Election Indices dataset*. Available online at: www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/Docts/ElectionIndices.pdf
Garrard, J. & Newell, J. (2006). *Scandals in past and contemporary politics*. Manchester: Manchester University Press.
Glasgow, G., Golder, M. & Golder, S.N. (2011). Who 'wins'? Determining the party of the prime minister. *American Journal of Political Science* 55(4): 937–954.
Golder, S.N. (2010). Bargaining delays in the government formation process. *Comparative Political Studies* 43(1): 3–32.
Hallerberg, M. & Wehner, J. (2016). *When do you get economists as policy-makers?* SSRN Working Papers. Available online at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2191490
Hernández, E. & Kriesi, H. (2016). The electoral consequences of the financial and economic crisis in Europe. *European Journal of Political Research* 55(2): 203–224.
King, G. & Zeng, L. (2001). Logistic regression in rare events data. *Political Analysis* 9(2): 137–163.

King, G. et al. (1990). A unified model of cabinet dissolution in parliamentary democracies. *American Journal of Political Science* 34(3): 846–871.
Kumlin, S. & Esaiasson, P. (2012). Scandal fatigue? Scandal elections and satisfaction with democracy in Western Europe, 1977–2007. *British Journal of Political Science* 42(2): 263–282.
Laver, M. (2003). Government termination. *Annual Review of Political Science* 6(1): 23–40.
Laver, M. & Shepsle, K.A. (1998). Events, equilibria and government survival. *American Journal of Political Science* 42(1): 28–54.
LeDuc, L. & Pammett, J.H. (2013). The fate of governing parties in times of economic crisis. *Electoral Studies* 32(3): 494–499.
Lehmann, P. et al. (2015). *Manifesto Corpus*, version 2015-a. Berlin: WZB Berlin Social Science Centre.
Lodge, M. & Wegrich, K. (2012). *Executive politics in times of crisis*. Basingstoke: Palgrave Macmillan.
Lupia, A. & Strøm, K. (1995). Coalition termination and the strategic timing of parliamentary elections. *American Political Science Review* 89(3): 648–665.
Markovits, A.S. & Silverstein, M. (1988). *The politics of scandal: Power and process in liberal democracies*. New York: Holmes & Meier.
Martin, L.W. & Stevenson, R.T. (2001). Government formation in parliamentary democracies. *American Journal of Political Science* 45(1): 33–50.
McDonnell, D. & Valbruzzi, M. (2014). Defining and classifying technocrat-led and technocratic governments. *European Journal of Political Research* 53(4): 654–671.
Mondak, J.J. (1995). Competence, integrity and the electoral success of congressional incumbents. *Journal of Politics* 57(4): 1043–1069.
Paldam, M. (1986). The distribution of election results and the two explanations of the cost of ruling. *European Journal of Political Economy* 2(1): 5–24.
Pastorella, G. (2016a). *Technocratic governments: Power, expertise and crisis politics in European democracies*. London: London School of Economics and Political Science.
Pastorella, G. (2016b). Technocratic governments in Europe: Getting the critique right. *Political Studies* 64(4): 948–965.
Pitlik, H. & Wirth, S. (2003). Do crises promote the extent of economic liberalization? An empirical test. *European Journal of Political Economy* 19(3): 565–581.
Powell, G.B. & Whitten, G.D. (1993). A cross-national analysis of economic voting: Taking account of the political context. *American Journal of Political Science* 37(2): 391–414.
Raunio, T. (2004). The changing Finnish democracy: Stronger parliamentary accountability, coalescing political parties and weaker external constraints. *Scandinavian Political Studies* 27(2): 133–152.
Rosanvallon, P. (2011). *Democratic legitimacy: Impartiality, reflexivity, proximity*. Princeton, NJ: Princeton University Press.
Schleiter, P. & Issar, S. (2015). Managing Busts and Exploiting Booms: The Economy, Constitutional Variation and Government Terminations. Paper presented at the European Political Science Association Annual Conference, Vienna.
Schleiter, P. & Morgan-Jones, E. (2009a). Constitutional power and competing risks: Monarchs, presidents, prime ministers and the termination of East and West European cabinets. *American Political Science Review* 103(3): 496–512.
Schleiter, P. & Morgan-Jones, E. (2009b). Party government in Europe? Parliamentary and semi-presidential democracies compared. *European Journal of Political Research* 48(5): 665–693.
Schleiter, P. & Morgan-Jones, E. (2010). Who's in charge? Presidents, assemblies and the political control of semipresidential cabinets. *Comparative Political Studies* 43(11): 1415–1441.
Schmitt, C. (2016). Panel data analysis and partisan variables: How periodization does influence partisan effects. *Journal of European Public Policy* 23(10): 1442–1459.
Siaroff, A. (2003). Comparative presidencies: The inadequacy of the presidential, semi-presidential and parliamentary distinction. *European Journal of Political Research* 42(3): 287–312.
Strøm, K. (1990). A behavioral theory of competitive political parties. *American Journal of Political Science* 34(2): 565–598.
Thatcher, M. & Sweet, A.S. (2002). Theory and practice of delegation to non-majoritarian institutions. *West European Politics* 25(1): 1–22.

Tucker, A. et al. (2000). From republican virtue to technology of political power: Three episodes of Czech nonpolitical politics. *Political Science Quarterly* 115(3): 421–445.
Weaver, R.K. (1986). The politics of blame avoidance. *Journal of Public Policy* 6(4): 371–398.
Whitten, G.D. & Palmer, H.D. (1999). Cross-national analyses of economic voting. *Electoral Studies* 18(1): 49–67.

Address for correspondence: Christopher Wratil, Cologne Centre for Comparative Politics, University of Cologne, Herbert-Lewin-Straße, 2, D-50931 Cologne, Germany. E-mail: C.Wratil@Uni-Koeln.de